An overview of International and Regional laws for the prevention of Marine oil pollution and “International obligation of Pakistan”

Sara Qayum & Weidong Zhu*

School of law and Political Science Ocean University of China, Qingdao 266100, China
[E-mail: zhuouc94@yahoo.com]

Received 30 March 2016; revised 26 July 2016

Pakistan presents an interesting picture as it brings distinctive constraints in developing efficient marine oil pollution mechanisms to respond marine oil pollution infrastructure among developing countries. The country has been quite proactive in ratifying the IMO instruments concerning marine oil pollution and even it has been quite slow to take steps to implement these measures in national domain. This article, with a brief focus on international and regional legal initiatives on marine pollution, considers the existing municipal legal framework of Pakistan to handle the issue. It has been revealed that the issue of marine pollution is not considered seriously by Pakistan yet and the existing domestic laws are mostly insufficient and leniently implemented.

[Key-words: Marine pollution, International and regional framework, status, Pakistan national legislation, international obligation]

Introduction

Marine oil pollution is a sea-based contaminant which is probably worst of the pollutants of the marine environment. Oil in the marine environment comes from a variety of sources. These include natural submarine seepage; natural decay of marine plant and animal life, shore based industries and transport activities, off-shore drilling wrecked oil tankers and other ships, and discharges from ships which pump out cargo and ballast tanks with sea water. Since the 19th century there have been a lot of major oil tanker accidents, like the Torrey Canyon in 1967, the Amoco Cadiz in 1978 or the Exxon Valdez in 1989, to name a few. Such big oil tanker accidents resulted in a significant public attention and pressure to develop a legal framework for marine safety.¹ Nowadays it is widely recognized that barely any area of our life remains untouched by shipping activities and further 90% of global trade is transported by sea². Every day thousands of vessels sail across the ocean carrying goods to conserve the international trading system. Without shipping, global trade, the transport of raw materials and the import and export of goods would not be possible³. Shipping as the key factor of global economy is, however, one of the causes of marine pollution. Beside the vessel-source pollution, there are 3 other major reasons which harm the marine environment, land-based pollution, atmospheric pollution and ocean dumping⁴. The ship-source pollution accounts for around 12% of the entire marine pollution, in comparison with land based and atmospheric sources (77%), ocean dumping (10%) and off-shore production (1%)⁵. Although pollution by shipping activities is not the main reason for
marine pollution, it should be kept in mind that the distressing consequences are linked with it and it has enormous impacts on the marine environment. Every year 1.800 million tons of crude oil end up in the sea and destroy the wide variety of marine animals and plants.

South Asia, the most heavily populated region in the world, the home of more than one-fifth of the world’s population 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 cause danger to the marine ecosystem. 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.

The major country in the South Asian region, Pakistan, presents an interesting picture as it brings out distinctive constraints in developing a competent oil spill response infrastructure in a developing country. The country has been quite practical in ratifying the IMO instruments concerning marine oil pollution and even ratified the OPRC and Intervention Convention much before India. However, it has been quite slow to take steps to implement these measures in national domain. The issue of oil spill management was not addressed in the national policies and legislations developed for environment protection in the country. Although the issue of marine pollution was sometimes included, it lacked specific focus on oil spill response mechanisms. Further, there was no central agency designated to coordinate the response to such an incident. A host of agencies empowered under different environmental acts on marine pollution were authorized to take action in this field. For example, the Pakistan Environment Protection Act, 1997 designates Pakistan Environment Protection Agency, Pakistan Merchant Shipping Ordinance, 2001 empowers DG Ports and Shipping while Maritime Security Agency Act, 1994 authorizes DG Maritime Security Agency to take measures in respect of marine pollution which seems to include marine oil pollution.

However, the lacuna in the oil drop response capabilities was showing during the most horrible environmental tragedy in Pakistan’s history when an oil tanker, Tasman Spirit, beached off Karachi harbor in Jul 2003 spilling more than 30000 tones of crude oil at sea. A large area was affected by the spill which resulted in severe and long term ecological and economic impacts. The national oil spill contingency plan was at the draft stage during this period and yet to be approved by the government. Thus, there was an initial confusion regarding organizing response with complications arising due to various individual local, national organizations claiming jurisdictions in coordinating the response. It resulted in delay for launching response. The operations were also hampered due to lack of technical expertise and limited equipment and resources. The cleanup operations concerned enormous costs. However, it was found that these costs could not be recovered as the country was not a party to any instruments of IMO concerning oil pollution of the liability and compensation.

Though in South Asia there are seven countries, the discussion of this paper will focus around Pakistan. This paper aims to focus on the marine pollution scenario in this state, the existing legal and regulatory framework, international obligations of this country and how this country complies with these obligations. This study also emphasis on the status of Pakistan in ratifying and implementing International conventions and weakness of Pakistan domestic law relating to marine oil pollution and international obligation of Pakistan to implement the international regime into national legislation.

Material and Methods

**International legal framework relating to Marine Pollution**

Up to the early 1970s the international law regarding the marine pollution by ships was unfocused and fundamentally unregulated. In those days there were only national regulations. To protect the sea and to ensure protection and avoidance of pollution from ships worldwide, the best way was to establish international regulations. Today a wide legislative framework attempting to stop and decrease pollution from
shipping activities and to ease the dreadful conditions of the maritime environment exists. On one hand, there are fundamental conventions, dealing with oil pollution of the seas directly or indirectly, while on other hand there are also liability regulations whose subject is find out that is liable for already incurred losses.

Most of the work in creating such an international legal framework has been achieved within the negotiations of the International Maritime Organization (IMO), which was found in 1959. It is a body of the United Nations and has various members from over 150 nations. The IMO as the main international regulatory body entrusted with setting an institutional outline for the implementation of international marine law and promote execution and enforcement of these standards by its member states, has negotiated these issues in numerous conferences, where conventions and treaties were developed, which outline generally-accepted international pollution standards.

Conventions

The International Convention for the prevention of pollution of the Sea by Oil was the first international convention established in 1954, which objective is to defend the marine atmosphere against contamination by oil tankers. It came into power in 1958 and put up criteria to guarantee the protection of the sea. According to OILPOL, tankers were totally banned to release oil or any oil mixtures containing in excess of 100 parts of oil per million, within specified zones. A forbidden zone covers an area 50 miles from the nearest land. OILPOL did not focus on oil spill accidents caused by oil tankers, but mainly on discharge of oil mixtures in sea and the pollution resulting from routine operations. Due to various amendments and the increase in oil trade, it was clear that OILPOL 54 was not sufficient and stricter and new guidelines were required in order to make it more compatible with present tanker practices.

The International Convention for the Prevention of Pollution by Ships, commonly known as MARPOL 73/78, made the OILPOL 54 Convention superseded. MARPOL was adopted in 1973 and customized by the Protocol of 1978. Since the 1973 Protocol had not entered into power, the Protocol engaged the Convention and as a mutual instrument it entered into force on 2 October 1983. Through the years MARPOL 73/78 has been extended, modified and updated by various amendment and protocols. Now there are six Annexes, all dealing with a special type of ship-sourced marine pollution. Thus, it does not only deal with oil, which is regulated in Annex I (MARPOL ANNEX I – Prevention of pollution by oil) Regulations 2006 but with all forms of marine pollution from shipping activities.

Annex I: Regulations for the Prevention of Pollution by Oil (entered into force 2 October 1983)

Covers prevention of pollution by oil from operational measures as well as from accidental discharges; the 1992 amendments to Annex I made it mandatory for new oil tankers to have double hulls and brought in a phase-in schedule for existing tankers to fit double hulls, which was subsequently revised in 2001 and 2003.

The Convention includes regulations for control and avoidance of pollution by hazardous and noxious liquid substances in bulk (Annex II), 1978 ANNEX II of the 1973 international convention for the prevention of pollution from ships: Regulations for the control of pollution by noxious liquid substances in bulk (revised version as of 2004).

Annex II: Regulations for the control of pollution by Noxious liquid substances in bulk (entered into force 2 October 1983)

Details the discharge criteria and measures for the control of pollution by noxious liquid substances carried in bulk; some 250 substances were evaluated and included in the list appended to the Convention; the discharge of their residues is allowed only to reception facilities until certain concentrations and conditions (which vary with the category of substances) are complied with.

In any case, no discharge of residues containing noxious substances is permitted within 12 miles of the nearest land.

Harmful substances passed by the sea in packaged form (Annex III) Merchant shipping (MARPOL ANNEX III – Prevention of pollution by harmful substances) Order 2015,
Annex III: Prevention of pollution by harmful substances carried by sea in packaged form (entered into force 1 July 1992)

Contains general requirements for the issuing of detailed standards on packing, marking, labelling, documentation, stowage, quantity limitations, exceptions and notifications. For the purpose of this Annex, “harmful substances” are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code) or which meet the criteria in the Appendix of Annex III.

Annex IV (sewage from ships) Sewage discharge regulations according to Annex IV to the MARPOL Convention, garbage pollution from ships (Annex V) Prevention of Pollution by Garbage from Ships, as well as air pollution from ships (Annex VI) Prevention of Air Pollution from Ship.


Contains requirements to control pollution of the sea by sewage; the discharge of sewage into the sea is prohibited, except when the ship has in operation an approved sewage treatment plant or when the ship is discharging comminuted and disinfected sewage using an approved system at a distance of more than three nautical miles from the nearest land; sewage which is not comminuted or disinfected has to be discharged at a distance of more than 12 nautical miles from the nearest land.

The first two of the annexes need to be accepted by the parties to the Convention, but the other annexes are voluntary.

As mentioned above, Annex I covers the prevention and drop of oil pollution as of equipped as well as from accidental marine oil discharges. Under the terms of Annex I, all ships are subject to surveys to guarantee that the structure, equipment, materials and arrangements thoroughly comply with the Convention.

In particular, much of OILPOL 54 was incorporated. The Convention regulates the conditions when and where oil discharges from tankers are allowed. However, the amounts of oil and oily mixtures which can be discharged of the cargo into the sea were reduced. Furthermore, under MARPOL it is strictly forbidden to release in particular areas including the Black Sea, the Baltic Sea, the Mediterranean Sea and the Persian Gulf. Responding to several oil spills (Exxon Valdez in 1989, Erika in 1999 and Prestige in 2002), MARPOL has been subject to numerous amendments. To ensure the effectiveness of these stringent discharge regulations, specific equipment such as oil-discharge monitoring systems, pumping arrangements and slop tanks are required aboard. In addition, governments have to install response conveniences for oily misuse water and all new tankers have to be prepared with double hulls. It is compulsory for new tankers over 70,000 dwt to have segregate weight tanks so it is no longer probable to use the similar amount designed for weight and shipment and to fulfill damage constancy necessities.

Moreover, MARPOL provides an oil proof manuscript obligation, where the group of cargo oil and its residues has been record. These book entries can be freely inspected by any member states at any time.


Due to the international character of the shipping industry and to the fact that marine pollution is a concept of transboundary nature, marine law is regulated by international, regional and domestic law. The result was the overlap of applicable laws, regulations and jurisdictions. The IMO, as seen above, has played a important role in codifying conventions and treaties regulating ship-sourced pollution. The colliding procedure commenced through the commencement of the United Nations Convention on the Law of the Sea (UNCLOS). Its goal was to remove contradictions and overlaps between different jurisdictions as well as to ensure that all loopholes in the international law were filled. The UN Convention underpins the role of the IMO and all the conventions and treaties which were created by it. In addition, UNCLOS has endorsed and acknowledged the policy of the International Maritime Organization trough references to the “generally accepted international rules”, those being interpreted as MAROL and SOLAS.

UNCLOS came into force on November 16, 1994 as international framework in marine law was adopted in 1982 in Montego Bay (Jamaica)
and. It contains regulations to ensure the preservation and sustainable utilize of assets and the maritime atmosphere and promote the safety and conservation of the existing assets of the ocean. Furthermore, it deals with more specific policy concerning environmental oil pollution issues. Part XII of UNCLOS Convention entitled “Protection and Preservation of the Marine Environment” and includes both general and specific obligation of state parties to prevent, reduce and control pollution. It also addresses international and national rules to attain the Convention’s objectives: prevention, decrease and manage of marine pollution caused by ships (Art. 207ff.). These also cover the avoidance, diminution and manage of the marine environment by oil. Pursuant to Art.211 of UNCLOS, contracting states have to create international regulations and principles to prevent, decrease and manage pollution of the maritime pollution by ships and adopt routing systems to reduce the danger of accidents that might grounds marine pollution. They also have to adopt international set of laws and principles recognized through the proficient international association laws and regulations for the avoidance, decrease and manage of pollution from ships flying their flag or of their registry which as a minimum must have the similar consequence as that of generally accepted.

*International Convention for the Safety of Life at Sea (SOLAS)*

The International Convention for the Safety of Life at Sea was entered into force in 1980 and adopted in 1974. The Convention contains regulations prevailing the safe construction of ships, the safety equipment which ships need to provide and the standards to which they should be operated in order to prevent accidents. As the provisions lay down, the Convention must be seen the same as the foundation of an international legal structure guaranteeing the protection of ships and life at sea, which also has impacts on the pollution of the maritime environment.

* Liability regulations

Due to many major tanker oil spills in the international seas, it was also necessary to create international regulations concerning liability and monetary reimbursement with regard to losses resulting from vessel oil pollution. Nowadays, civil liability and financial compensation for oil pollution is enclosed by a number of global conventions. The International Convention on Civil Liability for Oil Pollution Damage 1969 entered into force in 1975. It has been adapted by two Protocols in 1976 and 1992 which resulted in the 1992 CLC. The Convention regulates the accountability for the holder of the ship, the direct action against the insurer as well as the necessary indemnity. It applies to ships defined as “any sea-going vessel and any seaborne craft of any type whatsoever” and in order to fall under the scope of the Convention, the vessel has to be constructed “for the carriage of oil in bulk of cargo”. The responsibility of the owner of the ship is strict, what means more precisely independent of fault. However, it is restricted to various exceptions. Furthermore, the compulsory insurance to ensure the availability of compensation only affects ships which are larger than 2,000 grt. For ships which are smaller than 2,000 grt such a compulsory insurance is not required and it is not possible to proceed directly against the insurer.

The IOPC Fund was adopted in 1971 and was formed to supplement the Civil Liability Convention. It was revised in 1992 and since the 1971 Fund Convention ceased to be in force, only the 1992 IOPC Fund is currently successful. Its purpose was to provide additional compensation to people who suffer from oil pollution when there is no possibility to receive compensation under CLC because of the exemption of the liability of the ship-owner or when the owner of the ship or its insurer are financially incapable to provide the required compensation. After further huge oil spills at the Spanish and French coasts, it was clear that adequate compensation could not fully be provided to victims under the two conventions mentioned above. Therefore, in 2003 “The International Oil Pollution Compensation Supplementary Fund” has been adopted in regulate to make an additional step for oil pollution. It supplements where the limits of liability of the CLC 1969 and the Fund Convention 1992 are not able to completely provide compensation.

Since the CLC/ IOPC Fund system applies only to bunker oil pollution harm from specific vessel, bunker spills from other types of ships desired to be sheltered by another regulation.
Therefore, the gap in the conventional regime of vessel-source pollution has been filled by the adoption of the Bunker Convention (BOPC). Therefore, there is no overlying between the conventions CLC and BOPC because the latter is designed to cover pollution damage which falls outside the scope of the 1992 CLC. The Bunker Convention was adopted by the IMO in 2001 and finally entered into force in 2008. Most of the provisions laid down in the CLC have been adopted to the Bunker Convention, especially in respect to the strict liability and the compulsory insurance.

Regional Framework Relating to Marine Pollution

The first regional initiative to control marine pollution was taken by UNEP regional seas programmed 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 Program i.e. UNEP administered program, Non UNEP administered programmers’ and independent programmers’, South Asian Seas is one of Non–UNEP administered programmer. The regional seas programmer function through regional conventions and action plans. Though South Asian Seas Program 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 Program (SACEP), an independent regional intergovernmental organization, located in Sri Lanka, is performing as the Action Plan Secretariat. South Asian Seas Action Plan (SASAP) focuses on incorporated Coastal Zone Management (ICZM), oil-spill contingency planning, human resource development and the environmental effects of land-based activities. As there is no national convention, SASAP follows existing international environmental and marine conventions and considers UNCLOS as its umbrella convention.

This Action Plan is the guiding document for the purposes of management of marine environment which includes protection, deterrence and decrease of oceanic pollution in South Asian seas. It provides a structure for broad action which should add to both the protection and the expansion of marine environment of the region. The aim of the Action Plan is to protect and administer the marine environment and associated coastal environment 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. discussion and technical assistance 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, investigation and estimation 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 sanction and execution of existing global 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 realization, institutional planning and monetary measures as well as the Final Act of the South Asian Seas Action Plan. A Trust Fund has also been recognized for the preservation of the Secretariat. But except for selection and recognition of activities pertaining to maritime environment protection, this non-binding instrument has largely been unsuccessful in anticipation, decrease and manages of maritime pollution.

The OPRC Convention, 1990 facilitates worldwide collaboration and joint support in designed for and responding to a foremost oil pollution event and further encourages states to build up and preserve a sufficient competence to deal with oil pollution disaster situations. Bangladesh, India and Pakistan have ratified the OPRC Convention 1990. In order to support the countries to ratify and apply the Convention, UNEP adopted the project ‘Development and Implementation of National and Regional Oil Spill Contingency Plan’ in 1995 as one of the main concern actions in its South Asia Regional Seas Action Plan. In observance with the OPRC Convention 1990, a Regional Oil and Chemical Spill Contingency Plan and related MOU were developed, in association with the IMO, for...
better assistance among five maritime countries of South Asia. The South Asia Co-operative Environment Programme (SACEP) and the IMO have undertaken a mutual plan to support the region in developing a South Asian Regional Oil Spill Contingency Plan. A preparation 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 permitted 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. 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 settle the Regional Plan and MOU as a matter of high priority. Once these are adopted, a Regional Activity Centre is expected. The Contingency Plan was introduced to coordinate and integrate the responses of the national Authorities towards marine pollution incidents in the protective sea, coasts and related benefit of one or more of these countries, or to incidents surpassing the accessible reaction capability of each of these countries alone (paragraph 1.2.1), and to arrange a timely and efficient response to oil spills and to make possible their assistance in oil and chemical pollution awareness and response (paragraph 1.2.2). So, in simple words, the idea 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.

SAARC Disaster Management Centre (SMDC) has developed nine Road Maps on diverse aspects of disaster management, including the Road Map for local collaboration on Coastal and maritime hazard improvement Plan for South Asia, in the course of a participatory development, concerning the member states and experts on the relevant fields. The Road Maps have been approved by the concerned SAARC bodies. The Road Map on Coastal and Marine Risk aims to build up a disaster administration plan for the marine and coastal areas of each country and for the region itself and may take action as a manual for policy makers, administrators, technocrats, different organizations and stakeholders of the region who are dynamically implicated in disaster awareness and improvement planning for the region. The Road Map acknowledges manmade disasters and includes oil spills, coastal pollution and ballast water exchange etc. as disasters, recognizes the trans-boundary regional character of coastal and marine risks and calls for cooperation, 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 incorporated coastal zone management system along the Indian Ocean coast and recommends to develop national legislations to offer an institutional and lawful basis for coastal management with the regional perspectives.

Result and Discussion

Marine Pollution and Pakistan Legal Regime

In Pakistan, a legislative approval or executive action is required for the implementation of international treaties. Based on the discussion, this is revealed that the signing or ratifying international instruments relating to marine pollution are not enough for Pakistan, relevant municipal law incorporating the provisions of these international instruments should be enacted by the national legislature. There is no specific law in Pakistan that would constrain marine pollution but there are several laws having some provisions regarding avoidance and administer of maritime pollution. Pakistan Environmental Protection Act, 1997 describes safety, protection, rehabilitation and development of the environment, for the prevention and manages of all forms of pollution in general. Section 11 of the Act prohibits discharge of any sewage or waste or air pollutant or noise in a amount, attention or level which is in excess of the National Environmental Quality Standards. Federal Government may allege 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. This Act also puts prohibition of import of harmful waste into Pakistan and its territorial waters, special economic Zone and significant waters. It is also prohibited to produce, gather, dispatch, transport, treat, dispose of, store, handle or trade in any harmful material except in accordance with law or
through a license issued by the federal government. Section 10 of the Maritime Security Agency Act, 1994 stipulates that the agency is responsible for the regulation and safety of the sea benefit of Pakistan and to highlight and implement national jurisdiction and autonomy in the marine zones. The functions of the Agency contain enforcement of international laws, agreements and conventions on and under the water in the oceanic zones. It is liable to support other departments and agencies of the Government to care for and preserve the quality of maritime life and to avoid and manage maritime disasters including marine pollution in and approximately the ports, harbors, coastal areas, estuaries and other areas of maritime zones. Under Section 12 of this Act the officers and members of the staff may make inquiry, examinations, inspections, investigations, searches, seizures and arrests for avoidance, recognition and control of breach of any law for the time being in force within the marine zones.

Section 554 of the Pakistan Merchant Shipping Ordinance, 2001 stipulates that the discharge of mess and dumping of waste into the ocean is illegal. And if mess of waste is discharged or disposed off into the sea, the master or the holder of the vessel shall be accountable to a fine, which may extent 10000 US$. Similarly, ss. 555, 556, 562 and 568 talks about in detail the penalties and fines for polluting the waters in the harbor.

Section 21 of the Ports Act, 1908 prohibits release of ballast or waste into a port. It provides both fine and imprisonment for an act of throwing of ballast or waste or any such other thing or so discharges any oil or water mixed with oil. But this Act covers the port area only and the main purpose of the Act is to make possible shipping not to protect the maritime environment.

The Territorial Waters and Maritime Zones Act, 1976 talks of delimitation of marine borders and reiterates that State has the jurisdiction and authority to make policy for the maintenance and safety of the maritime environment and avoidance and administer of maritime 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 safety of maritime environment for ground 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.

Table 1-1: Status of Pakistan in ratifying and implementing International Conventions relating to Marine Oil pollution

<table>
<thead>
<tr>
<th>International Instruments on Marine Pollution</th>
<th>Kenya</th>
<th>Japan</th>
<th>Libya</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geneva Convention on High Seas, 1958</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Convention Relating to Intervention on the High Seas, 1982</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund Convention 1971</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>D</td>
</tr>
<tr>
<td>Convention for the Prevention of Pollution from Ships, 1973</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convention on Oil Preparedness, Response and Cooperation, 1990</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1994</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>International Convention on the Control of Harmful Anti-Fouling Systems on Ships, 2001</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>The Ballast Water Management Convention, 2004</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

- party to the instrument; D demarcated the instrument; S signed the instrument

**Marine oil pollution and International obligation of Pakistan**

The major country in the region, Pakistan, presents an interesting picture as it brings out typical constraints in developing an efficient oil spill response infrastructure in a developing country. The country has been quite proactive in ratifying the IMO instruments concerning marine oil pollution and even ratified the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC) is an international maritime convention establishing measures for dealing with marine oil pollution incidents nationally and in co-operation with other countries and Intervention Convention much before India. However, it has been quite slow to take steps to implement these measures in national domain. The issue of oil spill management was not addressed in the national policies and legislations developed for environment protection in the country.
Although the issue of marine pollution was sometimes included, it lacked specific focus on oil spill response mechanisms. Further, there was no central agency designated to coordinate the response to such an incident. A host of agencies empowered under different environmental acts on marine pollution were authorized to take action in this field. For example, the Pakistan Environment Protection Act, 1997 designates Pakistan Environment Protection Agency, Pakistan Merchant Shipping Ordinance, 2001 empowers DG Ports and Shipping while Maritime Security Agency Act, 1994 authorizes DG Maritime Security Agency to take measures in respect of marine pollution which seems to include marine oil pollution. However, the lacuna in the oil drop reaction capability was exposed during the most terrible environmental disaster in Pakistan’s history when an oil tanker, Tasman Spirit, beached off Karachi harbor in July 2003 spilling more than 30,000 tons of crude oil at sea. A large area was affected by the spill which resulted in severe and long term environmental over and above economic impacts. The national oil spill contingency plan was at the draft stage during this period and yet to be approved by the government. Thus, there was an initial confusion regarding organizing response with complications arising due to various individual local, national organizations claiming jurisdictions in coordinating the response. It resulted in delay for launching response. The operations were also hampered due to lack of technical expertise and limited equipment and resources. The cleanup operations involved huge costs. However, it was found that these costs could not be recovered as the country was not a party to any of the liability and compensation instruments of IMO concerning oil pollution.

This incident led to serious thinking on the issue and thus, the national environment policy developed in 2005 specifically included oil spill management for the first time in national policy and also stressed the require to expand a national oil spill contingency plan. It also called for initiating active legislative and operational measures to implement relevant international instruments and set up response capabilities. Thus, the issue was fast tracked and Pakistan ratified the CLC 92 in 2005 and the National Marine Disaster Contingency Plan was formulated and approved by the government in 2007. It consisted of three parts and also included the oil spill contingency plan with responsibility of coordination clearly designated to Maritime Security Agency.

Thus, the incident positively contributed in catapulting the issue of marine oil pollution into national prominence by highlighting the lacuna in the system for response and assisting in addressing these lacunae through policy initiatives.

After experiencing dreadful pollution damages caused by Tasman Spirit to marine life and people living near the coastline in 2003, and after analyzing the detailed overview of international regime, it would be necessary for Pakistan to submit accession document for CLC-92 under which compensation against marine oil pollution is payable without any contribution. Pakistan should immediately adopt CLC-92 and FUND conventions by taking the document and become its signatory so that in case of any incident the country could get proper compensation against damages caused by marine oil pollution as the 1992 CLC and 1992 Fund Convention provide a straightforward mechanism whereby the costs of clean-up and pollution damage can be recovered on strict liability basis. It is obligatory for Pakistan that whatever are the laws in Pakistan 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. Even after a well-known oil spill in its waters, Pakistan has not taken achievement to become to party the Fund Convention and also party only to the CLC, and even Pakistan’s domestic laws associated to marine oil pollution still have a lot of gaps. Pakistan have not up till now included the significant legal provisions to national legislation although it is also party to the OPRC Convention. Pakistan has accepted their National Oil Spill Contingency Plans although the realization of these strategies in an effective method is highly forced given the lack of trained human resources and combat equipment. The National Oil Spill Disaster Contingency Plan is efficient frequently and maintains a practical amount of tools while consistently training officers in combat oil spill exigencies. Moreover, a regional oil spill contingency plan was drafted in 2000, there is a marked lack of a regional oil spill contingency arrangement. But this has not reached the implementable stage.

A few exercises have also been conducted at national level to validate the contingency plan and fine-tune the response organization.
structure. Despite recent proactive approach, the country is yet to ratify the FUND Convention.

Conclusion
After analyzing overview of international and regional laws relating to marine pollution it and especially Pakistan domestic legislation on marine oil pollution, it is clear that national laws of Pakistan are insufficient to combat with the situation like TSOS and with control of marine pollution and reliance in the event of the TSOS may have to be placed on the broader laws originally developed for other purposes unless Pakistan has its specific domestic legislation for compensating those affected by oil spills from tankers in its territory. If the former applies there can be considerable uncertainty in the event of the TSOS as to the legal, operational and financial responsibilities of the main parties involved as well as to the amount of compensation that is going to be available for clean up and restoration reinstatement of an impaired environment.

After experiencing dreadful pollution damages caused by Tasman Spirit to marine life and people living near the coastline in 2003, and after analyzing the detailed overview of international regime, it would be necessary for Pakistan to submit accession document for CLC-92 under which compensation against marine oil pollution is payable without any contribution. Pakistan should immediately adopt CLC-92 and FUND conventions by taking the document and become its signatory so that in case of any incident the country could get proper compensation against damages caused by marine oil pollution as the 1992 CLC and 1992 Fund Convention provide a straightforward mechanism whereby the costs of clean-up and pollution damage can be recovered on strict liability basis. It is obligatory for Pakistan that whatever are the laws in Pakistan 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. Even after a well known oil spill in its waters, Pakistan has not taken achievement to become to party the Fund Convention and also party only to the CLC and even Pakistan’s domestic laws associated to marine oil pollution still have a lot of gaps. Pakistan have not up till now included the significant legal provisions to national legislation although it is also party to the OPRC Convention. Pakistan has accepted their National Oil Spill Contingency Plans although the realization of these strategies in an effective method is highly forced given the lack of trained human resources and combat equipment. The National Oil Spill Disaster Contingency Plan is efficient frequently and maintains a practical amount of tools while consistently training officers in combat oil spill exigencies. Moreover, A regional oil spill contingency plan was drafted in 2000, there is a marked lack of a regional oil spill contingency arrangement. But this has not reached the implementable stage.

Acknowledgements
This work was supported by the School of Law and Political Science, Ocean University of China (201105020).

References
1. Luoma, Emilia, Oil Spills and Safety Legislation, (publications from the Centre for Maritime Studies, University of Turku) 2009, pp. 3-4.
5. GESAMP, the State of the Marine Environment, (Reports and Studies) 1990, pp. 39.
14. Dempsey, P.S, compliance and Enforcement in International Law, Oil Pollution of the Marine

15. Luoma, Emilia, *Oil Spills and Safety Legislation*, (publications from the Centre for Maritime Studies, University of Turku) 2009, pp. 5.


29. See, art. 1.1 of the CLC 1992.


38. SAARC, Road Maps on risk management in South Asia, see generally http://saarc-sdmic.nic.in/roadmap.asp.


42. Environmental Protection Act, 1997 (Pakistan) section 13.

43. Environmental Protection Act, 1997 (Pakistan) section 14.

44. Merchant Shipping Ordinance, 1997 (Pakistan) section 55(4).
