

## IMPLEMENTATION OF THE MARPOL CONVENTION IN BANGLADESH

MD SAIFUL KARIM\*

*Vessel-source marine pollution is one of the main sources of marine pollution in Bangladesh. Due to unfettered operation of vessels, the country has been exposed to massive pollution that is causing a serious imbalance in the marine environment. Against this backdrop, this article seeks to demonstrate that the regulatory system of Bangladesh should be strengthened and made more effective in the light of international instruments to ensure the conservation and sustainable management of its marine environment. With this aim the article examines the present status of implementation of the MARPOL Convention in Bangladesh.*

### I INTRODUCTION

The marine area of Bangladesh is not only important for its significant economic role but also for its unparalleled natural panorama and aesthetic appeal. One-fourth of the total population of Bangladesh live along the coast line and many of them are directly dependent on the sea for their livelihood.<sup>1</sup> Hence conservation of the marine environment, in a sense, is more an economic and development issue than merely environmental. The coastline of Bangladesh is approximately 710 km long. This includes the country's most important ecosystems including the ecologically critical areas (ECAs) of Cox's Bazar Sea Beach, Sonadia Island, St Martin's Island

---

\* LLB Hons., LLM (Chittagong), LLM by Research (Singapore); Advocate (Bangladesh) and PhD candidate in School of Law at the Macquarie University, Sydney. Email: saiful24bd@yahoo.com. This article is based on research carried out at the National University of Singapore. The author would like to thank the National University of Singapore for the generous research scholarship and Dr Tan Khee Jin Alan for his able supervision. However, all errors and omissions remain the sole responsibility of the author, and the views expressed here are his own and do not necessarily represent those of any institution or organization with which he is associated. Some information in this article also has been used by him in another unpublished article entitled 'Implementation of the MARPOL Convention in the developing countries'.

<sup>1</sup> M Rafiqul Islam (ed.), *Where Land Meets the Sea: A Profile of the Coastal Zone of Bangladesh* (2004) 97.

and Sundarbans.<sup>2</sup> The marine area (exclusive economic zone) of Bangladesh extends to about 40,000 sq. miles, which is almost equal to two-thirds of its total land area.<sup>3</sup>

One of the major sources of marine environmental pollution in Bangladesh is the unregulated operation of a large number of vessels, operating for inland and merchant shipping, and of foreign ships which call in to Chittagong and Mongla ports. Due to the lax enforcement of laws and resource deficiencies of the concerned government departments, pollution from vessels at the ports and at other marine areas has become a very common incident. Due to such unfettered operation of vessels, the country has been exposed to massive pollution that is causing a serious imbalance in the marine environment.<sup>4</sup>

Oil pollution is the major vessel-source pollution in Bangladesh. Its occurrence in marine areas is mainly due to tankers and other vessels transiting through the busy sea transportation routes of the southern Bay of Bengal, as well as from maritime operations surrounding the two sea ports of Bangladesh.<sup>5</sup> Bangladesh contributes around six thousand tons of oil to the four hundred thousand tons of annual oil pollution in the Bay of Bengal.<sup>6</sup> The country annually imports around 3.5 million tons of crude and refined oil. This oil is transferred at an anchorage point some 40 miles south-west of Chittagong port from big tankers to small tankers because very large crude carriers (VLCCs) cannot enter into Chittagong and Mongla ports. During this transfer process some oil escapes into the sea.<sup>7</sup>

Incidents of heavy spillage from the oil tankers have occurred several times in the marine area of Bangladesh. A Greek-owned vessel flying a Cypriot flag of convenience spilt about 3000 tons of persistent oil in the Chittagong-Cox's Bazar marine area in 1989. In 1992 a huge oil spill was identified near the marine area of the coastal district of Khulna but the Department of Shipping could not identify the

---

<sup>2</sup> Government of the People's Republic of Bangladesh, Ministry of Environment and Forest, Gazette Notification No: PABAMA-4/7/87/99/245, 19 April 1999 and Government of the People's Republic of Bangladesh, Ministry of Environment and Forest, Gazette Notification No: PABAMA-4/7/87/99/263, 8 August 1999. Also see generally AM Kamal Uddin, *Areas with Special Status in the Coastal Zone* (2004).

<sup>3</sup> The sea boundary of Bangladesh is still unsettled with its neighbouring countries India and Myanmar. See generally Mohammad Khurshed Alam, 'Law of the Sea and Its Implications for Bangladesh' (1998) 19 *Bangladesh Institute of International and Strategic Studies Journal* 529; Mohamad Habibur Rahman, 'Delimitation of Maritime Boundaries: A Survey of Problems in the Bangladesh Case' (1984) 24 *Asian Survey* 1302. See also Harun ur Rashid, 'Sea Boundary of Bangladesh: A Legal View', *The Daily Star* (Dhaka, Bangladesh), 29 February 2004; and Mohammad Khurshed Alam, 'Urgency of Demarcating Maritime Boundary with Myanmar', *The Daily Star* (Dhaka, Bangladesh), 28 August 2006.

<sup>4</sup> UNEP, 'Bangladesh: State of the Environment' (2001) 44.

<sup>5</sup> Begum Rehana Akhter, *Pollution and its Management Approach* (2005) 14.

<sup>6</sup> Md Saeedur Rahman, 'Bay Health: Source to Sea', *The Daily Star* (Dhaka, Bangladesh), 27 February 2004.

<sup>7</sup> Ibid.

vessel responsible for the slick.<sup>8</sup> Even ships of the government-owned Bangladesh Shipping Corporation (BSC) also contribute heavily to this pollution. In one such incident, oil reportedly continued to ooze out for about 20 hours from a Bangladesh Shipping Corporation's tanker named the '*Banglar Shourav*' in the Chittagong port channel.<sup>9</sup>

Repeated oil spills from foreign and local ships which call in to the Mongla Port are creating a severe threat to the world's largest tidal halophytic mangrove forest, the Sundarbans. The Sundarbans is very important for the marine living resources as it is the main spawning ground of major commercially important marine species including prawn and fish. In 1990, a huge oil spill from an unidentified source was detected in the marine area adjacent to the Sundarbans forest. In August 1994, another oil spill was caused by a vessel flying Panama's flag which capsized near the Sundarbans. It caused the immediate mortality of a great number of fauna and flora in the Sundarbans mangrove forest and adjacent sea area. Moreover, this incident posed a severe threat to the future existence of fish, shrimp and other marine living resources.<sup>10</sup>

Another problem is dumping of garbage and sewage from ships. These are usually dumped into the sea. Compared to the volume of these types of wastes from the land, the amount of garbage and sewage from vessels was not considered too much in the past. However, the situation is now very different because of the increasing use of non-biodegradable substances such as plastics which, once thrown in the ocean, can persist in the marine environment for a long time.<sup>11</sup> Foreign and local ships find the marine area of Bangladesh a safe place for throwing away their garbage and sewage. The Chittagong Port Magistracy detected about 700 offending vessels over a three-year period and fined them but could not completely stop the dumping of pollutants.<sup>12</sup>

In recent years, the marine environment of Bangladesh has been showing signs of decay and is in a state of crisis. Therefore, government action in the past few years towards prevention of vessel-source marine environment and to fulfil its relevant international legal obligations needs to be examined.

---

<sup>8</sup> Mostafa Kamal Majumder, 'What Has Gone Wrong with the Bay' in Quamrul Islam Chowdhury (ed.), *Bangladesh State of the Environment Report (2001)* 94.

<sup>9</sup> Staff Correspondent, 'Karnaphuli Pollution: Probe Body Blames BSC Tanker Crew', *The Daily Star*, (Dhaka, Bangladesh), 26 October 2004; Staff Correspondent, 'Pollution Builds in Bay, Probes Opened into Fish Death', *The Daily Star*, (Dhaka, Bangladesh) 2 September 2004.

<sup>10</sup> Akhter, above n 5, 14.

<sup>11</sup> IMO, 'Preventing Marine Pollution: The Environmental Threat' <[http://www.imo.org/includes/blast\\_bindoc.asp?doc\\_id=434&format=PDF](http://www.imo.org/includes/blast_bindoc.asp?doc_id=434&format=PDF)> at 10 March 2008.

<sup>12</sup> BSS, 'Ships Polluting Chittagong Port Area', <<http://www.sos-arsenic.net/english/environment/toxic.html>> at 10 March 2008.

Contributing to the problem, compliance records of Bangladeshi ships are also very poor. The Bangladesh flag was even blacklisted in 2005 by the Tokyo MOU secretariat, based on an inspection record of port States from 2003 to 2005. During this period 32 Bangladeshi ships were inspected by the Member States of Tokyo MOU, of which 7 ships were detained due to non-compliance with international standards.<sup>13</sup> Bangladesh was not included in the black list of the 2007 annual report of Tokyo MOU. That does not necessarily mean that in the meantime the country developed its survey and certification systems properly to ensure compliance with international instruments. Bangladesh was not included in the black list because Tokyo MOU only considers flags which faced 30 or more inspections over the three-year period in compiling black, grey and white lists. Somehow Bangladeshi ships faced less than 30 inspections in this period. During the period between 2005 and 2007, 18 Bangladeshi ships were inspected by the Member States of Tokyo MOU, of which three ships were detained.<sup>14</sup> The government should take necessary steps for ensuring environmental compliance by the ships which are entitled to fly Bangladeshi flag by way of introducing a proper system of survey, certification and monitoring as prescribed by the relevant international legal instruments such as the *MARPOL Convention*.

Against this backdrop, the present article seeks to demonstrate that the regulatory system of Bangladesh should be strengthened and made more effective in the light of international instruments, to ensure the conservation and sustainable management of its marine environment. With these aims, this article intends to examine the present status of implementation of the *International Convention for the Prevention of Pollution from Ships, 1973* (popularly known as *MARPOL 73/78*) in Bangladesh. In addition, this article will propose and advocate a comprehensive legal and institutional framework for proper implementation of the *MARPOL Convention* in Bangladesh. Although this article is mainly focused on implementation of the *MARPOL Convention*, it makes frequent reference to some other international conventions because implementation of the *MARPOL Convention* is closely linked with implementation of these conventions.

## II THE MARPOL CONVENTION: SUBSTANTIVE RULES FOR DIFFERENT TYPES OF VESSEL-SOURCE POLLUTION

### *A Background of the MARPOL Convention*

Modern international law started its journey with the development of the international law of the sea. The father of modern international law, Hugo Grotius,

---

<sup>13</sup> Tokyo MOU, 'Annual Report on Port State Control in the Asia-Pacific Region 2005' <<http://www.tokyo-mou.org/ANN05.pdf>> at 10 March 2008.

<sup>14</sup> Tokyo MOU, 'Annual Report on Port State Control in the Asia-Pacific Region 2007' <[http://www.krs.co.kr/eng/dn/T/ANN07\(0\).pdf](http://www.krs.co.kr/eng/dn/T/ANN07(0).pdf)> at 10 March 2008.

wrote *Mare Liberum*,<sup>15</sup> which incorporates the concept of ‘freedom of the sea’, as far back as in 1608. This book was written primarily to justify the Netherlands’ activities in the Indian Ocean. The legacy of Grotius dominated the global community for over 400 years.<sup>16</sup> In the early decades of development, the law of the sea principally concerned two major uses of the sea: shipping and fishing. It was based on the principles of coastal States’ unfettered sovereignty over natural resources within territorial waters and complete freedom of the seas beyond territorial waters for all States. Although the law of the sea is the founding branch of modern international law, the history of international law regarding conservation of marine areas is a 20<sup>th</sup> century phenomenon. At the beginning of the 20<sup>th</sup> century, there were very few sea-related international conventions. Most of the treaties existing at that time were targeted to resolving boundary disputes between different nations.<sup>17</sup>

The 1926 Preliminary Conference on Oil Pollution of Navigable Waters, held in Washington, can be identified as one of the earliest international efforts to protect the marine environment from vessel-source pollution.<sup>18</sup> In 1954, the *International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL)* was adopted in a conference organised by the United Kingdom.<sup>19</sup> This Convention was amended in 1962, 1969 and 1971.<sup>20</sup> The 1954 *Oil Pollution Convention* was followed by some environmental protection provisions in the 1958 Law of the Sea conventions including the *High Seas Fishing and Conservation Convention*, the *Convention on the Continental Shelf* and the *Convention on High Seas*.<sup>21</sup>

Between the late 1960s and early 1970s, this process was followed by the negotiation of several supplementary conventions relating to interventions in high seas in cases of oil pollution casualties, and to civil liability and compensation for

<sup>15</sup> Hugo Grotius, *The Freedom of the Seas, or the Right Which Belongs to the Dutch to take part in the East Indian Trade* (1608) (Ralph van Deman Magoffin trans., James Brown Scott, ed., 1916).

<sup>16</sup> Garry R Russ and Dirk C Zeller, ‘From Mare Liberum to Mare Reservarum’ (2003) 27 *Marine Policy* 75, 75-78.

<sup>17</sup> Liselott Blunck, ‘The Oceans: State of the Marine Environment and New Trends in International Law of the Sea’, <<http://assembly.coe.int/Documents/WorkingDocs/doc98/edoc8177.htm>> at 10 October 2009.

<sup>18</sup> Preliminary Conference on Oil Pollution of Navigable Waters (1926) 20 *American Journal of International Law* 555.

<sup>19</sup> *International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL)* 1954, 327 UNTS 3 (entered into force 31 May 1968).

<sup>20</sup> IMO, ‘History of MARPOL 73/78’, <[http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258#2](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258#2)> at 10 March 2008 (hereafter ‘History of MARPOL’).

<sup>21</sup> Philippe Sands, *Principles of International Environmental Law*, (2<sup>nd</sup> ed, 2003) 393. Also see *Convention on Fishing and Conservation of Living Resources of the High Seas*, 1958, 499 UNTS 23 (entered into force 20 March 1966); *Convention on the Continental Shelf*, 1958, 499 UNTS 311 (entered into force 10 June 1964); *Convention on the High Seas*, 1958, 450 UNTS 82 (entered into force 30 September 1962).

oil pollution damage.<sup>22</sup> Of these, the 1969 *International Convention on Civil Liability for Oil Pollution Damage*<sup>23</sup>, the 1969 *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*,<sup>24</sup> and the 1971 *International Convention on the Establishment of an International Fund for Compensation of Oil Pollution Damage*,<sup>25</sup> deserve mention.

In 1967, the tanker *Torrey Canyon* ran aground near the English Channel and spilt 120,000 tons of crude oil in the sea. This was the most horrific oil pollution incident up to that time. The incident revealed the inadequacies of mechanisms to prevent oil pollution from ships and also uncovered the insufficiency in the existing system for providing compensation for oil pollution casualties.<sup>26</sup> Following this horrific incident, under the sponsorship of the International Maritime Organization (IMO), the *International Convention for the Prevention of Pollution from Ships (MARPOL) 1973* was adopted.<sup>27</sup> However, this Convention failed to come into effect, as not enough States ratified it. Increasing incidents of pollution involving oil tankers were the catalyst for an International Maritime Organization (IMO) conference on Tanker Safety and Pollution in 1978. This conference adopted, inter alia, a protocol to the *MARPOL Convention*, which was still not in force at the time. The *MARPOL 73/78 Convention* is therefore a combination of the 1973 Convention and the 1978 Protocol. Under Article 9 of the *MARPOL Convention*, it was stipulated that the *MARPOL Convention* supersedes the *OILPOL Convention*.<sup>28</sup> This major Convention was then followed by several other IMO-initiated instruments.<sup>29</sup> Over the years, the IMO has promoted adoption of more than 50 legal instruments, of which about half are related to environmental protection.<sup>30</sup>

<sup>22</sup> Blunck, above n 17.

<sup>23</sup> *International Convention on Civil Liability for Oil Pollution Damage*, 1969 (CLC 69), 973 UNTS 3, 9 ILM 45 (1970) (entered into force 19 June 1976), as amended by the 1976 Protocol to the 1969 Convention, 16 ILM 617 (1977) (entered into force 8 April 1981).

<sup>24</sup> *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*, 1969 (Intervention Convention), 77 UKTS Cmnd 6065 (1975) (entered into force 6 May 1975) as amended by the 1973 *Protocol Relating to Intervention On the high Seas in Cases of Marine Pollution by Substances other than Oil*, 13 ILM 650 (1974) (entered into force 30 March 1983).

<sup>25</sup> *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage* (FUND 71), 1110 UNTS 57, 11 ILM 284 (1972) (entered into force 16 October 1978), as amended by the 1976 Protocol to the 1971 Fund Convention, 16 ILM 621 (1977) (entered into force 22 November 1994), (ceased to operate 24 May 2002).

<sup>26</sup> 'History of MARPOL', above n 20.

<sup>27</sup> *International Convention for the Prevention of Pollution from Ships*, 1973, (MARPOL 73/78) 12 ILM 1319 (1973) as modified by the Protocol of 1978 to the 1973 Convention, 1341 UNTS 3, 17 ILM 546 (1978) (entered into force 2 October 1983). For the most recent version see MARPOL: Consolidated Edition 2006 (IMO, London, 2006) (hereafter MARPOL 73/78).

<sup>28</sup> David Hughes et al, *Environmental Law* (4<sup>th</sup> ed, 2002) 628.

<sup>29</sup> A non-exhaustive list of these conventions is: *International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)*, 1990, 30 ILM 733 (1991) (entered into force 13 May 1995) and its *Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances*, 2000 (*OPRC-HNS Protocol*) reprinted in Australian Treaty Series (2001) (entered into force 14 June 2007); *The International Convention on Civil Liability for Oil Pollution Damage*, 1992 (CLC 92), 1953

The *MARPOL Convention* is the most significant global legal instrument for the prevention of vessel-source marine pollution which covers technical issues. It introduced a system for the design, construction and equipment necessary for pollution prevention. These substantive obligations are to be implemented through a system of certification, inspections and surveys. Moreover, this Convention calls on the coastal States, in somewhat non-mandatory language, to provide reception facilities for the disposal of oily wastes, sewage, garbage and other hazardous substances.

Regulations covering the various sources of ship-generated pollution are contained in the six Annexes of *MARPOL* and are updated regularly. Annexes I and II, governing oil and chemicals, are compulsory but Annexes III, IV, V and VI, on packaged materials, sewage, garbage and air pollution, are optional.<sup>31</sup> The Annexes of *MARPOL* can be amended through the 'tacit acceptance' process.<sup>32</sup> The following parts will briefly present the substantive provisions of the *MARPOL Convention*. For convenience of discussion, the six annexes of *MARPOL* have been divided into three groups.

### B Pollution by Discharge of Oil

Annex I<sup>33</sup> of the *MARPOL Convention* deals with oil pollution from ships.<sup>34</sup> This Annex introduced some innovative processes and techniques and at the same time institutionalised some pre-existing practices. First of all, Annex I incorporated an oil discharge criterion from the *OILPOL* era. Regulation 34 of Annex I approves oil

---

UNTS 255 (entered into force 30 May 1996); *International Convention on Fund for Compensation for Oil Pollution Damage*, 1992 (*FUND 92*), 87 UKTS Cm 3433 (entered into force 30 May 1996); *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea* (HNS), 1996, 35 ILM 1406 (1996) (not entered into force); *International Convention on Liability and Compensation for Bunker Oil Spills*, 2001, IMO Doc LEG/CONF 12/19 (entered into force 21 November 2008); *International Convention on the Control of Harmful Anti-fouling Systems on Ships*, 2001, (AFS), IMO Doc AFS/CONF/26, (2001) (not entered into force); *International Convention for the Control and Management of Ship's Ballast Water and Sediments* (BWMC), 2004, IMO Doc BWM/ CONF/36 (2004) reprinted in ATNIF (2005) 18 (not entered into force); *Nairobi International Convention on the Removal of Wrecks*, 2007, IMO Doc LEG/CONF.16/19 (not in force) and *Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, 2009, IMO Doc SR/CONF/45 (2009) ( not in force).

<sup>30</sup> Zafrul Alam, *IMO Conventions and their Implementation*, paper presented at the East Asian Seas Congress held in Haikou City, Hainan Province, PR China, 12-16 December 2006.

<sup>31</sup> A State that becomes party to *MARPOL* must accept Annex I and II. Annexes III-VI are optional annexes.

<sup>32</sup> *MARPOL 73/78*, art 16. According to this process the amendments enter into force on a specified date unless an agreed number of States parties object by an agreed date.

<sup>33</sup> In 2004 the Annex I was revised; the revised version entered into force on 1 January 2007. The revised Annex I incorporated the various amendments adopted since *MARPOL* entered into force in 1983 and some minor amendments.

<sup>34</sup> See generally: Gini Mattson, 'MARPOL 73/78 and Annex I: An Assessment of its Effectiveness' (2006) 9 *Journal International Wildlife Law & Policy* 175.

discharge only if the following conditions are fulfilled: 'the total quantity of oil which a tanker may discharge in any ballast voyage whilst under way must not exceed 1/30,000 (1/15,000 for tanker delivered before 31 December 1979) of the total cargo carrying capacity of the vessel; the instantaneous rate of discharge of oil content must not exceed 30 litres per nautical mile travelled by the ship; and no discharge of any oil whatsoever must be made from the cargo spaces of a tanker within 50 nautical miles of the nearest land'.<sup>35</sup>

To reduce the amount of dirty bilge water discharged into the ocean, Annex I re-institutionalised the 'load on top' (LOT) system which had been developed by the oil industry in the 1960s. The LOT system requires a vessel to transfer dirty ballast water into a special slop tank in ballast voyage. After some days the oil flows up. After pumping out the clean water under the oil, new cargo oil is loaded on top of the residue oil in the next voyage. For proper functioning of this process, Annex I requires oil tankers to be equipped with oil-discharge monitoring and control systems, and oily water separators. It also requires slop tanks, sludge tanks and piping arrangements.<sup>36</sup>

Annex I makes it mandatory for all tankers of over 70 thousand deadweight tonnage (DWT) to have segregated ballast tanks (SBT) which must be suitable to give sufficient operating draft without the need to carry ballast water in oil cargo tanks. Moreover, it requires all newly-built tankers to meet a range of stability damage requirements for survival of the oil cargo in collision incidents.<sup>37</sup> The 1978 Protocol to the *MARPOL Convention* significantly changed some requirements and introduced some new mechanisms to combat oil pollution from vessels. First of these changes is the requirement of SBT on all new tankers of 20 thousand DWT or more. The SBT now has to be located in such a way that they can protect cargo tanks in incidents of collision.<sup>38</sup>

The 1978 Protocol institutionalised another technique, the crude oil washing system (COW), which was developed by the oil industries in the 1970s. This system has been developed as an alternative to SBT by the oil industry. The COW involves washing tanks by oil instead of using water.<sup>39</sup> Annex I requires implementation of the COW on all new tankers of over 20 thousand DWT.<sup>40</sup>

For the proper implementation of these provisions, Annex I introduced a system of certification, survey and monitoring. A ship or tanker has to carry some certificates and records including the international oil pollution prevention certificate and oil

---

<sup>35</sup> MARPOL 73/78, Annex I, reg. 34; see also: IMO, *Annex I: Prevention of pollution by oil*, <[http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258#7](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258#7)> at 10 March 2008 (hereafter Annex I: Prevention of pollution by oil).

<sup>36</sup> MARPOL 73/78, Annex I, regs 29 to 30. See also *ibid.* and Alan Khee Jin Tan, *Vessel-Source Marine Pollution: The Law and Politics of International Regulation* (2006) 131.

<sup>37</sup> Annex I: Prevention of pollution by oil, above n 35.

<sup>38</sup> *Ibid.* and MARPOL 73/78, Annex I, reg. 18.

<sup>39</sup> *Ibid.* and MARPOL 73/78, Annex I, reg.18 (6) (7).

<sup>40</sup> MARPOL 73/78 Annex I, reg. 18(8).



record book.<sup>41</sup> Finally, the parties to the Convention undertake to ensure reception facilities for oily wastes in loading ports, ship repair yards and bunkering ports.<sup>42</sup>

By far the most significant change of *MARPOL's* Annex I is the phasing out of single-hull oil tankers and the introduction of double-hulled oil tankers. According to the most recent amendment to the *MARPOL Convention* regarding this issue, all pre-*MARPOL* single-hull tankers of 20,000 GWT (Category-1) have to be phased out by 2007. Moreover, all post-*MARPOL* single-hull oil tankers of 20,000 GWT (Category-2) and single-hull oil tankers of above 5000 GWT but below 20,000 GWT (Category-3) have to be phased out by 2010.<sup>43</sup>

### C Chemicals, Packaged Materials, Sewage and Garbage

Annex II<sup>44</sup> of the Convention deals with the chemical wastes generated from noxious liquid substances (NLS) carried in bulk. These chemical wastes generated from tank washing are potentially more harmful than oil for the marine environment. Annex II elaborated certain discharge standards and mechanisms for the control of NLS pollution. It lists 250 substances as NLS. Discharging NLS is permissible only in designated reception facilities until some conditions are fulfilled.<sup>45</sup> Annex II introduced a system to control discharge which is based on certain thresholds, such as the distance from land, nature and concentration of effluent and the depth of the sea at the place of discharge. Discharge of NLS is totally prohibited within 12 miles of the nearest land.<sup>46</sup> Annex II also provides for necessary reception facilities for NLS.<sup>47</sup>

Annex III is dedicated to prevention of pollution by harmful substances in packaged form. This Annex elaborated common requirements and standards on packing, marking, labelling, documentation, storage, and notifications for preventing pollution by harmful substances. Annex IV of the convention details the

<sup>41</sup> Some other certificates and documents introduced by this annex are: Shipboard Oil Pollution Emergency Plan, Record of Oil Discharge Monitoring and Control System for the Last Ballast Voyage, Dedicated Clean Ballast Tank Operation Manual, Crude Oil Washing Operation and Equipment Manual (COW Manual), Condition Assessment Scheme (CAS) Statement of Compliance, CAS Final Review and Record, Heuristically Balanced Loading (HBL), Operational Manual, Oil Discharge Monitoring and Control (ODEMCE) Operational Manual, and Subdivision and Stability Information.

<sup>42</sup> *MARPOL 73/78*, Annex I reg. 38.

<sup>43</sup> *MARPOL 73/78*, Annex I, reg. 20 and Tan, above n 36, 150-155. See also: Elizabeth Galiano, 'In the Wake of the PRESTIGE Disaster: Is an Earlier Phase-Out of Single-Hulled Oil Tankers the Answer?' (2003) 28 *Tulane Maritime Law Journal* 113.

<sup>44</sup> In 2004 the Annex II was revised and the revised version entered into force on 1 January 2007. The revised Annex introduced some significant changes including inter alia a new four-category categorisation system for NLS.

<sup>45</sup> IMO, *Annex II: Control of Pollution by Noxious Liquid Substances*, <[http://www.imo.org/Conventions/contents.asp?doc\\_id=678&topic\\_id=258#8](http://www.imo.org/Conventions/contents.asp?doc_id=678&topic_id=258#8)> at 29 September 2007.

<sup>46</sup> *MARPOL 73/78*, Annex II, reg.13.

<sup>47</sup> *MARPOL 73/78*, Annex II, reg. 18.

requirements for prevention of pollution by sewage from ships. Annex V deals with marine pollution by garbage from ships. This Annex completely banned dumping of all forms of plastic in the sea.<sup>48</sup> Like Annex I, all these optional annexes also introduced a certification and survey system. Most important of these are the International Pollution Prevention Certificate for Noxious Liquid Substances Carried in Bulk and the International Sewage Pollution Prevention Certificate.<sup>49</sup> Finally, in all these annexes, parties to the Convention undertake to ensure reception facilities for different purposes including: reception facilities for sewage in ports of some areas where the port State determines that the sewage from ships will be unacceptable to the local people;<sup>50</sup> and reception facilities for garbage in all ports handling national and international trade.<sup>51</sup>

#### D Air Pollution from Ships

The IMO began working on shipping-based air pollution as far back as the late 1980s. In 1997, Member States of the IMO adopted a new annex, namely Annex VI to the *MARPOL Convention* for prevention of shipping-based air pollution. Annex VI entered into force on May 19, 2005.<sup>52</sup> The Annex imposes an emissions standard for NO<sub>x</sub> and required installation of exhaust gas cleaning systems to reduce its emissions.<sup>53</sup> It also imposes a SO<sub>x</sub> content limit in fuel as well as requirements for exhaust gas cleaning systems or technologies to limit SO<sub>x</sub> emissions.<sup>54</sup> This Annex also prescribes technologies to reduce the emissions of volatile organic compounds (VOCs)<sup>55</sup> and restricts the use of some ozone-depleting substances.<sup>56</sup> Annex VI prohibits shipboard incineration of certain substances including polychlorinated biphenyls (PCBs).<sup>57</sup> The Annex also includes regulation for reception facilities to deliver excess sulphur and halons under certain circumstances.<sup>58</sup> Annex VI also contains provision for declaration of special SO<sub>x</sub> emission control areas (SECAS).

<sup>48</sup> *MARPOL73/78*, Annex V, reg. 3. See generally Bruce S Jr Manheim, 'Annex V of MARPOL Convention: Will it Stop Marine Plastic Pollution?' (1988) 1 *Georgetown International Environmental Law Review* 71; Michael J Bean, 'Legal Strategies for Reducing Persistent Plastics in the Marine Environment', (1987) 18 *Marine Pollution Bulletin* 357; Sally Ann Lentz, 'Plastics in the Marine Environment: Legal Approaches for International Action' (1987) 18 *Marine Pollution Bulletin* 361; Paul E Hagen, 'The International Community Confronts Plastics Pollution from Ships: MARPOL Annex V and the Problem that Won't Go Away' (1989-1990) 5 *American University Journal of International Law & Policy* 425.

<sup>49</sup> Some other certificates and records prescribed by these annexes are: Cargo Record Book, P & A Manual, Shipboard Marine Pollution Emergency Plan for Noxious Liquid Substances, Garbage Management Plan, and Garbage Record Book.

<sup>50</sup> *MARPOL73/78*, Annex IV, reg. 12.

<sup>51</sup> *MARPOL73/78*, Annex V, reg. 7.

<sup>52</sup> See generally B Lin & C-Y Lin, 'Compliance with International Emission Regulations: Reducing the Air Pollution from Merchant Vessels' (2006) 30 *Marine Policy* 221.

<sup>53</sup> *MARPOL73/78*, Annex VI, reg. 13.

<sup>54</sup> *MARPOL 73/78*, Annex VI, reg. 14.

<sup>55</sup> *MARPOL73/78*, Annex VI, reg. 15.

<sup>56</sup> *MARPOL 73/78*, Annex VI, reg.12.

<sup>57</sup> *MARPOL 73/78*, Annex VI, reg. 16.

<sup>58</sup> *MARPOL 73/78*, Annex VI, reg. 17.

### E Implementation of MARPOL Convention: An Overview

Although the *MARPOL Convention* is a vibrant international treaty and often given credit for reducing pollution of the marine environment from ships, a report published by the US National Academy of Sciences noted, inter alia, that a lack of worldwide enforcement, monitoring and port State control severely limit the effectiveness of the Convention. Moreover, there are huge difficulties in identifying the sources of oil spillage.<sup>59</sup>

*MARPOL* primarily granted prescriptive and enforcement jurisdiction to the flag States. However, any violation of the requirements of *MARPOL* within the jurisdiction of a coastal State can be prohibited and sanctions can be established under the law of that State.<sup>60</sup> The meaning of the term ‘within the jurisdiction’ has to be determined in the light of the international law in force at the time the Convention is applied or interpreted.<sup>61</sup> This provision was incorporated in the Convention because while negotiating *MARPOL* States failed to reach an agreement about the coastal States’ jurisdiction. The drafters of the Convention kept the door open until the adoption of the *United Nations Convention on the Law of the Sea*<sup>62</sup> (*UNCLOS*) in 1982. Like *MARPOL*, *UNCLOS* mainly relies on flag States’ prescriptive jurisdiction and enforcement power. This is one of the main causes of the present unhappy status of implementation of international marine environmental conventions. Many ships, particularly those from flag of convenience and land-locked countries, never visit their own country. Most of the flag States do not see any benefit in making stringent regulations. On the other hand, coastal States have genuine interest in protecting their marine environment, but *UNCLOS* gives them a very restricted prescriptive and enforcement jurisdiction.<sup>63</sup>

<sup>59</sup> Gerard Peet, ‘The MARPOL Convention: Implementation and Effectiveness’ (1992) 7 *International Journal Marine & Coastal Law* 277. On effectiveness and implementation of *MARPOL* 73/78, see generally: Jeff B. Curtis, ‘Vessel-Source Oil Pollution and MARPOL 73/78: An International Success Story?’ (1985) 15 *Environmental Law* 676; Rebecca Becker, ‘MARPOL 73/78: An Overview of International Environmental Enforcement’ (1997) 10 *Georgetown International Environmental Law Review* 625; Andrew Griffin, ‘MARPOL 73/78 and Vessel Pollution: A Glass Half Full or Half Empty’ (1993-1994) 1 *Indiana Journal of Global Legal Studies* 489; Paul Stephen Dempsey, ‘Compliance and Enforcement in International Law - Oil Pollution of the Marine Environment by Ocean Vessels’ (1984) 6 *Northwestern Journal of International Law & Business* 459.

<sup>60</sup> *MARPOL* 73/78 art 4.

<sup>61</sup> *MARPOL* 73/78 art 9(3).

<sup>62</sup> *United Nations Convention on the Law of the Sea*, 1982, 21 ILM 1261 (1982) (entered into force 16 November 1994) (*UNCLOS*).

<sup>63</sup> See generally: Erik Jaap Molenaar, *Coastal State Jurisdiction Over Vessel-Source Pollution* (1998); LS Johnson, *Coastal State Regulation of International Shipping*, (2004) 2-3; Kari Hakapaa, ‘Foreign Ships in Vulnerable Waters: Coastal Jurisdiction over Vessel-Source Pollution with Reference to The Baltic Sea’ (2005) 33 *International Journal of Legal Information* 256.

Over-reliance on flag State enforcement can be identified as one of the major causes of worldwide enforcement deficiency of the *MARPOL Convention*.<sup>64</sup> A huge number of ships are registered in so-called open registries and operate with a 'flag of convenience'. As of 1 January 2004, 64% of the total tonnage of the world's merchant fleet was registered outside of the owner's domicile.<sup>65</sup> Many of these open registry countries have no 'genuine link' with the ships entitled to fly their flags. Moreover, their ships very rarely or never visit their own marine area. These countries find no incentive to prescribe stringent national regulation or proper implementation of international instruments.<sup>66</sup> Some of these open registry countries are very reluctant to prescribe or enforce stringent regulation on ships entitled to fly their flag. The relation between registry and ship is a relation of service provider and client. Some of these countries give registration to ships owned by foreign citizens to gain money.<sup>67</sup> The marine environment is not an issue in their national agenda. Some of them are even land-locked countries having no connection to or reliance on the sea.

On the other hand, even developing countries, which do not register ships owned by foreign nationals without a genuine link, face problems in implementing the *MARPOL Convention* as a flag State. These developing countries lack resources to enforce the *MARPOL Convention* on the ships flying their flags. Also, the global community is not very concerned about the issue, as ships of non-open registry developing countries rarely or never call to the Western developed countries' ports. Most of these ships operate regionally.

Developing countries are facing problems to comply with the *MARPOL Convention*, both as coastal and port States. Non-access to modern equipment and funds, as well as a lack of political will, are the main factors behind their non-compliance. Most of the developing countries do not provide reception facilities in their ports. The way the *MARPOL Convention* provision relating to reception facilities has been drafted makes the developing countries feel that they have no legal obligation to provide reception facilities.<sup>68</sup> The Convention requires parties to 'undertake to ensure the provision' of reception facilities.<sup>69</sup> Many developing countries regard this provision as having a non-binding status. Even in one of its publications, the IMO itself came up with following statement: '[t]his does not mean that the Government

---

<sup>64</sup> Griffin, above n 59, 506 & Mattson, above n 34, 190.

<sup>65</sup> Institute of Shipping Economics and Logistics, 'Total Merchant Fleet by Country of Domicile', <[http://www.isl.org/products\\_services/publications/samples/COMMENT\\_4-2004-short.shtml.en](http://www.isl.org/products_services/publications/samples/COMMENT_4-2004-short.shtml.en)> at 3 July 2008.

<sup>66</sup> See generally Tan, above n 36, 47-57. Boczek defined the 'flag of convenience' as the 'flag of any country allowing the registration of foreign-owned and foreign-controlled vessels under conditions which, for whatever the reasons, are convenient and opportune for the persons who are registering the vessels'; Boleslaw Adam Boczek, *Flags Of Convenience: An International Legal Study* (1962) 2.

<sup>67</sup> Becker, above n 59, 631-632, Griffin above n 59, 506-507 & Curtis, above n 59, 708.

<sup>68</sup> Tan, above n 36, 265.

<sup>69</sup> *MARPOL73/78*, Annex I reg 38; Annex II reg 18, Annex IV reg 12, Annex V reg 7 and Annex VI reg 17.

of a Party must provide the facility; it means, in practice, that the Government can require a port authority or terminal operator to provide the facilities'.<sup>70</sup>

All these inherent drawbacks make the *MARPOL* system and other IMO marine environmental instruments largely ineffective, particularly in developing countries. *MARPOL* and other IMO conventions are adopted and subsequently amended in the wake of major pollution incidents in the developed world which indicate that focus of these conventions is always on the developed world. Thus, these undoubtedly are reactive rather than proactive instruments. Against this backdrop, the following parts of this article will briefly examine the status of implementation of the *MARPOL Convention* in Bangladesh.

### III EXISTING LEGAL FRAMEWORK OF BANGLADESH

#### *A Introduction*

Different sectoral policies of the Bangladesh government clearly recognise the need for a comprehensive legal and institutional framework for protecting the marine environment from vessel-source pollution.<sup>71</sup> The National Environment Policy 1992 declares that one of the main government policies for marine environment will be to 'prevent all internal and external activities polluting the coastal and marine environment'. The National Coastal Zone Policy delineates the whole of the EEZ as a part of the coastal zone and declares that steps will be taken to handle the issue of discharge of bilge water from ships and oil-spill according to international conventions to which Bangladesh is a signatory. Further, the National Shipping Policy identified shipping security, environmental protection, effective operation of ports and shipping sector as main objectives of the government.

But this novel approach failed to translate into real, positive and proactive steps. Bangladesh is a party to *MARPOL 73/78* with all its annexes. However, the country has not enacted any enabling act to give effect to the *MARPOL Convention* in the domestic arena. It is completely undesirable that after a long period of signing and ratifying *MARPOL* and other IMO Conventions, Bangladesh is yet to enact necessary enabling domestic laws to give effect to these international legal instruments. The following parts will briefly examine the extent to which the *MARPOL Convention* has been implemented in the relevant sectoral laws of Bangladesh.

---

<sup>70</sup> IMO, *MARPOL--How to Do It: Manual on The Practical Implications of Ratifying, Implementing and Enforcing MARPOL 73/78* (2003) 74.

<sup>71</sup> The policies which more or less deal with vessel source marine pollution include, inter alia: National Coastal Zone Policy (2005), National Shipping Policy (2000), Environment Policy and Implementation Plan (1992), National Fish Policy (1998), National Tourism Policy (1992), National Energy Policy (1996), and National Water Policy (1999).

### B Implementation of MARPOL Convention and Environmental Law

Although Bangladesh does not have any comprehensive law directly dealing with the vessel source marine pollution, the Bangladesh *Environment Conservation Act 1995*<sup>72</sup> (*EC Act*) may be used for protecting the marine environment to some extent. As the umbrella environmental legislation, it provides for overall environmental conservation of the country. It established a Department of Environment (DoE) headed by a Director General (DG DoE) whose powers and functions include taking all necessary steps for the conservation of the environment, improvement of environmental standards and the control and mitigation of pollution of the environment.<sup>73</sup> Provision has been made for the framing of environmental guidelines for the control and abatement of environmental pollution and for the protection and improvement of the environment.<sup>74</sup> For the proper functioning of the *EC Act*, the government has already promulgated the *Environment Conservation Rule 1997 (EC Rule)*.<sup>75</sup>

The *EC Act* defines pollution as ‘the contamination or alteration of the physical, chemical or biological properties of air, water or soil, including change in their temperature, taste, odour, density, or any other characteristics, or such other activity which, by way of discharging any liquid, gaseous, solid, radioactive or other substances into air, water or soil or any component of the environment, destroys or causes injury or harm to public health or to domestic, commercial, industrial, agricultural, recreational or other useful activity, or which by such discharge destroys or causes injury or harm to air, water, soil, livestock, wild animal, bird, fish, plant or other forms of life’.<sup>76</sup> This wide definition can easily accommodate all sorts of environmental pollutions or discharges from vessels including oil, garbage, sewage or other hazardous and noxious substances.

In case of any accidental discharge, the responsible person has to take measures to control or mitigate the environmental pollution.<sup>77</sup> They also have to immediately inform the DG DoE of the occurrence or the likelihood of such occurrence.<sup>78</sup> On receipt of such information, the DG DoE will take necessary remedial measures to control or mitigate the environmental pollution, and the responsible person shall be bound to render assistance and co-operation as required by the DG DoE. The responsible person will be liable for all expenses of control and mitigation activities.<sup>79</sup>

---

<sup>72</sup> The *Bangladesh Environment Conservation Act 1995* (Act I of 1995).

<sup>73</sup> Ibid ss 3 and 4.

<sup>74</sup> Ibid s 13.

<sup>75</sup> *Environment Conservation Rule 1997*, (S.R.O. No. 197-Law/97).

<sup>76</sup> *Bangladesh Environment Conservation Act*, above n 72, s 2(b).

<sup>77</sup> Ibid s 9.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid.

Action can be taken against vessel-source pollution under the abovementioned provisions of the *EC Act*. However, this law cannot be treated as an implementing act for *MARPOL* and other IMO marine environment conventions. More importantly, as per government agencies allocation of responsibilities, the Department of Shipping is the responsible department for implementing IMO marine environmental conventions, not the Department of Environment. As the umbrella law for overall protection of environment, the *EC Act* is not suitable for the inclusion of detailed provisions for design, constructions, certifications and surveying of ships for ensuring environmental compliance. Like many other countries Bangladesh should implement *MARPOL* in its shipping and port-related laws.

### C Implementation of MARPOL Convention in Shipping and Port-Related Laws

The Government of Bangladesh enacted the *Territorial Waters and Maritime Zones Act 1974 (TWMZ Act)* which demarcates the territorial waters, contiguous zone, economic zone and continental shelf of Bangladesh.<sup>80</sup> There are some inconsistencies between this law and international law. Bangladesh's maritime boundary with neighbouring countries is still unsettled.<sup>81</sup> The *TWMZ Act* also contains some provisions to prevent marine environmental pollution. According to *TWMZ Act* s 6, the government may, by gazette notification, establish conservation zones in the sea for maintenance of the living resources. *TWMZ Act* s 8 empowers the government to take such measures as it deems appropriate for preventing and controlling marine pollution and preserving the quality and ecological balance in the marine environment in high seas adjacent to the territorial waters. According to the *Territorial Waters and Maritime Zones Rules 1977 (TWMZ Rules)*, innocent passage of foreign ships through the territorial waters shall be considered prejudicial to the security or interest of Bangladesh 'if it engages in any act of wilful or serious marine pollution, fishing and carry out any search [*sic*] or survey activities'.<sup>82</sup> The *TWMZ Rules* serve mainly to demarcate maritime zones of the country; they are not an appropriate vehicle for implementation of a highly technical convention like *MARPOL*. Nevertheless, concerned departments can enact necessary regulations for implementation of *MARPOL* under powers conferred by the *TWMZ Rules*.

The umbrella law regulating shipping in Bangladesh is the *Merchant Shipping Ordinance 1983 (MS Ordinance)*.<sup>83</sup> This ordinance makes necessary provisions for surveying and registration of Bangladesh ships and also details provisions relating to seaworthiness of vessels. It comprehensively deals with the issues of registration

<sup>80</sup> The *Territorial Waters and Maritime Zones Act 1974* (Act No. XXVI of 1974) ss 3, 4, 5, 6 and 7.

<sup>81</sup> Rahman, above n 3 and Alam, above n 3.

<sup>82</sup> *Territorial Waters and Maritime Zones Rules 1977* (Bangladesh Gazette, 8 Feb.1978)

<sup>83</sup> *Merchant Shipping Ordinance 1983* (Ordinance No. XXVI of 1983), as amended by the *Merchant Shipping (Amendment) Act 1995* (Act No. II of 1995) and the *Merchant Shipping (Amendment) Act 2004* (Act No. VII of 2004).

and nationality of ships, manning of ships, safety, construction, collisions, accidents, shipping casualties, wreck and salvage. The *MS Ordinance* established the Department of Shipping, Mercantile Marine Department, Shipping Offices, Surveyors and all other shipping-related government bodies. However, this ordinance does not contain any provision directly relating to marine environment.

The *MS Ordinance* gives a definition of a 'Bangladesh Ship'.<sup>84</sup> According to this definition, there must be a genuine link between the ship owner and Bangladesh. There is thus no scope pursuant to the *MS Ordinance* for using the Bangladesh flag as a flag of convenience. The *MS Ordinance* also defines a special category of ships called 'coasting ship'<sup>85</sup>; such vessels operate between Bangladesh and ports of such neighbouring countries as Myanmar and India. Registration requirements for these small ships are less strict than for seagoing vessels.

The *MS Ordinance* implemented the *International Load Lines Convention*, 1966, and the *International Convention for the Safety of Life at Sea*, 1974. The question of implementing the *MARPOL Convention* was, however, a totally different issue for the Bangladesh government: all the *MARPOL* annexes came into effect for Bangladesh in 2002, well after the 1983 enactment of the *MS Ordinance*. Although the latter was subsequently amended several times, the issue of implementing *MARPOL* was not tackled by these amendments. Hence, the *MS Ordinance* is not suitable to meet present day needs because its survey and certification procedures do not reflect the relevant provisions of *MARPOL*.

The government of Bangladesh established a Coast Guard force by means of the *Coast Guard Act 1994 (CG Act)*.<sup>86</sup> The *CG Act* empowers the Coast Guard to take action against environmental pollution and illegal fishing in the territorial waters, contiguous zone, conservation zone, economic zone and continental shelf of Bangladesh.<sup>87</sup> The Coast Guard is also entrusted with the duty of enforcement of any warrant or any other order of any court or other authority in respect of any ship which has entered the territorial waters of Bangladesh.<sup>88</sup> As there is no national implementing law for *MARPOL* in Bangladesh, the Coast Guard is not entitled to take any action constituting enforcement of the Convention in Bangladesh.

The port-related laws are also very relevant for protection of the marine environment from vessel-source pollution. Sections 6, 14 and 21 of the *Port Act 1908*<sup>89</sup> (*P Act*) are dedicated to protect waters of port areas from pollution caused by chronic spillage of oil, throwing or casting of ballast, rubbish or other things, and discharge of bunker waters containing oil from vessels. But the penal provisions of the *P Act* are not adequate. Rule 2 of the *Port Rules 1966* laid down

---

<sup>84</sup> Ibid s 2(3).

<sup>85</sup> Ibid s 2(4).

<sup>86</sup> The *Coast Guard Act 1994* (Act no. XXVI of 1994).

<sup>87</sup> Ibid s 7.

<sup>88</sup> Ibid s 7 (d).

<sup>89</sup> The *Ports Act 1908* (Act No. XV of 1908).



provisions for loading and unloading of dangerous cargo and ballast. The Rule defined, among other things, some types of petroleum as dangerous cargo.<sup>90</sup> The two sea ports of Bangladesh, Chittagong and Mongla, were established by two separate ordinances. According to the *Chittagong Port Authority Ordinance 1976*,<sup>91</sup> causing pollution of the water or environment of the port area shall be punishable by fine, which may total 100,000 *Taka* (1 US\$ = 68.30 *Taka*). The *Mongla Port Authority Ordinance 1976* contains a similar provision. This punishment may be suitable to prevent small-scale violations, but it is certainly not adequate to prevent large-scale oil pollution. Bangladesh neither ratified any international conventions dealing with liability and compensation for oil pollution casualties nor enacted any national law as did the United States of America. Nevertheless, as a common law country, recourse to the court is always open under tort law for any major oil pollution incident. The port-related legislation in the country has not been enacted with a view to implement the *MARPOL Convention* in Bangladesh. Some of these laws were enacted 100 years before and have not been updated.

Bangladesh imports approximately 3.5 million tons of oil from middle eastern countries every year. This oil is generally carried by 100,000 DWT oil tankers. None of these are Bangladeshi-flagged ships. The depth of the Chittagong port channel does not allow these tankers to enter Chittagong port. These tankers transfer oil to some shuttle tankers (5000-15,000 DWT) owned by the Bangladesh Shipping Corporation (BSC) to transfer the oil to the country's only refinery, Eastern Refinery Limited, located near the Chittagong Port. The transfer of oil from mother tankers to shuttle tankers is usually done at the Kuntubdia anchorage, some 40 miles south-west from Chittagong port. Almost all of these shuttle tankers were built before 1987; while they do not have a double hull they have a dedicated clean ballast tank, oil separators and slop oil tanks. Some of them maintain the oil discharge monitoring and control system as per *MARPOL* and the Oil Record Book. However, most of the middle-sized transferee tankers and imported product tankers are not in compliance with the *MARPOL* operational and equipment requirements.<sup>92</sup>

Bangladesh has 104 tankers larger than 150 gt operating in coastal and inland water. Most of these are old, second-hand imported vessels. Of these 104 tankers, only 25 were built after the entry into force of *MARPOL*. This indicates that none of these tankers has oil pollution prevention facilities as required by *MARPOL*. Apart from these tankers, the country has 5000 registered vessels of which 500 vessels are above 400 gt. Like the oil tankers, these vessels are also very old and do not have any oil discharge monitoring and control system as prescribed by the *MARPOL Convention*.<sup>93</sup>

---

<sup>90</sup> Mohammad Khurshed Alam, *Bangladesh's Maritime Challenges in the 21<sup>st</sup> Century* (2004) 299.

<sup>91</sup> *Chittagong Port Authority Ordinance 1976* (Ordinance No. LII of 1976) s 41A.

<sup>92</sup> Alam, above n 90 at 295.

<sup>93</sup> *Ibid.* at 295-296.

In the past, the Chittagong Port Magistracy was quite active in detecting marine pollution in the port area. But its jurisdiction is very limited. Under the *Port Authority Ordinance*, a magistrate can impose a small fine of up to 100,000 Taka. Moreover, the port magistrate can take action only against the pollution incident in port areas and not any other part of the sea. This power and jurisdiction may suffice to stop marine pollution by small inland ships and mechanized boats, but it is certainly not adequate for big tankers or other vessels.

Bangladesh's compliance and enforcement mechanisms as a port and coastal State are very weak, fragmented and uncoordinated. Bangladesh provides no reception facilities at sea ports. The enforcement, legal, administrative and judicial authority for large scale vessel-source pollution is not very clear. Although there have been a number of large-scale oil pollution incidents in the marine area of Bangladesh, concerned authorities failed to prosecute any foreign ships.<sup>94</sup> There is no coordination between the Coast Guard, maritime administration and port authorities. Even if the Coast Guard were to arrest a ship for major oil pollution in territorial waters, it is not clear which authority would prosecute it nor in which court this would occur. The whole maritime sector has been struggling with age-old unenforced laws which are inherently vague.

Existing laws in Bangladesh are very vague, particularly in the areas of prevention of pollution and civil liability for oil pollution. Implementation mechanisms of existing environmental laws are largely unsuccessful. Administrative and judicial authorities are not clear and coordinated. Although, as stated above, Bangladesh ratified the *MARPOL Convention* with all its annexes, national laws have not been updated to implement this international convention.

Taking these matters into account, the government of Bangladesh finally realised the need for a comprehensive enabling national legislation to give effect to the *MARPOL Convention* and other conventions to which Bangladesh is a party. In 2004 the Department of Shipping drafted a *Marine Environment Conservation Act (MEC Act)* for implementation of the *MARPOL Convention*, which will be placed to the Parliament for consideration after necessary scrutiny. The following part briefly introduces the draft *MEC Act*.

#### IV THE DRAFT MARINE ENVIRONMENT CONSERVATION ACT 2004

##### *A Introduction*

The draft *MEC Act* is principally aimed at conserving the marine environment and preventing marine pollution in Bangladesh and at the same time giving effect to the *MARPOL 73/78* in Bangladesh.<sup>95</sup> By means of the *MEC Act*, *MARPOL* will become part of Bangladesh's law. If provisions of any delegated legislation made

<sup>94</sup> Akhter, above n 5 and Mujumdar, above n 8.

<sup>95</sup> Draft *Bangladesh Marine Environment Conservation Act 2004* (Draft *MEC Act*) (Unofficial English Translation collected from Department of Shipping, Bangladesh) s 6.

under the draft *MEC Act* are inconsistent with the provisions of the *MARPOL Convention*, the provisions of the Convention shall prevail.<sup>96</sup>

The draft *MEC Act* also provides for the government to give effect to seven other international conventions related to the marine environment by delegated legislation.<sup>97</sup> Although the draft *MEC Act* makes provision for giving effect to these seven other conventions, Bangladesh is not a party to them all: it is only party to the Intervention and the OPRC conventions. That is why the draft *MEC Act* itself will not give effect to these conventions. The law is merely delegating power to the government to give effect to these conventions through promulgation of regulations if Bangladesh ratifies these conventions in the future. This is a good approach circumventing the time-consuming process of making several laws through parliament. It is a welcome development suggesting that in the near future Bangladesh may be able to ratify these important conventions.

### B Scope of Application

The draft *MEC Act* s 2 deals with the scope of application of this instrument. According to this section, the *MEC Act* shall apply to 'Bangladesh Waters and outside Bangladesh Waters and shall include all ships whether Bangladeshi or foreign within Bangladesh Waters and where Bangladesh Waters are likely to be threatened'.<sup>98</sup> The Act defines 'Bangladesh Waters' as the area defined in s 3 of the *TWMZ Act*. Section 3 of the *TWMZ Act* defines 'Bangladesh Waters' as the 'Territorial Waters' of Bangladesh. The application of the draft *MEC Act* is said to extend to the all national and foreign ships within Bangladesh waters as well as in cases where Bangladesh waters are likely to be threatened. In future this provision may create ambiguity. If the EEZ of Bangladesh is polluted by an act of any foreign

<sup>96</sup> Ibid s 7.

<sup>97</sup> These conventions are: the *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*, 1969 and its protocol 1973; the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention)*, 1972; the *International Convention on Civil Liability for Oil Pollution Damage*, 1969 and its Protocols of 1976 and 1984; the *Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material*, 1971; the *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage*, 1971 and its Protocols of 1976 and 1984; the *International Convention on Oil Pollution Preparedness, Response and Co-operation*, 1990 (OPRC); *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea*, 1993. See Draft *MEC Act* s 38. Some other sections of the draft *MEC Act* confer power to different government authorities to make rules which may play a positive role in formation of marine environmental regime in the country. Section 37 provides that the government has general power to make rules to carry out the purposes of the *MEC Act* and to give effect to the international conventions adopted by the International Maritime Organization and accepted by the government. All rules duly made to give effect to such conventions shall be deemed to form part of this Act and shall have effect accordingly. Section 39 of the draft *MEC Act* confers a rule-making power on the Director General of the Department of Shipping.

<sup>98</sup> Draft *MEC Act*, above n 95, s 2(a)

ship,<sup>99</sup> it is not very clear whether the draft *MEC Act* will be applicable to that ship because the definition of ‘Bangladesh waters’ only includes the territorial waters of Bangladesh. An ambiguity may arise if owners of foreign ships come up with the argument that no action can be taken against the ship if it is within the EEZ of Bangladesh and not within the territorial sea. Moreover, the question may arise whether the draft *MEC Act* will be applicable in case of any pollution in internal waters. Thus, the draft *MEC Act* s 2 needs to be redrafted carefully if it is not to render the Act largely ineffective.

### *C Provisions for the Prevention of Vessel-Source Pollution*

The main aim of the draft *MEC Act* is to control vessel-source marine pollution in Bangladesh’s marine area. Part II of the draft law contains provisions for prevention of pollution caused by discharge of oil or pollutants within and beyond Bangladesh waters and discharge of oil as a result of exploration of the seabed.

All kinds of discharge and escape of oil or pollutants in Bangladesh waters have been made a criminal offence. If oil or pollutant escapes or is discharged in Bangladesh waters, the person liable shall be punishable with a fine of 25% higher than the costs incurred to clean up the discharge or with a maximum five years imprisonment or both. Moreover, the polluters have to eradicate the pollutants otherwise they can be punished by another five years imprisonment.<sup>100</sup>

This section of the draft *MEC Act* is going to make discharge as well as escape of oil or pollutant an offence with a very rigorous punishment. However, making unintentional escape or accidental discharge a criminal offence is inconsistent with *UNCLOS*. Moreover, it may create enforcement problems as the courts will ultimately seek to establish criminal intention, recklessness, or at least gross negligence before punishing the accused.

*UNCLOS* permits deprivation of individual liberty and imposition of criminal punishment like imprisonment to seafarers only in case of ‘wilful and serious act of pollution in the territorial sea’.<sup>101</sup> Article 230(2) of *UNCLOS* provides:

Monetary penalties only may be imposed with respect to violations of national laws and regulations or applicable international rules and standards for the prevention, reduction and control of pollution of the marine

---

<sup>99</sup> Article 211(5) of *UNCLOS* provides a jurisdiction to coastal States to prescribe ‘laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to generally accepted international rules and standards’ in respect of their exclusive economic zones.

<sup>100</sup> Draft *MEC Act*, above n 95, s 8.

<sup>101</sup> Olagunju G Anthony, ‘Criminalization of Seafarers for Accidental Discharge of Oil: Is there Justification in International Law for Criminal Sanction for Negligent or Accidental Pollution of the Sea?’ (2006) 37 *Journal of Maritime Law & Commerce* 219, 235.

environment, committed by foreign vessels in the territorial sea, except in the case of a *wilful and serious act of pollution in the territorial sea*.<sup>102</sup>

The intention of the Convention is very clear from the wording of this article. The word 'only' clearly indicates that the Convention permits other penalties such as imprisonment only in case of 'wilful and serious act of pollution in the territorial sea'. As observed by Anthony, '[a]ny attempt, therefore, to stretch the provision beyond that limit, will amount to contravention of the Convention except as the proviso permits; i.e. except in the case of 'wilful and serious act of pollution in the territorial sea'... In such instance, there must be evidence of a wilful, intentional and deliberate act on the part of the accused, and not mere accident.'<sup>103</sup> Moreover, *UNCLOS* obliges parties to respect all recognised rights of the accused in the legal proceedings.<sup>104</sup>

In taking such an approach, the drafters of the proposed Act may have been influenced by the examples in the US where seafarers were imprisoned for accidental discharge of oil due to unintentional acts such as negligence or inadvertence.<sup>105</sup> The European Union is also, to some extent, going to follow the same path. In 2005, the Council of the European Union issued a directive which stated that any discharge of polluting substances in the internal waters, territorial sea, straits used for international navigation, the EEZ, and the high seas would be treated as a criminal offence if committed with 'intent, recklessly or by serious negligence'.<sup>106</sup>

The main problem of the draft *MEC Act* is that it is going to criminalise all discharge or escape irrespective of their nature. The position of Bangladesh law is even stricter than that of the EU and US. Reliance only on criminal sanctions will not solve the problem and, more importantly, it is conflicting with the country's international legal obligations as a party to *UNCLOS*. Rather, Bangladesh should countenance becoming a party to the IMO liability and compensation regime and develop national legal framework along the same lines.

Sections 14 and 15 of the draft *MEC Act* provide for necessary equipment in ships to prevent pollution and to deal with pollution incidents.<sup>107</sup> Ships which are not complying with the equipment provisions may be detained.<sup>108</sup> The draft *MEC Act*

<sup>102</sup> *UNCLOS*, art 230 (2), emphasis added.

<sup>103</sup> Anthony, above n 101, 235.

<sup>104</sup> *UNCLOS*, art 230 (3).

<sup>105</sup> Anthony, above n 101, 235.

<sup>106</sup> *Directive 2005/35/EC* of the European Parliament and of the Council of 7 September 2005 on ship-source pollution and on the introduction of penalties for infringements, 2005 OJ L 255, arts 4 and 3(1).

<sup>107</sup> Violation of these sections will be punishable with a fine of 25% higher than the original cost of damage or with an imprisonment for a term, which may extend to three years or with both.

<sup>108</sup> Draft *MEC Act*, above n 95, s 16.

prohibits transfer of oil and other pollutants without requisite notice.<sup>109</sup> Moreover, the owner, master, agent, and the occupier of the ship are bound to report discharge of oil and other pollutants to the concerned authorities.<sup>110</sup> These provisions seem to be sound and may play a significant role to prevent marine pollution if properly enforced. The proposed Act does not precisely define the term 'necessary equipment', but the director general of the Department of Shipping may frame necessary rules for ensuring that all vessels must be fitted with the necessary equipment listed in *MARPOL* and other IMO marine environment related conventions.

#### D Reception Facilities

The draft *MEC Act* grants the port authorities power to provide reception facilities for oil and other pollutants. The port authority may collaborate with or appoint private parties to provide such facilities. The port authority or authorized person can impose reasonable charges for the service.<sup>111</sup> This is a very good provision which will open the door for private sector investment for reception facilities. If government imposes strict provision without providing reception facilities, it will adversely affect the maritime and trade sector of the country. The government may direct any port authority, oil industry or any dry dock or terminal operator to provide reception facilities for oily mixture or any other substances. It will be a criminal offence if any port or industry fails to comply with the government direction to provide reception facilities.<sup>112</sup> As the Bangladesh government is actively considering granting permission to the private sector to operate ports, this provision may be very useful in the future.

#### E Civil Liability for Shipping Casualties

Part III of the draft *MEC Act* deals with shipping casualties.<sup>113</sup> Pursuant to s 24, if any oil or pollutant is discharged or escapes into Bangladesh waters from any ship, the owner of the ship shall be liable to give compensation for such pollution.

---

<sup>109</sup> Draft *MEC Act*, above n 95, s 20.

<sup>110</sup> If he fails to do so without any reasonable ground, he will be punishable with imprisonment for a term which may extend to three years or a fine, which may extend to 1,000,000 *taka* (1 US\$ = 68.30 *Taka*) or with both. See Draft *Marine Environment Conservation Act* s 21.

<sup>111</sup> Draft *MEC Act*, above n 95, s 19.

<sup>112</sup> Draft *MEC Act*, above n 95, s 19(6).

<sup>113</sup> According to s 22 of the draft *MEC Act*, the government may give necessary directions for preventing or reducing or eliminating pollution, from oil or from any pollutant or the risk of such pollution in respect of shipping accidents. Under s 26, if any person, to whom a direction is duly given under s 22, contravenes any requirements of the direction, he shall be guilty of an offence and may be punishable with a maximum penalty of *Taka* 2,000,000 (1 US\$ = 68.30 *Taka*) or with imprisonment of two years or both. According to s 23, if any action is duly taken by a person in pursuance of a direction given to him under s 22, he has the right to recover compensation in respect of unreasonable loss or damage caused to him while acting under such directions.

As per s 25, any ship carrying in bulk a cargo of more than 2000 tons of persistent oil shall not enter or leave a port of Bangladesh or engage in any oil transfer operation within Bangladesh unless there is a valid certificate showing that there is in force a contract of insurance or other security satisfying requirements of Article VII of the *Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC 69)* or its subsequent amendments. Furnishing this certificate will not give immunity to the ship owner or other person from liability to pay any sums determined by the government or awarded by the court where the aggregate of such sums exceed the sums fixed by applying the provisions of paragraph 1 of Article V of *CLC 69*.<sup>114</sup> However, Bangladesh is not a party to *CLC 69*. That being the case, it appears that there is no problem in imposing more stringent civil liability on ship owners than this Convention provides. However, it may create problems in the future if the country becomes a party to the international compensation and liability regime. Moreover, *CLC 69* has been replaced by a new legal instrument. This will be elaborated in Part H below.

#### F Preparedness and Response

Section 35 of the draft *MEC Act* provides for contingency plans to combat pollution at local and national levels and authorises the ‘head of the contingency plan’ to acquire the services of such persons, materials, equipment, vessels and crafts as may be required for the purpose. The head of the contingency plan or authorised person shall have the right of access over any land, buildings, premises or anything else deemed necessary for the purpose of implementing the contingency plan. Although the proposed law highlights the issue of preparedness and response, implementation of *MARPOL* and any other relevant convention is largely dependent on the making of a comprehensive rule under this section.

#### G Enforcement, Detection of Offence and Judicial Procedures

The draft *MEC Act* details enforcement mechanisms including provisions for keeping different types of records on oil cargo, chemicals, toxic substances or garbage; power of inspection; enforcement and application of fines and enforcement of different international conventions related to the marine environment. Government authorities are empowered by this Act to directly enforce provisions of *MARPOL 73/78* and other marine environmental conventions on ships of other State parties to those conventions. To enforce any international marine environmental convention, government officials can board any foreign ships if the ship is entitled to fly the flag of a State party to that particular convention. After

---

<sup>114</sup> *International Convention on Civil Liability for Oil Pollution Damage (CLC 69)*, opened for signature 29 November 1969, 973 UNTS 3, 9 ILM 45 (1970) (entered into force 19 June 1976), as amended by the 1976 Protocol to the 1969 Convention, opened for signature 1 February 1977, 16 ILM 617 (1977) (entered into force 8 April 1981).

going on board, the concerned official may require production of any record to be kept in accordance with the convention.<sup>115</sup>

Sections 12 and 13 of the draft *MEC Act* provide for the institution of penal action against offenders and judicial procedure including special power of the court. A case can be filed to the Marine Court established under s 47 of the *Inland Shipping Ordinance 1976 (IS Ordinance)* if any offence occurs under the *MEC Act*. The Marine Court is a court of first-class magistrature empowered to try offences under the *IS Ordinance*.<sup>116</sup> It would not be a wise decision to give judicial officers of this court a much higher pecuniary or subject matter jurisdiction than what they usually possess under the *Criminal Procedure Code*.<sup>117</sup> Moreover, this court may not be suitable to try large claims that may arise under the *MEC Act*. Furthermore, just a single court placed far inland will not be able to handle the huge number of cases arising in different parts of the country. Bangladesh has already established a number of environment courts<sup>118</sup> presided over by joint district judges with unlimited pecuniary jurisdiction. These courts could be utilised for enforcing the draft *MEC Act*. Section 12 of the *MEC Act* could be changed to empower an Environment Court to try any cases in which the government claims 500,000 *Taka* or more as compensation or expenditure for combating pollution. Moreover, the government may wish to consider using the Admiralty Bench of High Court Division of the Supreme Court, which already has jurisdiction to adjudicate any claim arising from a damage done by a ship.<sup>119</sup>

#### H Some Observations on the Draft Act

According to s 7 of the draft *MEC Act*, where any provisions of any rules and regulations made under the Act are inconsistent with the provisions of the *MARPOL Convention*, the provisions of the Convention shall prevail. However, where any provisions of the Act are inconsistent with the provisions of *MARPOL*, the provisions of the Act shall prevail. Whether the provisions of the draft *MEC Act* are consistent with *MARPOL* or not is still a moot point. The draft *MEC Act* is largely in conformity with *MARPOL*, but there are certainly some inconsistencies with international regulations dealing with the civil and criminal liability of marine pollution damages as well as with *UNCLOS*. For example, the draft *MEC Act* makes provision for the recovery of clean-up costs from the ship owner in the form

<sup>115</sup> According to s 34 of the draft *MEC Act*, the coast guard, in accordance with the *Coast Guard Act 1994*, will do the following in collaboration with the Department of Shipping: detecting marine pollution, detecting the source of marine pollution, reporting to the local Mercantile Marine Department for further action soon after detection of the pollution and its source, removal of the pollutants, taking part in contingency plan and complying with other government orders as and when given.

<sup>116</sup> *Inland Shipping Ordinance 1976* (Ordinance No. LXXII of 1976) ss 47-53

<sup>117</sup> The *Code of Criminal Procedure 1898* (Act No. V of 1898) s 29C.

<sup>118</sup> *Environment Court Act 2000* (Act No. XI of 2000) ss 4 and 5.

<sup>119</sup> *Admiralty Act 2000* (Act No. XLIII of 2000) s 3. See generally N. Ahmed, 'Law of Admiralty in Bangladesh through the Ages' (1987) 10 *Law & International Affairs* 134.



of a fine,<sup>120</sup> but at the same time it imposes civil liability for the same purpose.<sup>121</sup> This approach undoubtedly violates the principle of natural justice.

Another very important issue is that the draft *MEC Act* is going to give the government power to ratify *CLC 69*<sup>122</sup> and the *International Fund for Compensation for Oil Pollution Damage 1971 (FUND 71)*<sup>123</sup>. This indicates that the proposed Act is drafted without cognizance of recent developments in international marine environmental law. The IMO adopted a new convention, namely the *Civil Liability Convention (CLC 92)*,<sup>124</sup> which is already in operation. Parties to the *CLC 92* ceased to be parties to the *CLC 69* from 16 May 1998. These two conventions will co-exist for the time being because some of the parties to *CLC 69* are yet to ratify *CLC 92*. Nevertheless, *CLC 92* will eventually replace *CLC 69*. Moreover, a ship which only has the *CLC 69* certificate may find some difficulties in trading with countries which became parties to *CLC 92*. In that case, ships from non-party countries may have to get both the *CLC 69* and *CLC 92* certificates.<sup>125</sup> Furthermore, *FUND 71* has been replaced by the 1992 *FUND Convention (FUND 92)*<sup>126</sup> and ceased to be in force in 2002. Relevant provisions of the draft *MEC Act* should be redrafted with a clear understanding of the recent changes in the international conventions relating to civil liability and compensation.

Although there are some serious inconsistencies, it is encouraging that the draft *MEC Act* largely conforms to *MARPOL*. But there is every possibility that this draft will never be enacted as a law because several previously drafted laws have not been enacted due to lack of political will. For example, according to a report published by the UNEP, an ordinance for marine pollution control was drafted and was in the final stages of promulgation in 1984.<sup>127</sup> Unfortunately that draft ordinance never became a law. It will not be surprising if the 2004 draft faces the same destiny because the conservation of marine environment has failed to get

<sup>120</sup> Draft *MEC Act*, above n 95, s 8(2).

<sup>121</sup> Draft *MEC Act*, above n 95, s 24.

<sup>122</sup> *International Convention on Civil Liability for Oil Pollution Damage (CLC 69)*, opened for signature 29 November 1969, 973 UNTS 3, 9 ILM 45 (1970) (entered into force 19 June 1976), as amended by the 1976 Protocol to the 1969 Convention, opened for signature 1 February 1977, 16 ILM 617 (1977) (entered into force 8 April 1981).

<sup>123</sup> The *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND 71)*, opened for signature 18 December 1971, 1110 UNTS 57, 11 ILM 284 (1972) (entered into force 16 October 1978), as amended by the 1976 Protocol to the *FUND 71*, opened for signature 1 February 1977, 16 ILM 621 (1977) (entered into force 22 November 1994) (ceased to operate 24 May 2002).

<sup>124</sup> The *International Convention on Civil Liability for Oil Pollution Damage (CLC 92)*, opened for signature 15 January 1993, 1953 UNTS 255 (entered into force 30 May 1996).

<sup>125</sup> IMO, *International Convention on Civil Liability for Oil Pollution Damage* <[http://www.imo.org/Conventions/contents.asp?doc\\_id=660&topic\\_id=256](http://www.imo.org/Conventions/contents.asp?doc_id=660&topic_id=256)> at 10 October 2009.

<sup>126</sup> *International Convention on Fund for Compensation for Oil Pollution Damage*, opened for signature 15 January 1993, (FUND 92), 87 UKTS Cm 3433 (entered into force 30 May 1996).

<sup>127</sup> UNEP, 'Environmental Problems of the Marine and Coastal Area of Bangladesh: National Report' (1986) 24.

proper prominence in the national agenda. Lack of political will along with a lack of technical resources is the main cause of the present unsatisfactory status of the marine environment in Bangladesh. Moreover, even if this law is enacted it will not be very easy to enforce with the present lack of technical and institutional capacity in the country. In particular, the government should build the capacity of the port and maritime administration as well as the Bangladesh Coast Guard.

#### V INSTITUTIONAL ASPECTS OF IMPLEMENTATION: PROBLEMS AND SOLUTIONS

##### *A Strengthening Institutional Capacity and Interagency Cooperation*

Drafting or enacting enabling legislation is the first step and undoubtedly the easiest one. Enforcement of these domestic regulations remains the main challenge. For the proper enforcement of law, developing institutional capacity is a *sine qua non*. A number of government agencies are involved in the enforcement of marine environmental laws in Bangladesh. For vessel-source marine environment pollution, the lead ministry is the Ministry of Shipping and the lead agency is the Department of Shipping. The Department of Shipping is also responsible for implementation of all vessel-source pollution-related international conventions in Bangladesh. This department is aided by several other subordinate offices under its administrative control which include the Mercantile Marine Department, the Marine Academy, the Government Shipping Office, and the Seaman's Training School. One problem of maritime administration is that two sea ports of the country, Chittagong and Mongla, are not technically under the control of the Department of Shipping. These ports are established by separate law and treated as autonomous bodies.

This fragmentation of authority makes it difficult for the Department of Shipping to take action under port State control. To enforce law in the territorial sea and EEZ, the Department of Shipping needs help from the Coast Guard, but there is no formal coordination between the agencies. The Coast Guard is regarded as an agency under the Ministry of Home Affairs. To solve this problem, all concerned agencies should be coordinated under a single authority. Moreover, protection of marine environment is one of many duties of all these agencies, and not the main duty. Government officials are not specifically trained for detection of marine pollution as well as for pollution incident response. There is an urgent need for capacity building.

Moreover, the authority of different government agencies is not very clear. Different government agencies work in the same area with conflicting responsibilities. The maritime administration, port administration, environment department, custom department, Coast Guard and naval forces are not coordinated under a single administration. These departments may be involved in enforcement of different regulations in the same field. Table 1 briefly describes the responsibility of different government agencies in combating vessel-source marine pollution.

Table: 1 Key Government Agencies Involved in Prevention of Vessel-source Pollution<sup>128</sup>

Name	Role
Ministry of Shipping Department of Shipping Mercantile Marine Department Government Shipping Office Marine Academy Seaman's Training School	<ul style="list-style-type: none"> <li>➤ Implementation of all IMO conventions</li> <li>➤ Liaison with IMO and other International organizations.</li> <li>➤ Inspection of ships.</li> <li>➤ Enforcement of the <i>Merchant Shipping Ordinance 1983</i> and all other relevant legislation.</li> <li>➤ Registration, survey and certification of ships.</li> <li>➤ Training and certification of marine officers, engineers and seamen.</li> </ul>
Chittagong and Mongla Port Authorities	<ul style="list-style-type: none"> <li>➤ Management and development of ports.</li> <li>➤ Prevention of pollution in port area .</li> </ul>
Coast Guard	<ul style="list-style-type: none"> <li>➤ Patrolling in the maritime area of Bangladesh.</li> <li>➤ Detection of activities causing pollution of the environment in the maritime zones of Bangladesh and taking measures for their stoppage.</li> <li>➤ Enforcement of any warrant or any other order of any court or other authority in respect of any ship which has entered the territorial waters of Bangladesh. (Section 7 <i>Coast Guard Act 1994</i>)</li> </ul>
Bangladesh Navy	<ul style="list-style-type: none"> <li>➤ Safeguarding the country's sovereignty over the internal waters and territorial sea, and sovereign rights over the Contiguous Zone, Exclusive Economic Zone (EEZ) and Continental Shelf.</li> </ul>
Department of Environment	<ul style="list-style-type: none"> <li>➤ Overall management and protection of environment.</li> <li>➤ Enforcement of <i>Environment Conservation Act 1995</i>.</li> </ul>

Another management deficiency in maritime administration in Bangladesh is that concerned departments are not represented at IMO meetings. Most of the time,

<sup>128</sup> Websites of Bangladesh Navy, Coast Guard, Department of Shipping and Chittagong Port Authority.

Bangladesh is represented at the IMO meetings by an official of its London High Commission who is a professional diplomat having no training and expertise in maritime affairs. Officials of the maritime administration very rarely participate in the IMO meetings.

Institutional capacity building must not be limited to providing training and coordination. Combating vessel-source marine pollution involves a huge amount of investment in facilities and equipment. The government of Bangladesh must invest reasonable funds to provide pollution detection equipment to concerned departments. The Bangladesh Coast Guard is currently facing an extreme shortage of patrol boats and other equipment for detection of marine pollution.<sup>129</sup> Moreover, sea ports of the country provide no reception facilities. If the government considers that it is not possible to provide all these facilities from its own fund then the government should apply to international donor agencies and developed countries for financial assistance.

### B *Financial and Technical Issues*

In many cases, the least developed countries may not fully implement international marine environmental conventions due to financial inability or economic reasons. Providing reception facilities and collecting patrolling vessels and other equipment involve a huge amount of investment. A report of the United Nations Conference on Environment and Development estimated that the cost of establishing a reception facility in developing countries would be \$ 560 million for the period 1993-2000.<sup>130</sup> The amount has very likely increased since this time. Many of the least developed countries which are struggling to provide bare necessities for their people may consider investment for marine environmental protection as a luxury. As pointed out by Beckman, 'some countries may regard the international standards in the IMO Conventions as ideals to strive for, but not standards which can reasonably be met at this time by ships flying their flag or by ships from neighbouring countries entering its ports'.<sup>131</sup> Bangladesh is not an exception from the overall scenario.

Bangladesh lacks sufficient technical and legal expertise. Technical experts in maritime administrations sometimes find it extremely difficult to understand the legal terms, while legal officers of the maritime administration find it difficult to

---

<sup>129</sup> According to Commodore Alam, 'the Coast Guard is yet to play a dominant role in policing our waters due to lack of patrol vessels, interceptor vessel and aircraft'. He also observed, 'The Coast Guard with its inadequate equipment, ship, and personal has been able to curb smuggling, random catch of *Jatka* fish, and provide service to fishermen in distress, helped in environmental conservation and may soon upgrade its policing capabilities provided it receives the right attention of the policy makers'. Alam, above n 90, 319 -409.

<sup>130</sup> Ronald Bruce Mitchell, *Intentional Oil Pollution at Sea- Environmental Policy and Treaty Compliance* (1994) 208.

<sup>131</sup> Robert Charles Beckman, *Ratification and Effective Implementation of IMO Conventions in the East Asian Seas Region*, paper presented at the East Asian Seas Congress, Haikou City, Hainan Province, PR China, 12-16 Dec. 2006.

understand the technical terms of some of the international marine environmental conventions such as *MARPOL*. Moreover, like many other least developed coastal States, maritime administrations in Bangladesh do not have sufficient funds to send their experts to countless meetings of international organizations. However, it should be noted that Bangladesh earns a considerable amount of revenue from sea ports and other maritime activities. So, lack of political will, not financial inability can be identified as the main bottleneck behind the non-implementation of *MARPOL* in Bangladesh.

### C Changing Political Mindset

There is a widespread lack of political will in the developing countries concerning the state of the marine environment and socio-economic impact of marine environmental pollution. Bangladesh is not an exception from the global scenario. Sometimes developing nations have responded to the global environmental protection movement with several reservations, implied or expressed. This is because international marine environmental conventions have, in many respects, failed to reflect the needs of developing countries. As observed by Fakhry, developing countries may ‘view international marine environmental law as offering too inadequate an answer to their needs. For, instance, the *United Nations Convention on the Law of the Sea* requires enforcement of shipping standards by the flag State; in other words, the burden is placed on the nominal player, not the real economic stakeholder (the State of beneficial ownership of the ship)’.<sup>132</sup>

The legal system of Bangladesh mainly follows the common law tradition. Historically, a ‘use’ oriented approach has been taken by the law and institutions which deal with natural resources in Bangladesh.<sup>133</sup> Due to various inadvertent reasons, the need for an effective environmental regulatory regime has not received wide recognition in Bangladesh. Most of the initiatives for environmental conservation are largely ineffective.<sup>134</sup>

As stated earlier, Bangladesh earns a considerable amount of revenue from Chittagong and Mongla ports, but the government is not ready to invest some of this revenue for protection of the marine environment. In recent times the government has been showing a positive attitude towards the prevention of vessel-source marine pollution. Bangladesh is going to become a party to the Indian Ocean

<sup>132</sup> Aref Fakhry, ‘Capacity-building in International Marine Environmental Law: Perspectives of Developing Countries’ in Andree Kirchner ed, *International Marine Environmental Law: Institutions, Implementation and Innovations* (2003) 93, 97.

<sup>133</sup> Mohiuddin Farooque, ‘Regulatory Framework and Some Examples of Environmental Contamination in Bangladesh’ in BELA (ed), *Selected Writings of Mohiuddin Farooque: Environmental Order the Security of Survival* (2004) 20.

<sup>134</sup> Niaz Ahmed Khan, & Ataur Rahman Belal, ‘The Politics of the Bangladesh Environmental Protection Act’ (1999) 8 *Environmental Politics* 317. Also see S Rizwana Hasan, ‘Conservative Forest Act Cannot Conserve Forests’, *The Daily Star* (Dhaka, Bangladesh) 7 June 2008. In this article the writer offered some comment on forest-related laws of Bangladesh.

Memorandum of Understanding (IOMOU) on port State control.<sup>135</sup> The Department of Shipping recently drafted a number rules to give effect to different international conventions to fulfil the country's international obligations under the IOMOU. Among these newly drafted rules, the *Merchant Shipping (Port State Control) Rules*<sup>136</sup> may be particularly instrumental in implementing marine environment related international conventions in Bangladesh. The Rules will implement 'international standards for ship safety, pollution prevention and shipboard living and working conditions' in Bangladesh.<sup>137</sup> This is undoubtedly a great example in the legislative history of the country, where the government is going to give effect to relevant international regulations before joining an international institution. If these rules and proposed Act are approved by the government and Bangladesh joins the IOMOU, the marine environmental protection regime in Bangladesh will be strengthened and implementation of international conventions may be ensured by this process.

#### *D Participation of Non-State Actors and Creating Incentives for Environmental Compliance*

Environmental legislation in Bangladesh mainly adopts a command and control approach, that is, a top-down approach. Most of the initiatives come from high officials without taking into account the opinion of field-level people. Environmental law-making processes are dominated by the authoritarian approach, and law is thus not an instrument of social engineering for the people.

In Bangladesh, mechanisms presently in place give no incentive for environmental compliance. The government has to find some market based mechanisms for solving environmental problems. Privatisation and attracting foreign investment may be one way of solving the problems. For example, the government may give permission to the private sector to establish reception facilities. As a most progressive step, whole port facilities can be transferred to the private sector with strong regulation or a directive that private port operators must provide reception facilities.

### VI CONCLUDING REMARKS

As discussed above, the draft *MEC Act* contains some inconsistencies with international conventions. Moreover, it does not properly uphold the stated aims of relevant international conventions. This draft law needs to be redrafted with a clear understanding of the international conventions. More importantly, government

---

<sup>135</sup> The Cabinet of Bangladesh recently approved a proposal to sign the Indian Ocean Memorandum of Understanding (IOMOU). *The New Age*, 'PM Orders Action Plan to Ease Traffic Jam', <<http://www.newagebd.com/2009/sep/01/front.html>> at 10 October 2009.

<sup>136</sup> Department of Shipping, Draft *Merchant Shipping (Port State Control) Rules*, <<http://www.dos.gov.bd/027.Final%20Port%20State%20Control%20Regulations.2007.doc>> at 10 August 2008.

<sup>137</sup> *Ibid.*

should take immediate steps for speedy enactment of the proposed law. Making stringent law without providing necessary reception facilities may hinder international trade. This will be counter-productive for the country's economy. Moreover, without capacity building, enforcement of new legislation will be highly problematic. Before enacting a new law Bangladesh should develop its institutional capacity. As proposed in this article, Bangladesh must identify longer term and shorter term priorities in implementing *MARPOL*. I would now like to conclude by summarising those proposals again.

Firstly, in order to implement vessel-source marine pollution prevention conventions, the country should immediately undertake a capacity-building project for its maritime and port administration. Funds should be allocated on a priority basis for the establishment of reception facilities and collection of pollution detection equipment. Moreover, the government may wish to invite private sector to provide reception facilities.

Secondly, reform of the governance system is also critically required. The Maritime Administration, Port Administration and Coast Guard should work in a co-operative manner. At the moment there is no coordination between these departments. Since the Coast Guard has no independent funding, the port authorities should spend some portion of their revenue for the modernisation of the Coast Guard. In Bangladesh, different government agencies are working in the same area with overlapping and conflicting duties and responsibilities. An immediate initiative should be taken for institutional reform to ensure better coordination between government agencies

Finally, after establishing the necessary infrastructure, the draft *MEC Act* should be enacted as early as possible with necessary modifications and amendments as suggested in above. A proper judicial forum has to be created for prosecution and dispute resolution, replacing the present inactive Marine Court. Implementation of the *MARPOL Convention* will be very difficult for Bangladesh without becoming a party to the IMO civil liability and compensation conventions. In furtherance of a comprehensive legal framework for compensation for marine pollution damage, Bangladesh should consider ratifying *CLC 92*, *FUND 92* and other IMO liability and compensation conventions.

Bangladesh should not use the lack of financial assistance as an excuse for non-compliance with global standards. If there is firm determination from the government, at least some of the international conventions may be implemented in full or in part without any external help. Even to get assistance from donor agencies and international financial institutions, the government of the respective country has to first initiate the proposal. The country has to implement *MARPOL* and other international marine environmental conventions for the betterment of its own people and environment. The global environmental initiative is not a hindrance to the process of economic development. Economic development and protection of

environment can be merged in the same process by introducing the principle of sustainable development in all aspects of State affairs.