

## MARINE POLLUTION AND THE SOUTH ASIAN COASTAL STATES: A LEGAL APPRAISAL

ABDULLAH AL ARIF\*

MD. ERSHADUL KARIM\*\*

*South Asia is the living place of more than one-fifth of the world's population and it is the most densely populated region in the world. There are five coastal states in this region (i.e. Bangladesh, India, Maldives, Pakistan and Sri Lanka) and due to their great reliance on the sea for their livelihood, the people here contribute toward pollution which may have disastrous consequences in the long run. This article, with a brief focus on international and regional legal initiatives on marine pollution, considers the existing municipal legal framework to handle the issue in these countries. It has been revealed that this issue of marine pollution is not considered seriously yet and the existing laws are mostly outdated and leniently implemented.*

### I. INTRODUCTION

The sea occupies three-quarters of the world and offers ample opportunities to provide with many kinds of resources including food, mineral and transport facilities. Safe sea is the source of life and can offer unlimited opportunities, whereas polluted sea endangers life on earth. That is why, marine pollution is one of the greatest concerns in the world over the last few decades. South Asia, the home of more than one-fifth of the world's population and the most densely populated region in the world, is comprised of Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka and Maldives. Majority of the people of this region are some of the world's poorest communities and are highly dependent on sea resources. However, marine pollution is a constant threat and continues to endanger the marine ecosystem.

---

\* Lecturer, Department of Law, Daffodil International University, Dhaka, Bangladesh; LLB (Hons), LLM (University of Dhaka, Bangladesh); LLM (South Asian University, New Delhi, India). He can be reached at: [abduarif@gmail.com](mailto:abduarif@gmail.com).

\*\* Doctoral Candidate in Nanotechnology Law and Policy, Faculty of Law, University of Malaya, Malaysia; LLB (Hons), LLM (University of Dhaka, Bangladesh); LLB (Hons) (University of London). He can be contacted at: [ershadulkarim@gmail.com](mailto:ershadulkarim@gmail.com).

Marine pollution causes serious threat for developing countries of South Asia, especially the coastal states i.e. Bangladesh, India, Maldives, Pakistan and Sri Lanka. Many types of fish species, birds, and different other species are already extinct or endangered due to marine pollution in this region. Interestingly, these South Asian coastal states have some unique and distinct features- for example, Bangladesh has the longest unbroken sea beach in the world, India is the largest democracy in the world, and the Maldives is projected to disappear due to sea level rise.

The South Asian Association for Regional Co-operation (SAARC) is the regional organisation of these countries and these countries are also parties to many international and regional bodies. Considering the seriousness of marine pollution in this region, all these coastal states of South Asia have taken some common initiatives under the auspices of SAARC and some individual initiatives of their own.

Though in South Asia there are seven countries, the discussion of this paper will focus around the five coastal states i.e. Bangladesh, India, Sri Lanka, Maldives and Pakistan. This paper aims to focus on the marine pollution scenario in these coastal states, the existing legal and regulatory framework, international obligations of these countries and how these countries comply with these obligations. The paper starts with describing the existing international legal framework for prevention, reduction and control of marine pollution in brief, followed by the regional initiatives that have been taken so far by South Asian countries in this regard. After that, the domestic legal measures taken by the countries of this region shall be discussed where it will be examined how the countries have responded to this problem, their compliance to international legal regime and their own domestic legislations. Finally, some recommendation to help improve prevention, reduction and control of marine pollution in the region will follow from the study.

## **II. MEANING AND CAUSES OF MARINE POLLUTION**

Marine pollution refers to the introduction of substances by humans into the marine environment, resulting in harm to living resources, presenting hazards to human health, downgrading the quality of seawater and hindering marine activities such as fishing and swimming.<sup>1</sup> Tomczak studied a total of sixteen international treaties and conventions<sup>2</sup> on oceanic areas of international importance (including one national text and three texts proposed

---

<sup>1</sup> C R Nichols and R G Williams, *Encyclopedia of Marine Science*, (Facts on File, Inc. New York, 2009) 360.

<sup>2</sup> Tomczak's analysis included the Geneva Convention on the Continental Shelf, 1958; Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas, 1958; Arctic Waters Pollution Prevention Act (Canada), 1970; Oslo Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft, 1972; London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972; International Convention for the Prevention of Pollution from Ships, 1973; Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden, 1974; Draft Rules on Sea Pollution, 1968; Draft Articles on Marine Pollution of Continental Origin, 1972; GESAMP definition, 1969; Paris Convention for the Prevention of Marine Pollution from Land-Based Sources, 1974; Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974; Convention for the Protection of the Mediterranean Sea Against Pollution, 1976; Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution, 1978; Convention for Co-operation in the Protection and Development of the Marine Environment of the West and Central African Region, 1981; Law of the Sea Convention, 1982.

by NGOs) between 1954 and 1982 excluding conventions relating to pollution from specific substances. He solicits in favour of including a definition on marine pollution as used in United Nations Convention on the Law of the Sea, 1982 (UNCLOS).<sup>3</sup>

Article 1 (1) (4) of UNCLOS defines ‘marine pollution’ as:

The introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities’.<sup>4</sup>

From this definition, it is obvious that the pollution must be induced by human being and with such actions it must deteriorate and degrade the marine environment, endanger human health and marine lives. For the purpose of our discussion in this paper, this definition of marine pollution will be used.

There are number of reasons responsible for marine pollution. Agriculture, being the main profession of the people of this region, worsens the situation as the United Nations Educational, Scientific and Cultural Organisation (UNESCO) revealed that the agricultural run-off, discharge of nutrients and pesticides and untreated sewage include plastic account for approximately 80% of marine pollution worldwide.<sup>5</sup>

It was also found that (a) domestic wastes; (b) industrial wastes from textile mills, chemical plants and pharmaceutical, plastic, detergent, food processing, jute and tyre factories etc.; (c) pesticides and insecticides used in agriculture and healthcare, including chlorinated hydrocarbons like DDT, BHC, Endrin and Dieldrin and organophosphates such as Malathion, Parathion, Diazinon etc.; (d) petrochemical substances, from oil exploration, refineries, oil tankers, ships, fishing vessels etc.; (e) radioactive wastes, from nuclear power stations; (f) heated effluents discharged from thermal (coal-based) power stations are responsible for marine pollution in this region.<sup>6</sup> Apart from oil and radioactive materials, there are ten major factors of marine pollution: domestic sewage, pesticides, inorganic wastes, including pulp and paper wastes, military wastes, heat, detergents, solid objects, and dredging spoil and inert wastes.<sup>7</sup>

### III. INTERNATIONAL INSTRUMENTS ON MARINE POLLUTION

At the international level, there have been a number of initiatives taken by the international community to address the marine pollution problem. International fora have been considering

<sup>3</sup> M Tomczak Jr, 'Defining Marine Pollution: A Comparison of Definitions used by International Conventions' (1984) *Marine Policy* 311.

<sup>4</sup> *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 1833 UNTS 3, (entry into force 16 November 1994), Art 1(1)(4) (henceforth known as ‘UNCLOS’).

<sup>5</sup> United Nations Educational, Scientific and Cultural Organisation, *Marine Pollution*, <<http://www.unesco.org/new/en/natural-sciences/ioc-oceans/priority-areas/rio-20-ocean/blueprint-for-the-future-we-want/marine-pollution/>>.

<sup>6</sup> The Central Inland Capture Fisheries Research Institute, *The India East Coast*, (Barrackpore, West Bengal, 2007). Available at <<ftp://ftp.fao.org/docrep/fao/007/ad894e/AD894E06.pdf>> last accessed 1 February 2013.

<sup>7</sup> M H Rahman, *Legal Regime of Marine Environment in the Bay of Bengal* (Atlantic Publishers & Distributors (P) Ltd., New Delhi, 2007) 6.

marine pollution immediately after the emergence of United Nations from 1954. However, the South Asian countries are quite late in responding to this issue, due to the fact that these countries were preoccupied with their political independence, or post-independence reconstruction during this time. The international instruments are discussed briefly in chronological order below.

The *International Convention for the Prevention of Pollution of the Sea by Oil 1954* was the first attempt to prevent pollution of the sea by oil tankers. It prohibited the discharge of oil or oil mixture by tankers within prohibited zones from the coastline. Subsequent amendments to the Convention in 1969 and 1971 introduced stringent requirements for operational discharges which were consistent with the "load-on-top system" of operating adopted by oil tankers and new standards on the construction of oil tankers. This Convention was superseded by the 1973/78 MARPOL Convention.<sup>8</sup>

The *Geneva Convention on the High Seas 1958* contains at least two Articles, i.e. Article 24 and 25 on marine pollution and through this Convention states were obliged to cooperate with the competent international organisations in taking measures to prevent the pollution. From among the South Asian countries, Nepal, Pakistan and Sri Lanka are parties to this Convention.<sup>9</sup>

The next is the *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969*, a multilateral treaty which empowers the coastal states to take measures beyond the limits of their territorial sea in case of maritime casualty involving oil pollution from ships which may cause major harmful consequences. A subsequent Protocol was adopted in 1973 which extended the Convention to substances other than oil.<sup>10</sup> Bangladesh, India, Pakistan and Sri Lanka are parties to this Convention and only Pakistan is party to the Protocol.<sup>11</sup>

The *International Convention on Civil Liability for Oil Pollution Damage 1969 (CLC)* creates a scheme of liability for oil pollution damage caused by oil tankers and further provides that the ship owner is strictly liable for oil pollution damage, without any need to prove negligence or fault except in certain circumstances, e.g. war and insurrection. The Convention was replaced by the 1992 Protocol.<sup>12</sup> Bangladesh and Pakistan were not parties, India and Sri Lanka denounced it, and only Maldives decided to become party to this Convention.

<sup>8</sup> International Maritime Organisation, *Pollution Prevention* (IMO, 2013). <http://www.imo.org/ourwork/environment/pollutionprevention/oilpollution/pages/background.aspx> last accessed 1 February 2013.

<sup>9</sup> *Convention on the High Seas*, opened for signature 29 April 1958, 450 UNTS 11 (entered into force 30 September 1962).

<sup>10</sup> *International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties*, opened for signature 29 November 1969, 970 UNTS 211. Available at <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-Relating-to-Intervention-on-the-High-Seas-in-Cases-of-Oil-Pollution-Casualties.aspx>> last accessed 1 February 2013.

<sup>11</sup> For status of IMO conventions, see generally International Maritime Organisation, *Status of Conventions* (IMO, 2013). Available at <<http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx>> last accessed 1 February 2013.

<sup>12</sup> *Protocol of 1992 to amend the International Convention on the Civil Liability for Oil Pollution Damage of 29 November 1969*, opened for signature 27 November 1992, 1956 UNTS 255 (entry into force 30 May 1996). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Civil-Liability-for-Oil-Pollution-Damage-%28CLC%29.aspx>> last accessed 1 February 2013.

---

The *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1971*, (Fund Convention) which was subsequently superseded by 1992 Protocol, aimed to establish a fund to provide additional compensation so that within the limits of the Fund's total liability, the victims of marine pollution are fully and adequately compensated. It also provides for compensation even when no liability for damage arises under the CLC, or where the ship owner is financially incapable of meeting his obligations under the CLC.<sup>13</sup> Only Maldives decided to become a party, India and Sri Lanka denounced this Convention.

The *Convention on the Prevention of Marine Pollution by the Dumping of Wastes and other Matter, 1972* regulates the deliberate disposal of certain substances at sea, including oily wastes, dredging and land-generated wastes, excluding the oil pollution caused by normal operational discharges of ships and pollution caused by maritime casualties.<sup>14</sup> Pakistan and Afghanistan are parties to this Convention.

The *Convention for the Prevention of Pollution from Ships 1973* (1973 MARPOL Convention) aims to prevent the marine environment pollution caused by the operational discharge of oil and other harmful substances and to minimise the accidental discharge of such substances. State parties are under obligations to apply the provisions of the Convention to ships flying their flag and to ships within their jurisdiction.<sup>15</sup> Bangladesh, India, Maldives, Pakistan and Sri Lanka are parties to this Convention. Even though these countries are obliged to implement the provisions of the MARPOL 73/78 Convention, being developing economies, these countries have dearth of resources and modern technologies to comply with the Convention. Lack of political will is another reason for their non-compliance.<sup>16</sup>

The *United Nations Convention on the Law of the Sea, 1982*, popularly known as UNCLOS, is the one of the strongest and comprehensive global environmental treaties. For its significance in ocean regulation, it is often referred to by many authors as “the constitution for oceans”. It has established for the first time a comprehensive legal framework for the protection and preservation of the marine environment. It also provides a structure for a legal regime, which establishes the obligations, responsibilities, and powers of States in matters of marine environmental protection. States are bound to prevent and control marine pollution and are liable for damage caused by violation of their international obligations to combat such pollution. Being a framework Convention, all other global Conventions covering specific areas, e.g. the

---

<sup>13</sup> *International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage*, opened for signature 18 December 1971, 1110 UNTS 57 (entry into force 16 October 1978). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-the-Establishment-of-an-International-Fund-for-Compensation-for-Oil-Pollution-Damage-%28FUND%29.aspx>> last accessed 1 February 2013.

<sup>14</sup> *Convention on the Prevention of Marine Pollution by the Dumping of Wastes and other Matter*, opened for signature 13 November 1972, 1046 UNTS 120 (entry into force 30 August 1975). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/Convention-on-the-Prevention-of-Marine-Pollution-by-Dumping-of-Wastes-and-Other-Matter.aspx>> last accessed 1 February 2013.

<sup>15</sup> *International Convention for the Prevention of Pollution from Ships*, opened for signature 2 November 1973, 1340 UNTS 184 (entry into force 2 October 1983). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-%28MARPOL%29.aspx>> last accessed 1 February 2013.

<sup>16</sup> See, for general, Md. Saiful Karim, ‘Implementation of the MARPOL Convention in Developing Countries’ (2010) 79 *Nordic Journal of International Law* 303, 319.

International Maritime Organisation (IMO) and United Nations Environment Programme (UNEP) Conventions, are generally read subject to this 1982 Convention.

UNCLOS deals with all sources of pollution of the marine environment taking a holistic approach toward the problem. UNCLOS provides measures to minimise the factors responsible for marine pollution, inter alia, release of toxic, harmful or noxious substances from land-based sources; discharges from vessels, devices used for exploration of natural resources in seabed and subsoil, etc.<sup>17</sup>

The reason behind the popularity of UNCLOS among the international community is that it enshrines the notion that all problems of ocean space are closely interrelated and need to be addressed as a whole. All the South Asian coastal states are parties to this Convention.<sup>18</sup>

The *Montreal Guidelines on Land-based Marine Pollution, 1985*, a non-binding instrument adopted by UNEP, recommend a checklist for national legislation and for the creation of global, regional or sub-regional agreements, including measures to be taken to “prevent, reduce and control” pollution from land-based sources.<sup>19</sup>

The *Convention on Oil Preparedness, Response and Cooperation, 1990* (OPRC Convention) was adopted to encourage the establishment of oil pollution emergency plans on ships and offshore installations as well as at ports and oil handling facilities. Besides, it persuades the state parties to set up of national and regional contingency plans and a global framework for co-operation.<sup>20</sup> Bangladesh, India and Pakistan are parties to this Convention.

The *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996* (HNS Convention) builds a mechanism for compensation and liability covering all kinds of hazardous and noxious substances. It imposes strict liability for the ship owner providing higher upper limits than what are available under existing general limitation regimes. The Convention also provides for a system of compulsory insurance and insurance certificates. The HNS Convention covers not only pollution damage but also the risks of fire and explosion.<sup>21</sup> None of the South Asia countries is party to this very important Convention.

Under the *International Convention on the Control of Harmful Anti Fouling Systems on Ships, 2001*, parties to the Convention are required to prohibit and/or restrict the use of harmful anti-fouling systems on ships flying their flag and ships under their authority and all ships that enter a port, shipyard or offshore terminal of a party. Since some of the organotins in anti fouling

<sup>17</sup> UNCLOS 1982, art 194.

<sup>18</sup> For UNCLOS see generally <<http://www.un.org/Depts/los/index.htm>>.

<sup>19</sup> Y Tanaka, 'Regulation of Land-Based Marine Pollution in International Law: A Comparative Analysis Between Global and Regional Legal Frameworks' (2006) 66 *Journal of Comparative Public Law and International Law* 535, 574.

<sup>20</sup> *International Convention on Oil Pollution Preparedness, Response and Cooperation*, opened for signature 30 November 1990, 1891 UNTS 78 (entry into force 13 May 1995). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Oil-Pollution-Preparedness%2c-Response-and-Co-operation-%28OPRC%29.aspx>> last accessed 1 February 2013.

<sup>21</sup> *International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea*, opened for signature 3 May 1996, [2010] ATNIF 55 (not in force). See <<http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-on-Liability-and-Compensation-for-Damage-in-Connection-with-the-Carriage-of-Hazardous-and-Noxious-.aspx>> last accessed 1 February 2013.

paints which are used to coat the bottom of the ships are very harmful for the living resources at sea, the Convention prohibits the use of those harmful organotins in anti-fouling paints.<sup>22</sup> None of the South Asian countries is party to this Convention.

*The Ballast Water Management Convention, 2004*, aims to prevent the spread of harmful aquatic organisms from one region to another, by establishing standards and procedures for the management and control of ships' ballast water and sediments. Under the Convention, all ships in international traffic are required to manage their ballast water and sediments according to a ship-specific ballast water management plan.<sup>23</sup> With 38 contracting parties, the Convention is not yet entered into force. Maldives is the only South Asian country that signed this Convention.

*The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009*, a recent addition to the existing international legal framework to address marine pollution, aims at ensuring that ships, when being recycled after reaching the end of their operational lives, do not pose any threats to human health, safety and environment. The Convention intends to address all the issues around ship recycling, including the fact that ships sold for scrapping may contain environmentally hazardous substances such as asbestos, heavy metals, hydrocarbons, ozone-depleting substances and others.<sup>24</sup> The Convention has only one contracting party and not yet entered into force. No South Asian country has signed the Convention yet.

**Table 1: Status of the International Instruments on Marine Pollution at a glance and the South Asian countries<sup>25</sup>**

<b>International Instruments on Marine Pollution</b>	<b>Bangladesh</b>	<b>India</b>	<b>Maldives</b>	<b>Pakistan</b>	<b>Sri Lanka</b>
Geneva Convention on High Seas, 1958				X	X
International Convention Relating to Intervention on the	X	X	-	X	X

<sup>22</sup> *International Convention on the Control of Harmful Anti-fouling Systems on Ships*, opened for signature 5 October 2001, 1833 UNTS 397 (entry into force 17 September 2008). See <[http://www.imo.org/about/conventions/listofconventions/pages/international-convention-on-the-control-of-harmful-anti-fouling-systems-on-ships-\(afs\).aspx](http://www.imo.org/about/conventions/listofconventions/pages/international-convention-on-the-control-of-harmful-anti-fouling-systems-on-ships-(afs).aspx)> last accessed 4 February 2013.

<sup>23</sup> *International Convention for the Control and Management of Ships Ballast Water and Sediments*, opened for signature 13 February 2004 (not yet in force). See <[http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Control-and-Management-of-Ships%27-Ballast-Water-and-Sediments-\(BWM\).aspx](http://www.imo.org/About/Conventions/ListOfConventions/Pages/International-Convention-for-the-Control-and-Management-of-Ships%27-Ballast-Water-and-Sediments-(BWM).aspx)> last accessed 1 February 2013.

<sup>24</sup> *Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, opened for signature 1 September 2009, IMO/SR?CONF/45 (not yet in force). <<http://www.imo.org/OurWork/Environment/ShipRecycling/Pages/Default.aspx>> last accessed 1 February 2013.

<sup>25</sup> International Maritime Organisation, *Status of Conventions* (IMO, 2013), <<http://www.imo.org/About/Conventions/StatusOfConventions/Pages/Default.aspx>>. last accessed 1 February 2013.

High Seas in Cases of Oil Pollution Casualties, 1969					
International Convention on Civil Liability for Oil Pollution Damage 1969	-	d	x	-	d
Fund Convention 1971	-	d	x	-	d
Convention on the Prevention of Marine Pollution by the Dumping of Wastes and other Matter, 1972	-	-	-	x	-
Convention for the Prevention of Pollution from Ships 1973/78	x	x	x	x	x
United Nations Convention on the Law of the Sea, 1982	x	x	x	x	x
Convention on Oil Preparedness, Response and Cooperation, 1990	x	x	-	x	-
International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996	-	-	-	-	-
International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001	-	-	-	-	-
The Ballast Water Management Convention, 2004	-	-	s	-	-
The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	-	-	-	-	-
<p><b>x</b> = party to the instrument; <b>d</b>= denounced the instrument; <b>s</b>= signed the instrument</p>					



---

#### IV. REGIONAL LEGAL FRAMEWORK ON MARINE POLLUTION IN SOUTH ASIA

Regional initiatives play a crucial role in ocean governance and hence UNCLOS 1982 has put considerable importance on regional initiatives for the prevention, reduction and control of marine pollution.<sup>26</sup> As a region, South Asia does not have any significant regional legal framework for the prevention, reduction and control of marine pollution. SAARC is the only regional organisation in South Asia established in 1985 with a view to building cooperation between and among the member states in the economic, social, cultural, technical, scientific and other areas of common interests. Environment is also made one of its areas of cooperation soon after the establishment of the organisation.<sup>27</sup> Marine pollution control was among the initial thirteen areas of possible cooperation among the SAARC countries.<sup>28</sup> The year 1992 was declared as the SAARC Year of Environment in the fifth meeting of the SAARC heads of the states and governments. But, unfortunately, for many reasons (e.g. lack of follow-up measures and cooperation) the SAARC has failed to accomplish any significant achievements in building cooperation in such a serious issue like marine pollution until now,<sup>29</sup> except for some declarations and a Road Map.<sup>30</sup> But, with the initiative taken by UNEP, there are some developments at the policy level and a couple of guiding instruments have come up as a result of cooperation among the coastal states of South Asia.

As of now, there are three non-binding instruments that target marine pollution, namely, an Action Plan adopted by South Asian Seas Environment Programme (SASEP) under the auspices of UNEP Regional Seas Programme (South Asian Seas programme is a Non-UNEP administered regional Seas programmes),<sup>31</sup> a regional Oil and Chemical Contingency Plan,<sup>32</sup> and a Road Map on Coastal and Marine Hazard Mitigation Plan developed by SAARC Disaster

---

<sup>26</sup> UNCLOS 1982, art 192.

<sup>27</sup> South Asian Association for Regional Cooperation, *Area of Cooperation* (SAARC, 2009) <[http://saarc-sec.org/areaofcooperation/cat-detail.php?cat\\_id=54](http://saarc-sec.org/areaofcooperation/cat-detail.php?cat_id=54)> last accessed 1 February 2013.

<sup>28</sup> D Guru, 'Sustainability of Development and Economics of Environment in the Context of SAARC Countries' in R K Sen and K C Roy (eds) *Sustainable Economic Development and Environment: India and Other Low Income Economies (LIEs)* (Atlantic Publishers & Distributors, 1996) 59.

<sup>29</sup> Md S Karim, 'The UNCLOS and the Regional Action for Protection of Marine Environment: Perspective of the South Asian Seas Region' (2008) 29 (4) *Bangladesh Institute of International and Strategic Studies Journal* 427, 428.

<sup>30</sup> *Ibid.*, 428.

<sup>31</sup> South Asian Cooperative Environment Programme, *Action Plan for the Environment and Management of the Marine and Coastal Environment of the South Asian Region* (SACEP, 1995). <<http://www.sacep.org/pdf/SAS%20Action%20Plan.pdf>> last accessed 31 January 2013.

<sup>32</sup> South Asian Cooperative Environment Programme, *Draft Regional Oil and Chemical Marine Pollution Contingency Plan for South Asia* (SACEP, 2000). <<http://www.sacep.org/pdf/Action%20Plan%20and%20Strategies%20-%20Oil%20spill%20contingency%20plan.pdf>> last accessed 31 January 2013.

---

Management Centre (SDMC), New Delhi, India in collaboration with SAARC Coastal Zone Management Centre (SCZMC), Male, Maldives.<sup>33</sup>

### *I. Action Plan for Protection and Management of Marine and Coastal Environment of South Asian Seas Region, 1995*

The first regional initiative to control marine pollution was taken by UNEP regional seas programme in 1974 as a response to the 1972 United Nations Conference on the Human Environment held in Stockholm. Of the three kinds of Regional Seas Programme i.e. UNEP administered programme, Non UNEP administered programmes and independent programmes, South Asian Seas is one of Non-UNEP administered programmes. The regional seas programmes function through regional conventions and action plans. Though South Asian Seas Programme is yet to come up with a convention, the South Asian Seas Action Plan (SASAP) was adopted in March, 1995. The South Asia Cooperative Environment Programme (SACEP)<sup>34</sup>, an independent regional intergovernmental organisation, located in Sri Lanka, is acting as the Action Plan Secretariat. South Asian Seas Action Plan (SASAP) focuses on Integrated Coastal Zone Management (ICZM), oil-spill contingency planning, human resource development and the environmental effects of land-based activities. As there is no regional convention, SASAP follows existing global environmental and maritime conventions and considers UNCLOS as its umbrella convention.<sup>35</sup>

This Action Plan is the guiding document for the purposes of management of marine environment which includes protection, prevention and reduction of marine pollution in South Asian seas. It provides a framework for comprehensive action which should contribute to both the protection and the development of marine environment of the region. The aim of the Action Plan is to protect and manage the marine environment and related coastal ecosystem of the region. Some of the relevant provisions of the Action Plan are- introduction and background (article 1), objective of the action plan i.e. consultation and technical co-operation among states, promotion of policies and adoption of different measures to protect marine environment, etc. (article 5), steps to be taken by way of, inter alia, survey and assessment of present social and economic activities for the protection, etc. (article 9), checklist for the government for environment management and to adopt appropriate environment policies (article 10), review of municipal legislation in line with international obligations, and ratification and implementation of existing international agreements concerning the prevention and control of marine pollution (articles 11-15). The Action Plan further sets out its priority based activities in the form of annexes, e.g. ICZM (Annex I), National and Regional Oil and Chemical Spill Contingency Planning (ANNEX II), Human Resources Development (Annex III), Protection of the Marine Environment from Land-based Activities (Annex IV).

Furthermore, the Meeting of Plenipotentiaries also adopted three resolutions in respect of the implementation, institutional arrangements and financial arrangements as well as the Final Act

---

<sup>33</sup> SAARC Disaster Management Centre, *SDMC Road Map* (South Asia Association of Regional Cooperation, 2007). <<http://saarc-sdmc.nic.in/roadmap.asp>> last accessed 31 January 2013.

<sup>34</sup> For more information about South Asian Cooperative Environmental Programme, see generally <<http://www.sacep.org>> last accessed 1 February 2013.

<sup>35</sup> United Nations Environment Programme, *Non-UNEP Programmes South Asia* (UN, 2013) <<http://www.unep.org/regionalseas/programmes/nonunep/southasian/default.asp>> last accessed 31 January 2013.

---

of the South Asian Seas Action Plan. A Trust Fund has also been established for the maintenance of the Secretariat.<sup>36</sup> But except for selection and recognition of activities pertaining to marine environment protection, this non-binding instrument has largely been unsuccessful in prevention, reduction and control of marine pollution.<sup>37</sup>

## II. *Regional Oil and Chemical Marine Pollution Contingency Plan For South Asia, 2000*

The OPRC Convention, 1990 facilitates international co-operation and mutual assistance in preparing for and responding to a major oil pollution incident and further encourages states to develop and maintain an adequate capability to deal with oil pollution emergency situations. Bangladesh, India and Pakistan have ratified the OPRC Convention 1990. In order to assist the countries to ratify and implement the Convention, UNEP adopted the project 'Development and Implementation of National and Regional Oil Spill Contingency Plan' in 1995 as one of the priority activities in its South Asia Regional Seas Action Plan.<sup>38</sup> In compliance with the OPRC Convention 1990, a Regional Oil and Chemical Spill Contingency Plan and associated MoU were developed, in association with the IMO, for enhanced cooperation among five maritime countries of South Asia. The South Asia Co-operative Environment Programme (SACEP) and the IMO have undertaken a joint project to assist the region in developing a South Asian Regional Oil Spill Contingency Plan. A draft of the Contingency Plan and other background documents were reviewed by the senior officials in Colombo, Sri Lanka on 14th to 16th December 1999. The final plan was then submitted to a High Level Meeting which approved it on 6th December 2000. Three countries (i.e. Bangladesh, Maldives and Pakistan) have already signed the MoU and by India and Sri Lanka are at an advanced stage of signing.<sup>39</sup> As the final adoption has been pending since 2000, the 4th Inter-governmental Meeting of Ministers (IMM) held in Jaipur, India on 22nd May 2008, requested SACEP to finalise the Regional Plan and MoU as a matter of high priority. Once these are adopted, a Regional Activity Centre is expected.<sup>40</sup>

The Contingency Plan was introduced to co-ordinate and integrate the responses of the national Authorities towards marine pollution incidents in the territorial sea, coasts and related interests of one or more of these countries, or to incidents surpassing the available response capacity of each of these countries alone (paragraph 1.2.1), and to organise a prompt and effective response to oil spills and to facilitate their co-operation in oil and chemical pollution preparedness and response (paragraph 1.2.2). So, in plain words, the purpose of this Contingency Plan is to better prepare the states to respond immediately and effectively in an event of oil spill pollution. Since the plan is yet to come into force, it will be premature to comment on the success of the plan.

---

<sup>36</sup> South Asia Co-operative Environment Programme (SACEP), <[http://www.sacep.org/html/sas\\_actionplan.htm](http://www.sacep.org/html/sas_actionplan.htm)>.

<sup>37</sup> Md S Karim, 'The UNCLOS and the Regional Action for Protection of Marine Environment: Perspective of the South Asian Seas Region' (2008) 29 (4) *Bangladesh Institute of International and Strategic Studies Journal* 427, 433.

<sup>38</sup> Annex II of the Action Plan for the Protection and Management of the Marine and Coastal Environment of the South Asian Seas Region, 1995.

<sup>39</sup> South Asia Co-operative Environment Programme (SACEP), <<http://www.sacep.org/>>.

<sup>40</sup> See South Asia Cooperative Environment Programme, *Priorities* (SACEP, 2010) <[http://www.sacep.org/html/sas\\_priority.htm](http://www.sacep.org/html/sas_priority.htm)> last accessed 2 February 2013.

---

### III. *Regional Cooperation on Coastal and Marine Risk Mitigation Plan for South Asia: Road Map*

SAARC Disaster Management Centre (SMDC) has developed nine Road Maps on different aspects of disaster management, including the Road Map for Regional Cooperation on Coastal and Marine Risk Mitigation Plan for South Asia, through a participatory process, involving the member states and experts on the relevant fields. The Road Maps have been approved by the concerned SAARC bodies.<sup>41</sup>

The Road Map on Coastal and Marine Risk aims to build up a disaster management plan for the marine and coastal areas of each country and for the region itself and may act as a manual for policy makers, administrators, technocrats, different organisations and stakeholders of the region who are actively involved in disaster preparedness and mitigation planning for the region. The Road Map acknowledges manmade disasters and includes oil spills, coastal pollution and ballast water exchange etc. as disasters,<sup>42</sup> recognises the trans-boundary regional character of coastal and marine risks and calls for cooperation,<sup>43</sup> chalks out some areas of cooperation, inter alia, development of a common protocol at regional level addressing the coastal and marine risks, establishment of a compatible and interoperable national and regional integrated coastal zone management system along the Indian Ocean coast and<sup>44</sup> recommends to develop national legislations to provide an institutional and legal basis for coastal management with the regional perspectives.<sup>45</sup>

## IV. MARINE POLLUTION AND MUNICIPAL LEGAL REGIME

In this stage of discussion we shall be focusing on the municipal legal regime of the five coastal states of South Asia. Before shedding focus on the legal and regulatory set up in these countries to manage issues relating to marine pollution, it will be pertinent to mention that all these countries are common law countries with written Constitutions having almost similar constitutional arrangement. The provisions of international instruments to which these countries are parties by way of signing or ratification are not automatically enforceable through municipal courts unless relevant domestic legislations are not enacted.<sup>46</sup> In a number of decisions, the Supreme Court of Bangladesh held that the provisions of international instruments are not

---

<sup>41</sup> For more about SAARC Road Maps on risk management in South Asia, see generally <<http://saarc-sdmc.nic.in/roadmap.asp>>.

<sup>42</sup> See South Asian Association for Regional Cooperation, *Regional Cooperation on Coastal and Marine Risk Mitigation Plan for South Asia* (SAARC, 2008) paragraph 2.1. Available at [http://saarc-sdmc.nic.in/pdf/roadmap/road\\_map2.pdf](http://saarc-sdmc.nic.in/pdf/roadmap/road_map2.pdf) last accessed 3 February 2013.

<sup>43</sup> Ibid para 5.2.

<sup>44</sup> Ibid para 5.4.

<sup>45</sup> Ibid.

<sup>46</sup> See for example, Constitution of Bangladesh 1972, Article 145; Constitution of India 1949, Article 253; Constitution of Maldives 2008, Article 115(J); Constitution of Sri Lanka 1978, Article 157.

enforceable in Bangladesh unless they are incorporated into national laws.<sup>47</sup> The Constitution Bench of the Supreme Court of India in *State of West Bengal V. Kesoram Industries Ltd.*, AIR 2005 SC 1644 at para 4, observed that '[A] treaty entered into by India cannot become law of the land and it cannot be implemented unless parliament passes a law as required under Article 253'. In Pakistan, a legislative approval or executive action is required for the implementation of international treaties, and such law has to conform to the injunctions of Islam.<sup>48</sup> Similarly, the Sri Lankan Supreme Court also ruled in the case of *Nallaratnam Singarasa v Attorney General*, S.C. Spl (LA) No. 182/99, that it could not give effect to the international law in the absence of municipal legislation. Article 93 of the Maldives Constitution, 2008 stipulates that

- (a) Treaties entered into by the Executive in the name of the State with foreign states and international organisations shall be approved by the People's Majlis, and shall come into force only in accordance with the decision of the People's Majlis.
- (b) Despite the provisions of article (a), citizens shall only be required to act in compliance with treaties ratified by the State as provided for in a law enacted by the People's Majlis'.<sup>49</sup>

Based on this discussion, this is revealed that the signing or ratifying international instruments relating to marine pollution are not enough for these South Asian countries, relevant municipal law incorporating the provisions of these international instruments should be enacted by the national legislatures. On the basis of this understanding, we shall be considering the municipal legal position of these South Asian countries on marine pollution.

### A. Bangladesh

The Constitution of Bangladesh, 1972 has recently been amended in 2011 to include protection and improvement of environment and biodiversity under article 18A, which proclaims that 'the State shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens.' This article 18A is placed under Part II of the Constitution titled Fundamental Principles of State Policy. Although this provision and along with twenty other provisions (articles 8-26) is not judicially enforceable, they are fundamental to the governance of Bangladesh and shall be applied in law making, guide to interpret the Constitution and form basis of work of the State and the citizens.<sup>50</sup> Inclusion of such provisions in the black letters of the Constitution reiterates the commitment of the government towards the protection of environment, including the marine environment, from pollutions.

<sup>47</sup> *Hussain Muhammad Ershad Vs. Bangladesh and others* (2000) 29 CLC (AD) = 7 BLC (AD) 67; *M/s. Supermax International Private Ltd. Vs. Samah Razor Blades Industries* (2004) 33 CLC (AD) = II ADC (2005) 593. On the other hand, in the case of *Allama Delawar Hossain Sayedee Vs. Bangladesh and others* (2009) 38 CLC (HCD) = 18 BLT (HCD) (2010) 188, as the provisions of article 13 of the Universal Declaration of Human Rights, 1948 was incorporated in the domestic laws of the country, the same was held to be enforceable.

<sup>48</sup> See J Razzaque, 'Public interest environmental litigation in India, Pakistan, and Bangladesh' (2004) 7 *Kluwer Law International* 30, 31.

<sup>49</sup> Constitution of Maldives, 2008, art 93.

<sup>50</sup> Constitution of the Peoples' Republic of Bangladesh, 1972, art 8 (2).

The Territorial Water and Maritime Zones Act 1974<sup>51</sup> was the first enactment by the Government of Bangladesh that sought to determine the maritime boundaries and to some extent, to prevent marine pollution. Under this Act, the Government may, by gazette notification, establish conservation zones in the sea for maintenance of the living resources.<sup>52</sup> The Act also empowers the Government to take appropriate measure 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.<sup>53</sup>

Under the Territorial Water and Maritime Zones Act 1974, the Territorial Waters and Maritime Zones Rules was passed in 1977. According to this 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.'<sup>54</sup> Marine Fisheries Ordinance of 1983 also talks of marine pollution to some extent. According to this Ordinance, use or attempt to use of any explosive, poison or other noxious substances in water is an offence.<sup>55</sup> Under this Ordinance, the Government may declare any portion of Bangladesh fisheries water as marine reserve for special protection of aquatic flora and fauna therein.<sup>56</sup>

Coast Guard force of Bangladesh was established through the Coast Guard Act 1994 with a view to providing security in the coastal area and protecting the coast from all odds. One of the functions of the Coast Guards is detection of activities causing the pollution of the environment in the maritime zones of Bangladesh and taking measures for their stoppage.<sup>57</sup> There are some port related laws e.g. Port Act, 1908 and Port Rules 1966, the Chittagong Port Authority Ordinance 1976 and the Mongla Port Authority Ordinance, 1976 are also very important for protection of the marine environment from vessel-source pollution. But, the application of these laws is limited to the port areas only.<sup>58</sup> Bangladesh is a party to International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969, UNCLOS, MARPOL and International Convention on Oil Pollution Preparedness, Response and Cooperation (London, 1990).

In order to minimise, environment pollution including marine pollution, the government of Bangladesh has taken a number of initiatives. The government banned the use of plastic as shopping bag from 01-01-2002 through gazette notification dated 30-12-2001 in Dhaka Municipal area and in the whole country from 11-04-2002 through notification dated April 08, 2002 with some exception as to plastic used in food products, medicine etc. This is a ground-breaking initiative considering that plastic is projected as the main culprit in degrading marine environment.

---

<sup>51</sup> Territorial Water and Maritime Zones Act, 1974 (Bangladesh).

<sup>52</sup> Territorial Water and Maritime Zones Act, 1974 (Bangladesh) s 6.

<sup>53</sup> Territorial Water and Maritime Zones Act, 1974 (Bangladesh) s 8.

<sup>54</sup> Territorial Water and Maritime Zones Rules, 1977 (Bangladesh) s 3(g).

<sup>55</sup> Marine Fisheries Ordinance, 1983 (Bangladesh) s 26.

<sup>56</sup> Marine Fisheries Ordinance, 1983 (Bangladesh) s 28.

<sup>57</sup> Coast Guard Act, 1994 (Bangladesh) s 7(2)(e).

<sup>58</sup> M S Karim, 'Implementation of MARPOL in Bangladesh' (2009) 6 *Macquarie Journal of International and Comparative Environmental Law* 66.

---

Both Bangladesh and India have dumping grounds for ships that need to be scrapped. It has turned to be a lucrative sector for development of the country. However, there are serious allegations that this sector has been accelerating the menace of marine pollution in the country. In this context, in the case of *Bangladesh Environmental Lawyers Association (BELA) Vs. Bangladesh represented by the Secretary, Ministry of Environment and Forest and 18 others*, 2010, 39 CLC (HCD) = 16 BLC (HCD) (2011) 123, the High Court Division of the Supreme Court of Bangladesh ruled that

‘...we cannot allow highly risky and polluting business as that of ship breaking to operate on our precious and irreplaceable coastal eco-system’ and ‘a hazardous and polluting operation as that of ship breaking cannot continue on open beaches without proper safety of the people of the coastal area as well as protection of the eco-system.’

Finally the court ordered to publish the Ship Breaking and Recycling Rules, 2011. Being directed by the court, the Ministry of Industry of the Government of Bangladesh published the Rules on December 12, 2011. Predominately this Rule concerns the safety of workers, activities of different authorities and hazardous waste. Therefore, though the issue of marine pollution is not directly addressed in this Rule, it can be inferred in light with the provisions dealing with the prevention of hazardous waste, that the issue of marine pollution was a consideration while drafting the Rule. The said Rule provides for punishment for violation of the provisions of the Rule in Chapter- VIII and also provides that in case of environmental measures, non-compliance shall be dealt with the Environment Conservation Act 1995 and the Environment Court Act 2010.

There are some scattered instances of the implementation of these laws in order to protect against marine pollution. To this extent, in May 2012, the Department of Environment of Bangladesh fined USD 6200 to the vessel DV Chittagong which collected 2.52 hundred thousand Farnese oil from MV Hiper Link and sank in the Bay of Bengal. It also fined another ship owned by Ocean (BD) Group of approximately USD 7500 for similar kind of offences. The amount is very small but significant in the context of Bangladesh. In August, 2010, the Department of Environment also fined USD 2000 to Sun Man Textile Ltd. for discharging industrial waste in the Bay of Bengal. In October 2010, the KIY Steel Industries was fined with USD 37500 for similar kind of offences.

However, Bangladesh is trying to keep pace with the international legal regime on marine pollution through enacting appropriate legislation with a view to addressing the issue. The Draft Marine Environment Conservation Act, 2004 is an attempt in that direction. The draft law aimed at preserving the marine environment and preventing marine pollution in Bangladesh taking a holistic approach towards the problem. This draft, if passed, will also act as the enabling legislation for MARPOL 73/74.<sup>59</sup>

The draft Marine Environment Conservation Act also empowers the government to give effect to seven other international conventions related to the marine environment by delegated legislation. They include 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

---

<sup>59</sup> Draft Bangladesh Marine Environment Conservation Act 2004 (Unofficial English Translation) s 6.

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.<sup>60</sup>

### *B. India*

India has federal system of governance and the responsibility to prevent and control marine pollution is shared by both provincial and central governments. India does not have a comprehensive law to prevent and control marine pollution. As a result, marine pollution laws in India are to some extent scattered and patchy.

The Constitution of India contains similar provision like article 18A of the Bangladesh Constitution. Article 48A of the Constitution while shedding focus on protection and improvement of environment and safeguarding of forests and wild life, stipulates that ‘The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.’ This provision is broad enough to empower the government to take measures to protect and improve the environment, including marine environment. Pertinent to mention here that similar to article 8 (2) of the Bangladesh Constitution, article 37 of the Indian Constitution provides that the provision is not judicially enforceable, but will be fundamental in the governance of the country and be used during the law making.

The Coast Guard Act, 1950 provides levying of heavy penalties for the pollution of port waters in 1993, Coast Guard under Ministry of Defence made directly responsible for combating marine pollution.<sup>61</sup> The Merchant Shipping Act 1958 provides for prevention of pollution from ships and offshore platforms in the Exclusive Economic Zone. For the purpose of civil liability for oil pollution damage, this Act applies to every Indian and foreign ship, while it is at a port or place in India or within the territorial waters of India or any marine areas adjacent thereto over which India has, or may hereafter have, exclusive jurisdiction in regard to control of marine pollution under the Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976 (80 of 1976), or any other law for the time being in force<sup>62</sup>.

The Water (Prevention and Control of Pollution) Act (1974) deals with the control of pollution arising from land-based sources with a jurisdiction of up to 5 km in the sea.<sup>63</sup> The Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976 also has some provision pertaining to prevention of marine pollution. It provides that the

<sup>60</sup> M S Karim, 'Implementation of MARPOL in Bangladesh' (2009) 6 *Macquarie Journal of International and Comparative Environmental Law* 69.

<sup>61</sup> N K Uberoy, *Environmental Management* (2<sup>nd</sup> Edition, Excel Books, 2003) 197.

<sup>62</sup> Merchant Shipping Act, 1958 (India) s 352(g).

<sup>63</sup> B R Subramanian, 'National Legislations and International Conventions for Regulation of Coastal Zone Activities' in C R Murthy, P C Sinha, Y R Rao (eds) *Modelling and Monitoring of Coastal Marine Processes* (Co-published by Springer with Capital Publishing Company, 2008) 187.



Government of India has in Exclusive Economic Zone and Continental Shelf exclusive jurisdiction to preserve and protect the marine environment and to prevent and control marine pollution.<sup>64</sup> This Act also contains some penal measures for violation of any of its provisions. Under the Environment Protection Act (EPA) 1986, the Coastal Regulation Zone 1991 has been notified. Standards for discharging effluents are listed in the Coastal Regulation Zone on various activities in coastal zone. It classifies coastal zone into four categories specifying activities permitted and prohibited in each category. It offers protection to backwaters and estuaries. Aquaculture was allowed as foreshore activity.<sup>65</sup> In 1996, the Coast Guard formulated National Oil Spill Disaster Contingency Plan (NOS-DCP) also came into force.<sup>66</sup> It lays down a series of actions to be taken in the event of a major disaster of this nature. It also contains standard formats for reporting spills as well as forwarding data on equipment holding in the country.

Apart from these statutory provisions, this is already approved that the judiciary of India is very vibrant, independent and extremely efficient and thus, the decisions of the Indian Supreme Court are highly cited. In the case of *S. Kagannath vs. Union of India and Other*, (1997) 2 SCC 87 (also popularly known as ‘Shrimp Culture case’), arising out of intensive and semi intensive type of prawn farming in coastal areas, Justice Kuldip Singh, while considering the implementation of the Coastal Zone Regulation Notification, 1991, held that ‘The beaches and other areas of special interest are to be maintained aesthetically and at permissible levels of enteric bacteria. Protection of ecologically sensitive areas and land-sea interface resource areas is equally important.’

In the case of *Research Foundation For Science vs. Union of India & Another*, Writ Petition No. 657 of 1995, Justice Altamas Kabir of Indian Supreme Court, on July 6, 2012, thoroughly considered, including the drafting history and objective of the Convention, the MARPOL Conventions 1973/1978. In para 30, it was stated:

‘India is a signatory, both to the BASEL Convention as also the MARPOL Convention, and is, therefore, under an obligation to ensure that the same are duly implemented in relation to import of hazardous wastes into the country. As we have noticed earlier, the BASEL Convention prohibited the import of certain hazardous substances on which there was a total ban. However, some of the other pollutants, which have been identified, are yet to be notified and, on the other hand, in order to prevent pollution of the seas, under the MARPOL Convention the signatory countries are under an obligation to accept the discharge of oil wastes from ships. What is, therefore, important is for the concerned authorities to ensure that such waste oil is not allowed to contaminate the surrounding areas and also, if suitable, for the purposes of recycling, to allow recycling of the same under strict supervision with entrusted units and, thereafter, to oversee its distribution for reuse’.

---

<sup>64</sup> Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976 (India) ss 6,7.

<sup>65</sup> N K Uberoy, *Environmental Management*, (2<sup>nd</sup> Edition, Excel Books, 2003) 198.

<sup>66</sup> *Ibid*, 197.

Hence, this is apparent that once again the Indian Supreme Court took the lead in this region and reminded the obligation of the Indian government under the MARPOL Convention as the country is a signatory to the Convention.

In August, 2010, two ships named the MSC Chitra and MV Khalijia collided in Mumbai where MSC Chitra was carrying oil and pesticide, with 800 tonnes of oil being spilt. The Maharashtra Government has charged Rs. 30 million from the cargo vessel MSC Chitra for clean-up operation carried out off the city coast.

### *C. Maldives*

Maldives is an island State and therefore marine pollution is of utmost concern for her. The Constitution of Maldives gives some indication regarding environment protection and preservation. Article 22 says that the State has a fundamental duty to protect and preserve and protect natural environment, biodiversity, resources and beauty of the country. Article 67(h) of Maldivian Constitution more specifically states that the Executive has the duty to prevent all forms of pollution and ecological degradation for the benefit of present and future generation. However, this is a matter of concern that after the promulgation of the Constitution in 2008, no new legislation pertaining to environment has been passed.

There is no specific municipal law that targets marine pollution in Maldives; however, there is a general statute called Environmental Protection and Preservation Act<sup>67</sup> which prohibits all forms of pollution to the environment which includes marine environment as well. Under the Act, s. 5 requires that there should be an environmental assessment report done on any project that may have a substantial impact on environment and it should be submitted to Ministry of Environment and Energy prior to the implementation of the project. Section 6 of the Act provides that the Ministry have the power to stop such a project if they find that the project may cause damage to the environment. Section 7 of the Act deals with dumping of waste, oil and poisonous substances and if dumping of any of these to any area which is not authorised by the government is a crime. Under s. 8 of the Act, any dangerous waste which affects people and environment must be transported with prior permission. The permission has to be obtained before 3 months of the transportation from the Ministry of Transport and Communication.

Under the Armed Forces Act, 2008 (Act No. 1 of 2008), the Coast Guard is responsible to protect the maritime zones as declared under the Maritime Zones Act, 1996 (Act No. 6 of 1996). The Maritime Navigation Act, 1978 (Act No. 69 of 1978), without specifying any enforcement mechanism, while dealing with inland water transport, provides that inland water vessels must be operated in a safe manner without posing any threat or hazard to marine environment. However, there is no specific law on implementation of MARPOL Convention in the country.<sup>68</sup>

---

<sup>67</sup> An English Translation of the Environment Protection and Preservation Act (India) is published by the Ministry of Transport and Communication. Hence the English Translation is used for the purpose of this article: see Act No 4 of 1993.

<sup>68</sup> Aminath Zeeniya, 'Legal Analysis of International Conventions for the Prevention of Vessel-Source Marine Pollution: A Maldivian Perspective' LLM Thesis (IMO International Maritime Law Institute, 2012) 39.

---

### *D. Pakistan*

There is no specific law in Pakistan that would constrain marine pollution but there are several laws having some provisions regarding prevention and control of marine pollution. Pakistan Environmental Protection Act, 1997<sup>69</sup> talks of protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of all forms of pollution in general. Section 11 of the Act prohibits discharge of any effluent or waste or air pollutant or noise in an amount, concentration or level which is in excess of the National Environmental Quality Standards. Federal Government may levy charges for the violation of the provision. There is also a provision for environmental impact assessment in cases of projects likely to adversely affect the environment.<sup>70</sup> This Act also puts prohibition of import of hazardous waste into Pakistan and its territorial waters, Exclusive economic Zone and historic waters.<sup>71</sup> It is also prohibited to generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance except in accordance with law or through a licence issued by the federal government.<sup>72</sup>

Section 10 of the Maritime Security Agency Act, 1994 stipulates that the agency is responsible for the regulation and protection of the maritime interests of Pakistan and to assert and enforce national jurisdiction and sovereignty in the maritime zones. The functions of the Agency include enforcement of international laws, agreements and conventions on and under the water in the maritime zones. It is responsible to assist other departments and agencies of the Government to maintain and preserve the quality of marine life and to prevent and control a marine disasters including marine pollution in and around the ports, harbours, coastal areas, estuaries and other areas of maritime zones. Under Section 12 of this Act the officers and members of the staff may make inquiries, examinations, inspections, investigations, searches, seizures and arrests for prevention, detection and suppression of contravention of any law for the time being in force within the maritime zones.

Section 554 of the Pakistan Merchant Shipping Ordinance, 2001 stipulates that the discharge of sewage and disposal of garbage into the sea is prohibited. And if sewage or garbage is discharged or disposed off into the sea, the master or the owner of the ship shall be liable to a fine, which may extend 10000 US\$.<sup>73</sup> Similarly, ss. 555, 556, 562 and 568 discuss in detail the penalties and fines for polluting the waters in the harbour.

Section 21 of the Ports Act, 1908 prohibits discharge of ballast or rubbish into a port. It provides both fine and imprisonment for an act of throwing of ballast or rubbish or any such other thing or so discharges any oil or water mixed with oil. But the Act covers the port area only and the primary objective of the Act is to facilitate shipping not to protect the marine environment.

The Territorial Waters and Maritime Zones Act, 1976 talks of delimitation of maritime boundaries and reiterates that State has the jurisdiction and power to make rules for the

---

<sup>69</sup> Act No. 34 of 1997.

<sup>70</sup> Environmental Protection Act, 1997 (Pakistan) s 12.

<sup>71</sup> Environmental Protection Act, 1997 (Pakistan) s 13.

<sup>72</sup> Environmental Protection Act, 1997 (Pakistan) s 14.

<sup>73</sup> Merchant Shipping Ordinance, 1997 (Pakistan) s 554(4).

preservation and protection of the marine environment and prevention and control of marine pollution but there is no rule in the regard has been made till now.

The country has further drafted the National Action Plan on Environment for the protection of marine environment for land based activities. Back to 1994, the Marine Pollution Control Board was established to monitor and prevent marine pollution. The National Oil Contingency Plan is based on the OPRC 1990.

### *E. Sri Lanka*

On average more than 350 vessels cross Sri Lanka on a daily basis. In 1999, Sri Lanka witnessed the damage of the ship M V Meliksha with 16500mt fertilizer and about 200 mt of heavy fuel oil spilling into the sea. This caused serious damage to the marine environment. In 2006, the ship M.V. Amanat Shah sank 11 kms off Koggala while carrying teak logs from Myanmar to Bangladesh and caused a hazardous oil-spill of 25 mt. Very recently, in 2009, a chemical tanker MT Granba with 6250 mt of sulfuric acid leaked which resulted in 15.6 billion rupees of compensatory damages being assessed. In 2012, a Cypress flagged Bulk Carrier MV Thermopylae Sierra with more than 20-30 tons petroleum oil sank completely near Panadura coast.

Among the South Asian countries, Sri Lanka has the most comprehensive domestic legal framework to fight marine pollution. It has enacted laws specifically dedicated to prevent and control marine pollution. The Marine Pollution Prevention Act of Sri Lanka<sup>74</sup> is the enabling legislation to give effect to the international conventions that Sri Lanka is a party to. The long title of the Act is “An Act to provide for the prevention, reduction and control of pollution of Sri Lankan Waters; to give effect to international conventions for the prevention of the pollution of Sea or for the matters connected with or incidental thereto.” Therefore this Act is serving both the purposes; it is giving a domestic legal framework for prevention of marine pollution and at the same time incorporating the relevant international legal obligations into domestic legal framework. The Act is divided into eight parts. Part I deals with establishment of an authority called Marine Pollution Prevention Authority. The Authority shall be a five member body of persons having expertise in port operation and marine pollution, foreign policy and fisheries. Part II of the Act provides that discharge of oil or other pollutants shall be considered as a criminal offence and the responsible person or authority shall be liable criminally for this offence. Part III of the Act says that any discharge or escape of oil or other pollutants shall also entail civil liability and the authority or person responsible for the escape or discharge shall have to bear the costs or expenses caused by such discharge or escape. Part IV of the Act deals with preventive measures to fight marine pollution and requires that every vessel or Ship registered in Sri Lanka shall have to carry a record book with necessary details of oil and pollutants. Part V of the Act talks of reception facilities and equipment in ships. It says that the Authority established by the Act shall have the power to provide reception facility to enable ships to discharge oil residue or other pollutants and fees will be levied for the use of such facility. This part also provides for a requirement for every ship entering into Sri Lankan water that they shall have to be fitted with necessary equipment for the prevention of discharge of oil and other pollutants as prescribed. Part VI deals with situation where discharge or escape is

---

<sup>74</sup> Marine Pollution Prevention Act, 1981 (Sri Lanka).

---

occurred as a result of maritime casualty and Part VII deals with implementation of international conventions. Part VIII contains miscellaneous provisions.

The National Environmental Act 1980<sup>75</sup> also deals with prevention of pollution in general to some extent. This Act also establishes a authority called Central Environmental Authority<sup>76</sup> with a vision to establish a pollution free marine environment around Sri Lanka for the sustainable national development and the wellbeing of its people and the economy by the year 2020 and one of the functions of the authority is to undertake surveys and investigations as to the causes, nature, extent and prevention of pollution and to assist and co-operate with other persons or bodies carrying out similar surveys or investigations.<sup>77</sup> Moreover the authority may appoint a pollution control officers for inspection and evaluating the records of monitoring prescribed equipment and installations for detecting the presence, quantity nature of waste and their effects on the receiving portions of the environment.<sup>78</sup>

The Fisheries and Aquatic Resources Act<sup>79</sup> has some provision for the prevention of marine pollution. Part IV of deals with protection of fish and other aquatic resources. Section 27 of Part IV prohibits the use or possession of poisonous of explosive substances in Sri Lanka water for the purpose of fishing.

The Coast Conservation Act<sup>80</sup> also talks of preservation and conservation of the coastal areas of Sri Lanka though the specific purpose of the Act is to make a survey of the coastal area and to make a Coastal Zone Management Plan to administer the development activities within the coastal areas. Part I of the Act maintains that the administration, control, custody and management of the coastal zone are vested in the Republic. Part II of the Act deals with coastal zone management and it provides for a survey of coastal zone for the better administration of the coastal zone. This Part also provides a provision for a Coastal Zone Management Plan based on the results of the survey of the coastal zone.<sup>81</sup> Part III of the Act provides permit procedure and it says any development work in the coastal area has to be undertaken upon getting permission from the designated authority.<sup>82</sup> The authority may ask for the environment impact assessment report of the proposed development activity before giving permits.<sup>83</sup> Under section 67 of the Sri Lanka Ports Authority Act, 1979, the Minister is empowered to make regulation relating to the prevention of damage to or pollution of premises of the Ports Authority and the pollution of the water in the harbours of any specified port.

However there is a lack of coordinator between different government bodies. For example, the control and regulation of ship is under the authority of the Directorate of Merchant Shipping which is established under the Merchant Shipping Act, whereas the ship-source marine pollution is monitored by the Marine Environment Pollution Authority which was established by virtue of the provisions of the Marine Pollution Prevention Act, 2008. These two authorities

---

<sup>75</sup> National Environmental Act, 1980 (Sri Lanka).

<sup>76</sup> National Environmental Act, 1980 (Sri Lanka) s 1.

<sup>77</sup> National Environmental Act, 1980 (Sri Lanka) s 10(c).

<sup>78</sup> National Environmental Act, 1980 (Sri Lanka) s 25(b).

<sup>79</sup> Fisheries and Aquatic Resources Act, 1996 (Sri Lanka).

<sup>80</sup> Coast Conservation Act, 1981 (Sri Lanka).

<sup>81</sup> Coastal Zone Management Plan (Sri Lanka) s 12.

<sup>82</sup> Coastal Zone Management Plan (Sri Lanka) s 14.

<sup>83</sup> Coastal Zone Management Plan (Sri Lanka) s 16.

again have been functioning under two different ministries i.e. the Directorate of Merchant Shipping runs its activities within the authority of Ministry of Ports and Highways, whereas the Marine Environment Protection Authority functions under the Ministry of Environment. Besides, there is Port Administration established under the Sri Lankan Ports Authority Act, which apart from port activities also consider the offences under the Piracy Act<sup>84</sup> and Ministry of Foreign Affairs which is in charge of monitoring activities under the Suppression of Unlawful Acts against Safety of Maritime Navigation Convention.

In 2009, the government of Sri Lanka released a draft Ship Breaking Policy through which the government strongly expressed its intention to stop all kinds of ship breaking activities in Sri Lanka when neighbouring Bangladesh and India were projected to be very prosperous in terms of ship breaking industry.

## V. Conclusion

South Asian countries are the living place of more than twenty percent of the world population and this huge population poses a serious threat for the marine environment. Due to the socio-economic conditions, majority of the people are unable to take precautions and measures to minimise marine pollution. These countries are also developing countries and most of the time they have to compromise the economic development for the sake of the environment. Because of lack of education, most of these people are not aware of the dangers of pollution. There is no alternative to make people aware of this menace and the media has a great role to play in this regard. People should be made aware of sustainable use of marine resources and least discharge of any kind of waste in the marine water.

Because of some unique tourist attractions, many tourists visit these countries every year and there are many hotels alongside the beaches. Waste management system is unknown in most of these countries and in the absence of such initiative, most of the waste produced due to domestic or industrial use, the sea is the ultimate destination for waste disposal and thus the issue is turning to be worse day by day. It should be remembered that the marine environment should not be compromised with the short term economic development. These countries should also realise that unless such waste management system can be introduced, they may suffer economically due to about turn of the tourists from this region because of dirty and unhealthy beaches.

Other important steps to address marine pollution in national and regional level are to establish institutions to dedicatedly oversee the issue, to manage the finance and technical know-how, and most importantly, to change the mindset of the political leaders who put maximum importance to economic development and minimum to marine environment. The people of this region have to understand that without saving the oceans life on earth cannot survive for long. Therefore, the process of saving the marine environment from pollution should be started before it is too late.

---

<sup>84</sup> Act No. 9 of 2001.

The regional cooperation association of this region, SAARC should be made more active and vigilant on this issue. Already different isolated rather coordinated initiatives were taken which are found to be inadequate, inefficient and insufficient. It is high time that these initiatives are reviewed in light of the present need. Already thirty five years have passed after the emergence of SAARC and the economic strength of this region has been increasing positively. Therefore, SAARC should move for sustainable and responsible maintenance of marine environment.

Whatever are the laws in these countries on marine pollution, strict implementation of these laws are seriously desired to set some example so that prospective polluters get warning to refrain themselves from marine pollution. The polluter pays principle should be applied strictly. It has been noticed that even though some of the courts in this region are very active in environmental degradation issues and set some high standards on different aspects of environmental protection, one may hardly find the active role of the courts to protect the marine environment from pollution. Perhaps one of the main reasons in this regard is that these countries are mainly English common law countries and therefore, the courts cannot move unless there is any definitive cause of action and the issue of *locus standi* is solved. Hence, the NGOs have a crucial role to play and they can move before the court of law with class action suits or public interest environmental litigation. However, even if none is available, the courts can *suo moto* start action to protect the marine environment.

Realising the fact that safe, hygienic and sound marine environment will attract more investment in this region in different ways and relying on the age-old adage 'prevention is better than cure', the licencing and monitoring authority should be vigilant too. The after licence monitoring activities should be continuous and rigorous. Such authorities can arrange training programs for the license holders, which will allow them to minimise marine pollution. With all such co-ordinated efforts, this world will be a better place to live in.