

EFFECTIVENESS OF THE HONG KONG CONVENTION ON SHIP RECYCLING IN INDIA, BANGLADESH AND PAKISTAN

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ABSTRACT

Ship recycling or shipbreaking is the process of breaking up old ships mainly for their steel. International shipping companies own and use ships for their trade and ultimately sell them predominantly to Bangladesh, India, and Pakistan (South Asian Countries) for breaking up. As they have no iron ore to support their growing steel demand, these South Asian countries can offer attractive prices to shipowners. The activities in South Asian countries occur on open beaches using dangerous manual methods to save cost that actually pollute the environment, and cause deaths and injuries to workers in the ship recycling or shipbreaking industry.

Considering the global nature of the problem, the International Maritime Organisation (IMO) in 2006 decided to frame a comprehensive legally binding regime for regulating risks associated with ship-breaking activities.¹ Subsequently, the Convention for the Safe and Environmentally Sound Recycling of Ships (the Hong Kong Convention) was adopted at a diplomatic conference held in May 2009 in Hong Kong.² Prior to this, the only applicable international convention was the Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal, 1989 (the Basel Convention).

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¹ *New Legally Binding Instrument on Ship Recycling*, IMO Res A.981(24), Agenda Item 1, 54th Session, IMO Doc. A24/Res.981 1 (6 Feb 2006) para 1 ('The IMO Document').

² *The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, opened for Signature 1 September 2009. IMO Doc. SR/CONF45 (not yet in force) ('The Hong Kong Convention').

This article explains the deficiencies of the Basel Convention, explores the effectiveness of the Hong Kong Convention, and examines whether it has improved the shipbreaking practices in South Asia's developing countries. The article also evaluates the Hong Kong Convention's ability to regulate inter-State movement of contaminated ships in order to determine whether the 'cradle to grave' approach introduced by the Convention is sufficient to protect the marine environment and rights of workers at the recycling or shipbreaking facilities in the South Asian countries.

I INTRODUCTION

Shipbreaking or ship recycling is a process of removing reusable materials from old ships.³ These materials, mainly steel scraps, furniture and electronic materials have a large market in India, Bangladesh and Pakistan. As a result, the shipbreaking industry has grown to become a multi-million dollar business in these countries. Despite the advantages gained by these countries from accessing these reusable materials, there are major concerns in connection with the use of unsafe practices in this industry.⁴ With limited knowledge and resources to break ships safely and manage hazardous wastes, the South Asian nations risk their environment and human rights of workers. The primary beneficiaries are the shipowners who are able to dispose of their old ships for a good price even though they may include harmful waste.⁵

The International community is aware of the poor human rights and the environmental standards in the shipbreaking industry in South Asian countries. In order to combat some of these concerns, in 2009 the International Maritime Organisation (IMO) framed *The Convention for the Safe and Environmentally Sound Recycling of Ships* (the Hong Kong Convention). The aim of the Hong Kong Convention is to establish a comprehensive legally binding regime for regulating risks associated with shipbreaking activities.⁶ The IMO Member States adopted the Hong Kong Convention at a diplomatic conference held in May 2009 in Hong Kong,

³ *ibid* art 2.10.

⁴ Gabriela Agguuiello Moncayo, 'International Law on Ship Recycling and its Interface with EU Law' (2016) 109 *Marine Pollution Bulletin*, 301.

⁵ Shipowner means the person or persons or company registered as the owner of the ship, or in the absence of registration, the person or persons or company owning the ship or any other organisation or person such as the manager, or the bareboat charterer, who has assumed the responsibility for operation of the ship from the owner of the ship. The term also includes those who have ownership of the ship for a limited period pending its sale or handing over to a Ship recycling Facility: at *The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships*, opened for Signature 1 September 2009. IMO Doc. SR/CONF45 (not yet in force) annex (*Regulations for Safe and Environmentally Sound Recycling of Ships*) regulation 1.8 (*'Annex on Ship Recycling'*).

⁶ *The IMO Document* (n 1).

but it is yet to enter into force.⁷ The Convention will enter into force 24 months after it is ratified by 15 states (representing 40% of world merchant shipping by gross tonnage).⁸ Until April 2019, only ten states representing 23% of the gross tonnage have ratified the Convention.⁹

Providing its entry into force, the Convention contemplates shipbreaking to become a green industry, and therefore one of its aims is to introduce green shipbreaking with an emphasis on safety whilst undertaking shipbreaking activities. Before 2009, the only international framework that could have been applicable in making shipping companies accountable for environmental issues within the shipbreaking industry is the *Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and their Disposal, 1989* (the Basel Convention).¹⁰ However, the Basel Convention only deals with transfer of waste and due to the difficulty in determining the point in time when a ship turns from being 'a ship' to 'waste', it has not been successful in making the shipping companies accountable for the environmental issues within the shipbreaking industry.

The purpose of this article is to examine the effectiveness of the Hong Kong Convention on the shipbreaking practices in South Asian Countries. Following this brief introduction, the next part examines the practices in breaking the ships in South Asian countries and unveils the unsafe practices in this industry that leads to adverse consequences to coastal environment and human rights of workers. Part III explains the operation and deficiencies of the Basel Convention and the adoption of the Hong Kong Convention. Part IV critically analyses the deficiencies of the Hong Kong Convention in regulating the inter-State movement of hazardous ships and considers the principles and challenges of hazardous waste management system of the Convention. Part V examines whether the Hong Kong Convention complies with the Rio Declarations on the Environment and Development, such as the Polluter Pays Principle (PPP) and the Common but Differentiated Responsibility (CDRP) in order to determine whether the Hong Kong Convention can operate effectively in the context of shipbreaking. Part VI concludes with a discussion on what can be done to put a stop to the present unsafe practices within the shipbreaking industry.

⁷ *The Hong Kong Convention* (n 2).

⁸ *Ibid* art 17.1.

⁹ Industrial Global Union, *Hong Kong Convention on Ship Recycling Boosted by Japanese Ratification* (Web Page, 2 April 2019) <<http://industrialall-union.org/hong-kong-convention-on-ship-recycling-or-shipbreaking-boosted-by-japanese-ratification>>

¹⁰ *The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal*, opened for signature 22 March 1989, 1673 UNTS 126 (entered into force 5 May 1992) ('*The Basel Convention*').

II THE SOUTH ASIAN SHIPBREAKING INDUSTRY AND ITS UNSAFE PRACTICES

In the last two decades, India, Bangladesh and Pakistan have been the market leaders for breaking ships.¹¹ Before 2000, developed countries had their own shipbreaking industries. Due to risks involved in the process and the high level of safety standards under their established laws, it became too expensive to retain the shipbreaking industry in the developed countries. By the end of 20th century, shipbreaking was gradually shifted mainly to Turkey, China, India, Bangladesh and Pakistan.¹²

At present, China and Turkey have higher shipbreaking costs than South Asia and therefore Turkey and China have not been the preferred destinations for the last ten years. The reason for this is that Turkey's labour cost is twenty-five times higher than Bangladesh and India (around \$17.52 per day in Turkey compared to less than \$1 in Bangladesh per day).¹³ China on the other hand has invested a large amount of capital in building dry docks for shipbreaking,¹⁴ whereas India, Bangladesh and Pakistan have low cost of labour and they use the cheaper beaching method instead of dry dock.¹⁵ Dry dock is expensive but causes less environmental damage as wastes can be removed safely from the ships.¹⁶ In contrast, the beaching method of shipbreaking is cheaper in terms of establishment costs, but is a major concern for sustainable shipbreaking as it allows toxic substances to escape directly into the seawater.

¹¹ NGO Shipbreaking Platform, 'Platform Publishes List of Ships Dismantled Worldwide in 2018' (Press release, online at January 30, 2019) <https://www.shipbreakingplatform.org/platform-publishes-list-2018/> ('Press Release')

¹² Saiful Karim, *Shipbreaking in Developing Countries: A Requiem for Environmental Justice from the Perspectives of Bangladesh* (Taylor and Francis Group, 2018) 104.

¹³ 'Turkey National Minimum Wage' Countryeconomy.com (online) <https://countryeconomy.com/national-minimum-wage/turkey>; 'Bangladesh Minimum Wage, Labour Law, and Rate 2019, Employment Data Sheet Bangladesh Minimum Wage' *Minimum-Wage.org* (online) <<https://www.minimum-wage.org/international/bangladesh>>

¹⁴ Matt Miller, *Shipbreaking: Breaking Badly* (Web Page, April 23, 2018) <http://www.ajot.com/news/channel/maritime>.

¹⁵ Beaching means breaking ships on open beaches without any built structure. During high tide, a crewmember runs a ship on an open beach at its top speed so that it reaches as far as possible to the top end of a beach. After this, the unskilled workers strip, and dismantle the ship. Since the method uses a beach to break a ship, it is not possible to install any modern equipment for breaking and therefore the internal materials are directly released into the seawater. On the other hand, dry dock means to break ships inside of a built structure with all modern facilities to release and manage the internal wastes of a ship.

¹⁶ A dry dock is a built structure used for breaking ships so that hazardous substances can be managed in a sound way that stops such materials from mixing with sea water.

By using the cheaper beaching method and combined with the low cost of labour, the three South Asian countries control 90% the global shipbreaking business. In fact, the price offered to shipping companies by India, Bangladesh and Pakistan differs significantly from the price offered by Turkey and China.¹⁷ A large container ship that weighs around 25,000 Light Displacement Tonnages (LDTs)¹⁸ can earn a shipping company about \$11.80 million from a ship purchased by India, but only \$7 million from Turkey and \$5.25 million from China.¹⁹ In 2018, the three South Asian countries jointly broke 518 ships out of total 744 ships that had been broken worldwide. In terms of LDT, this amounts to 90.4% of ships that required breaking.²⁰

The shipbreaking industry is an economic necessity for the South Asian countries. These countries rely on the shipbreaking industry for their principal source of steel scraps and generate employment for their people. It contributes to 10-15% of overall steel production of India and Pakistan and 60% for Bangladesh.²¹ The profit from breaking one ship in Pakistan is \$16,600 and \$921,400 in Bangladesh.²² The high profit that is generated from the shipbreaking materials makes a significant contribution towards the government tax revenues. For example, the Bangladesh government earns about \$86 million per year as tax revenue from the shipbreaking industry.²³ In 2016, about 15% of the total tax revenue of Bangladesh came from their shipbreaking industry.²⁴

A significant number of workers are also employed in the South Asian shipbreaking industry. A World Bank Report in 2010 identified that over 40,000

¹⁷ Robin Des Bois, 'Shipbreaking Bulletin of Information and Analysis of Ship Demolition' (Report no. 52, July 31, 2018) 13.

¹⁸ Dictionary meaning of Light Displacement Tonnage is the weight of a ship with all its permanent equipment excluding the weight of cargoes, persons, fuel, dunnage and ballast. It is also referred to as gross tonnage: at dictionary.com (online at 26 June, 2019) <https://www.dictionary.com/browse/light-displacement>; .

¹⁹ Ibid.

²⁰ *Press Release* (n 10); NGO Shipbreaking Platform News, *Use of Polluting South Asia Scrap Yards Accelerating* (Web Page, 1 February 2017) <http://gcaptain.com/ngo-shipbreaking-platform-use-of-polluting-south-asia-scrap-yards-accelerating/>.

²¹ Maria Sarraf et al, 'Ship Breaking and Recycling Industry in Bangladesh and Pakistan,' (Report No. 58275-SAS, World Bank, 2010) 1-5 ('*World Bank Report 2010*')

²² Ibid.

²³ N. M. Golan Zakaria, Mir Tareque Ali and Khandakar Akhter Hossain, 'Underlying Problems of Ship Recycling Industries in Bangladesh and Way Forward' (2012) 9 (2) *Journal of Naval Architecture and Marine Engineering* 91, 98.

²⁴ Hasan Ruhan Rabbi and Avelina Rahman, 'Shipbreaking and Recycling Industries in Bangladesh; Issues and Challenges' (2017) 194 *Procedia Engineering* 254, 256.

workers were directly employed in the shipbreaking yards in Bangladesh and Pakistan. The Indian shipbreaking industry employs about 66,000 workers.²⁵ In 2017, more than 25,000 workers were directly employed in the Bangladesh shipbreaking industry.²⁶ In addition, more than one million people are employed in retail shops and re-rolling mills that are dependent on the shipbreaking industry. However, these economic benefits come at a cost to the environmental and human rights of workers. This is mainly due to their unsafe practices that are not appropriately regulated.

The workers employed in the South Asian shipbreaking industry have minimum experience on sound management and safety, and these workers undertake risky shipbreaking processes²⁷ without following the required high level of environmental and technical standards. According to the World Bank, there are three main unsafe practices within the South Asian shipbreaking industry.²⁸

Firstly, the shipowners send their ships to India, Bangladesh or Pakistan without pre-cleaning the toxic materials that remain in the old ships.²⁹ They mainly use the practice of reflagging to avoid their national and international responsibility of pre-cleaning.³⁰ Reflagging means to change the flag of a state to some particular states using open registries.³¹ Open registry of a state permits shipowners to register a vessel in a particular flag state without its own nationality. For example, the States of Panama and Liberia allow open registry for a fee. One report shows that 73% of world ships are registered under a country other than its beneficial and original owner.³² These are referred to as Flag of Convenience states (FOCs). FOCs have poor legal requirement on pre-cleaning.³³ Therefore, these old vessels often fly a flag of FOCs before reaching the shipbreaking yard and often remain polluted with toxic substances, such as Polychlorinated Biphenyls (PCBs), asbestos, lead paints, mercury, fuel deposits, and other harmful substances.

²⁵ Amit B. Mahindrakar et al, 'Shipbreaking industry in India: Assessment of Opportunity and Challenges' (January 2008) *eLaw Journal: Journal of Air and Waste Management Association* 1.

²⁶ Hossain et al (n 14).

²⁷ Robert Scott Frey, 'Breaking Ships in the World-System: An Analysis of Two Ship Breaking Capitals, Alang-Sosiya, India and Chittagong, Bangladesh' (2015) 21 (1) *Journal of World Systems Research* 26, 28.

²⁸ *World Bank Report 2010* (n 20) 31–38.

²⁹ Pre-cleaning means the process of discharging all contaminated items of a ship by the shipping companies or the owners before sending them for dismantling.

³⁰ Juan Ignacio Alcadieta, Francisco Piniella and Emilio Rodriguez-Diaza, 'The Mirror Flags: Ship Registration in Globalised Shipbreaking Industry' (2016) 48 *Transportation Research Part D*, 378.

³¹ Rhea Rogers, 'Ship Registration: A Critical Analysis' (LLM Dissertation, World Maritime University, 2010) 28.

³² NGO Shipbreaking Platform, *Flag of Convenience* (Web Page) <https://www.shipbreakingplatform.org/issues-of-interest/focs/>

³³ *Ibid.*

Secondly, when the ships reach the territorial water, they are run aground on the beaches at full speed during high tide. After beaching, the ships are cleaned on shallow open beaches, often near mangrove swamps. By using this method, they discharge all toxic substances into the seawater,³⁴ resulting in air pollution, soil erosion, soil contamination and water pollution, contamination of coastal regions and loss of biodiversity. The release of toxic waste has an impact on mangrove forests and threatens the habitat.³⁵ Examples of such polluted locations of shipbreaking industry are the ‘toxic hotspots’ or ‘sacrifice zones’ in Alang of India, Sitakunda of Bangladesh and Gadani of Pakistan.³⁶

Thirdly, ships are broken by using dangerous manual methods such as cutting ships with oxy-fuel torch and workers often carry steel plates on their shoulders. Such practices cause frequent accidents leading to death and injuries to the workers. Statistics show the following reasons as causes of accidents: fire explosions due to unseen gas in the ship chamber (49%); the fall of plates and parts of ships in the process of scrapping (25%); inhalation of toxic gas (16%) and workers falling from ships (8%).³⁷

A report from International Metalworkers Federation states, ‘Shipbreaking is one of the most dangerous occupations’.³⁸ This is also evident from various non-profit organisation (NGO) reports. In November 2016, at least 28 workers died and more than 50 workers suffered injuries due to explosion in a ship beached in Gadani, Pakistan. In 2016, 22 deaths and 29 serious injuries of workers were reported in Bangladesh. In India, two people died in a fatal accident.³⁹ In the first quarter of 2018, ten workers lost their lives, and two workers had severe injuries in

³⁴ Gopal Krishna, ‘High on Hazard, Alang Poses Big Threat to Environment and Health of Local Communities, Migrant Workers’, *Financial Chronicle* (online at 21 December 2012) <http://www.mydigitalfc.com/industry/high-hazard-463> provides that beaching means anchoring ships on sandy beaches for dismantling. It is a traditional method of bringing ships as close as possible to the intertidal zones of coastal areas. This helps them to cut ships without using built structures, except the hull of a ship.

³⁵ Mohammad Maruf Hussain and Mohammad Mahmudul Islam, ‘Ship Breaking Activities and Its Impact on the Coastal Zone of Chittagong, Bangladesh: Towards Sustainable Development’ (Research Report, Young Power in Social Action, Chittagong, Bangladesh, 2006); Federico Demaria, ‘Shipbreaking at Alang-Sosiy (India): An Ecological Distribution Conflict’ (2010) 70 *Ecological Economics* 250, 252–254.

³⁶ Frey (n 25) 27.

³⁷ Zakaria, Ali and Hossain (n 23) 98.

³⁸ International Metalworkers Federation, *Special Report- Cleaning Up Shipbreaking is the World’s Most Dangerous Job* (Web Page, 15 December 2015) <http://www.industriall-union.org/cleaning-up-ship-breaking-the-worlds-most-dangerous-job>

³⁹ Michael Schuler, NGO *Shipbreaking Platform News: Use of Polluting South Asia Scrap Yards Accelerating* (Web Page, 1 February 2017) <http://gcaptain.com/ngo-shipbreaking-platform-use-of-polluting-south-asia-scrap-yards-accelerating/>.

Bangladesh. At a shipbreaking yard in Alang, India, at least two workers lost their lives due to a toxic gas leak.⁴⁰ Further, on 18th February 2019, two shipbreaking workers were killed at a shipbreaking yard in Bangladesh.⁴¹

Literature in this area indicates that neither the international community nor the shipping companies have taken responsibility of the problems caused in the shipbreaking industry.⁴² Shipping companies do not want to bear the high cost of safe and proper disposal. Developing countries lack the resources required to upgrade their standards in shipbreaking. Thus, unless all parties involved in the shipbreaking industry are regulated through an international regulatory regime, the problems identified will remain. The next part explores the deficiencies of the Basel Convention that led to the adoption of the Hong Kong Convention. The basic operation of the Hong Kong Convention is also explained in the next part.

III THE OPERATION AND DEFICIENCIES OF THE BASEL CONVENTION AND THE ADOPTION OF THE HONG KONG CONVENTION

In 2009, the Member States of the IMO adopted the Hong Kong Convention to regulate the shipbreaking practices. Before 2009, the only international framework that could apply to make shipping companies accountable for environmental issues within the shipbreaking industry was the Basel Convention. The objective of the Basel Convention is to reduce the generation of wastes and restrict their movement, ie by keeping it closest to the place of production.

The requirements of the Basel Convention that are essential in meeting the objectives within the shipbreaking industry are found in Article 4.2.d of that Convention. This article requires the state of export or exporter of waste to reduce the wastes to a minimum point. This article also requires a written confirmation of sound management capacity from the state of import.⁴³ Sound management under

⁴⁰ NGO Shipbreaking Platform, *Waste Management World- Europe's Toxic Ships: How Poor Recycling Practices are Poisoning Asian Beaches* (Web Page, 16 August 2013) < <http://www.shipbreakingplatform.org/waste-management-world-europes-toxic-ships-how-poor-recycling-or-shipbreaking-practices-are-poisoning-asian-beaches/>>.

⁴¹ NGO Shipbreaking Platform, 'Fire on Board Greek Tanker Kills two Shipbreaking Workers in Bangladesh' (Press Release, 18 February 2019) 1.

⁴² Karim (n 12) 25.

⁴³ *The Basel Convention* (n 10) art 6.

Article 2.8 of the Basel Convention means the ability of an importing state to take all practicable steps to manage hazardous waste in a way that will protect human health and environment. Article 6.1 of the Basel Convention imposes a duty on the exporter of waste to obtain a Prior Informed Consent (PIC) from the state of import. This is in addition to the supply of a waste movement document. By granting a PIC, the state of import gives consent to the intended waste transfer.⁴⁴ The waste movement document requires information on 14 specific items including names of the exporter, generator, carrier and nature and quantity of the wastes.⁴⁵ This PIC is considered an effective mechanism in case of transboundary movement of wastes since government of an importing state can have full knowledge of the waste along with the authority to reject any waste transfer.

The central problem with the Basel Convention is a definitional one, namely, whether ships can be defined as wastes. The shipowners circumvent the Convention by arguing that the Basel Convention only applies to transfer of wastes and a ship is not waste at the time of their export.⁴⁶ Article 2.1 of the Convention defines 'waste' as substances or objects, which are disposed of, are intended to be disposed of, or are required to be disposed of by the provisions of national law.⁴⁷ It means, to transform a ship to waste depends on whether the owner or the management company 'intends' the ship to be 'waste'. Thus, the onus is on the owner or the management company to declare that the ship is on its last journey for dismantling. It is the 'subjective quality' of the last owner's intention that creates a problem in regulating the shipbreaking businesses within the Basel framework. The intention has to be interpreted from the express or implied activities of the immediate owner.

Without any express or implied activity of an owner presenting an intention to dismantle a ship, it is difficult to identify the intention required under article 2.1. For

⁴⁴ Ibid art 6.2.

⁴⁵ "A document accompanied with the list of hazardous wastes or other wastes which are moving from one country to other. It is issued from the point of trans-boundary movement to the of disposal point. This document works as the total picture of the wastes that are moving to keep the transit state and state of import informed about the wastes and their consequences": at *The Basel Convention* (n 40) art 4.7.c. The items should include the name of the Exporter, Generator, Carrier, site of the wastes, subject of general or single notification, date of the start of trans-boundary movement, means of transport, description of the wastes, special handling information, type and number of packages, quantity in weight or volume, declaration and certification: at *The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal*, opened for signature 22 March 1989, 1673 UNTS 126 (entered into force 5 May 1992) annex V B.

⁴⁶ International Chamber of Shipping, Communication to the Use of Basel Convention in the Context of Shipbreaking, 9 January 2004.

⁴⁷ *The Basel Convention* (n 10) art 2.1.

example, if the owner has taken the ship from traffic and awaiting an arrangement for dismantling or deleting from the ship registry, then the owner has shown an intention to dismantle the ship. An inference of intention is difficult to be drawn without any such activity. It is even more difficult to interpret the intention as ships are often loaded with cargo, even if on their final journey for breaking. In short, it is very difficult to determine the point in time when a ship turns from being 'a ship' to 'waste'.⁴⁸ Shipowners can therefore easily escape their responsibilities arising from the Basel Convention by concealing the fact that the ship is not on its last voyage from the state of export.

One of the notable examples of such concealment was the transfer of a ship called *North Sea Producer* from London to Bangladesh in August 2016. The original owner Maersk (a UK based shipping company) sold the ship to a post box company of Saint Kitts relying on a false claim that the ship was going to be used in Nigeria for commercial purposes. In fact, the ship sailed to Chittagong, Bangladesh for breaking.⁴⁹ Although the owner contended having no knowledge of shipbreaking, an investigation revealed that the owner actually initiated the process and used the post box company to bypass the Basel Convention.⁵⁰

The International community has been aware of such practices and problems in implementing the Basel Convention. The Conference of Parties (COP) to the Basel Convention by decision VII/26 started the process to enact a specific law on shipbreaking in 2004.⁵¹ The Conference requested the Open-ended Working Group (the Working Group) to draft a Convention considering 'the practical, legal and technical aspects of dismantling ships in the context of achieving a practical

⁴⁸ H Edwin Anderson, 'The Nationality of Ships and Flags of Convenience: Economic, Politics and Alternatives' (1996) 21 *Tulane Maritime Law Journal* 139, 163.

⁴⁹ According to investigation of the NGO Shipbreaking Platform, *North Sea Producer* was primarily used in transporting oil in a North Sea Oil Extracting field. It was used for oil transport for more than 17 years. After that, it was sold with a false claim that it was going to be used for commercial operation in Nigeria. Under the Basel Convention, it was illegal to sell a ship for breaking without informing her flag states. The original owner had knowledge about the ultimate destination of the ship but due to huge profit, used the fraud practice. The issue is still under investigation by the UK government: at Shipbreaking Platform, *Spotlight North Sea Producer Case* (Web Page) <http://www.shipbreakingplatform.org/spotlight-north-sea-producer-case>.

⁵⁰ Ibid.

⁵¹ Saurabh Bhattacharjee, 'From Basel to Hong Kong: International Environment Regulation of Ship-Recycling Takes One Step Forward and Two Steps Back,' 2009 (2) *Trade Law and Development* 193, 214–215.

approach to the issue of shipbreaking'.⁵² Five years later, the Working Group finalised the Convention and in May 2009, the IMO Member States signed the Convention at a Diplomatic Conference held in Hong Kong. The final text of the Hong Kong Convention was a combined effort of the IMO Member States, non-government organisations (NGOs), International Labour Organisation (ILO) and the Parties to the Basel Convention. Unlike the Basel Convention, the Hong Kong Convention is specific to shipbreaking that has introduced an international legal mechanism based on national notification and waste management system in order to restrict unsafe shipbreaking practices.

The national notification system under the Hong Kong Convention makes it a mandatory requirement for the shipowners and recycling facilities to notify their own State about their intention to recycle a ship.⁵³ The notification enables the administration of a flag State to prepare for necessary survey of a ship's Inventory of Hazardous Materials (IHM)⁵⁴ before issuing an International Ready for Recycling Certificate (IRRC).⁵⁵ Notification from a shipowner follows survey of an IHM and the survey follows the IRRC to authorise recycling of a ship by a flag State.

Like a shipowner, the recycling company is required to notify a competent authority of its own state in three stages. Firstly, about the intention to recycle a ship when preparing to receive a ship,⁵⁶ secondly, about the planned start of ship recycling after the ship recycling facility has obtained the IRRC, and thirdly,⁵⁷ about the completion of the intended recycling activity when the recycling of a ship is completed following the requirements of the Convention.⁵⁸

For sound management, the Convention provides that a recycling facility cannot accept a ship which is not free from the toxic substances (for example, asbestos, PCBs and ozone depleting substances) listed in the Appendix I of the Convention.⁵⁹

⁵² Decision VII/26 on Environmentally Sound Management of Ship Dismantling, UN Doc. UNEP/CHW.7/33 (October 2004).

⁵³ *Annex on Ship Recycling* (n 5) regulation 24.1.

⁵⁴ The IHM is specific to each ship and shall at least identify as Part I, Hazardous Materials listed in Appendices 1 and 2 to the *Hong Kong Convention* and contained in ship's structure or equipment, their location and approximate quantities: at *ibid* regulation 5.1.

⁵⁵ *Annex on Ship Recycling* (n 5) regulation 24.1.

⁵⁶ *Annex on Ship Recycling* provides the detail information that has to be included in the notification: at *Annex on Ship Recycling* (n 5) regulation 24.2; the Hong Kong Convention provides that 'Competent Authority(ies)' means a governmental authority or authorities designated by a Party as responsible, within specified geographical area(s) or area(s) of expertise, for duties related to Ship recycling Facilities operating within the jurisdiction of that Party as specified in this Convention: at the *Hong Kong Convention* art 2.3.

⁵⁷ *Annex on Ship Recycling* (n 5) regulation 24.3.

⁵⁸ *Ibid* regulation 25.

⁵⁹ *Ibid* regulation 17.

Importantly, the Convention introduces a “cradle to grave”⁶⁰ approach, meaning that ships must protect the marine environment throughout its lifetime and a recycling plant cannot receive a ship that does not comply with such requirements.⁶¹ This leads to a number of surveys that are required to be undertaken before the recycling can commence. The first survey is required prior to putting into business of transportation, or before the International Certificate on IHM is issued.⁶² Each new ship is to maintain a certificate of IHM since its operation. Secondly, a periodic survey is required every five years.⁶³ Thirdly, an additional survey is required upon the request of the ship owner in case of any change, replacement or significant repair of the structure,⁶⁴ and finally, a survey is to be conducted before recycling or shipbreaking commences.⁶⁵ A flag state can issue an IRRC following the final report before a ship ends up to a recycling facility.⁶⁶ The IRRC proves that a ship is free from any hazardous materials listed in the Convention.⁶⁷ These requirements are intended to ensure improved health, safety, and better environmental protection in recycling facilities.

In order to accept a ship, a recycling facility must obtain survey reports from the owner,⁶⁸ and improve its physical and technical capacity to manage the reported hazardous materials in a sound manner.⁶⁹ Under Regulation 15, it is the duty of each Party to establish proper legal mechanism to enforce this requirement in a recycling facility.⁷⁰

Enforcement of the sound management system under the Convention can be a problem in South East Asia countries like India, Bangladesh and Pakistan because of their technical and financial inability. These countries still have a high rate of illiteracy, unemployment, and lack of communication infrastructure, sanitary

⁶⁰ Under the Hong Kong Convention both ‘ship recycling facilities operating under the jurisdiction of a party’ and ‘ships entitled to fly the flag of a party’ are under the purview of the Convention: at the *Hong Kong Convention* (n 2) art 3.1.

⁶¹ *Annex on Ship Recycling* (n 5) regulation 17.2. and regulation 4.

⁶² *Ibid* regulation 10.1.1.

⁶³ *Ibid* regulation 10.1.2

⁶⁴ *Ibid* regulation 10.1.3

⁶⁵ *Ibid* regulation 10.1.4

⁶⁶ *Ibid* regulation 11.11.

⁶⁷ It means to comply with the conditions of safety as laid down in the Convention like proper oxygen and removal of explosive substances: at *ibid* regulation 1.6 – 1.7.

⁶⁸ *Annex on Ship recycling* (n 5) regulation 17. 1 and 17. 1.3.

⁶⁹ *The Hong Kong Convention* (n 2) art 6 read with *Annex on Ship recycling* (n 5) regulation 8.1.

⁷⁰ *Annex on Ship Recycling* provides that a Party is required to establish effective use of inspection, monitoring and enforcement provisions, including powers of entry and sampling. Such a mechanism may include an audit scheme to be carried out by the competent authority or an organisation recognised by the Party: at *Annex on Ship recycling* (n 5) regulation 15.1–2.

facilities and lack of other necessities due to poverty. The governments of these countries have therefore preferred to invest their state budget in these areas rather than in the shipbreaking industry. With full knowledge of large shipping nations, they accept the toxic ships and risk their environment and human rights over the economic benefit they receive from this industry.

The Convention could have introduced a mandatory fund mechanism for financial assistance from large shipping countries to be spent for improving recycling facilities of these shipbreaking countries. Instead of such a system, the convention merely relies on the willingness of industrialised nations,⁷¹ to support the recycling facilities. There is no guarantee that every request for assistance from the recycling state will be accepted. The next part therefore evaluates these operational systems and identifies the problems and their implications on the South Asian shipbreaking industry.

IV CRITICAL EVALUATION OF THE SYSTEM THROUGH THE LENS OF THE SOUTH ASIAN COUNTRIES

As explained above, the Hong Kong Convention has introduced some innovative approaches to notification and waste management system, yet there are some serious weaknesses in the provisions of the Hong Kong Convention. These weaknesses may hinder the provisions of the Convention from being practically applied within the shipbreaking industry of India, Bangladesh and Pakistan.

A Problem with the Hong Kong Convention Notification System

A major weakness of the notification system is that it does not impose an obligation on a recycling State to restrict export and entry of a ship unless a recycling facility follows the reporting requirements voluntarily. The reason is that the reporting under the Convention requires no state-to-state notification and authorisation. The notification system is intended to make the companies accountable to their own State, but provides no mechanism to enforce the requirement. It provides no legal or other consequence in case of failure to comply with the reporting requirement. Because of this substantial gap, the reporting merely becomes a directory rather than a mandatory criterion. The Convention imposes no mandatory obligation on a State Party to enforce the notification requirement. Consequently, the recycling States may be reluctant to impose the reporting obligations as long as their industries are providing employment and greater revenues for their government.

⁷¹ *The Hong Kong Convention* (n 2) art 13.

Due to this regulatory gap in enforcing the reporting obligations, it can be presumed that toxic ships will continue to beach in India, Bangladesh and Pakistan for recycling. The Hong Kong Convention could have incorporated the widely used PIC system of the Basel Convention that would require a recycling State to give consent to receive the ship. This would then put the obligation on the recycling state to check for hazardous contaminants against the ship's IHM.⁷² The PIC is distinguishable from the reporting system under the Hong Kong Convention. The PIC would require consent from the recycling State before the ship could be received whereas the reporting system does not require such consent to stop the transfer of the ship into the recycling State, even though the recycling company has not notified the relevant authority in the recycling State. As a result, recycling companies may be able to accept for recycling a ship that has toxic materials without any intervention from their government.⁷³ Such entry of a ship for scrapping into a State may continue to become a *fait accompli* for shipbreaking States.⁷⁴

B The Problem with Satisfying the Requirement of Sound Waste Management

The uncontrolled entry of old ships into developing countries may also not comply with the Hong Kong Convention's requirement of sound management. Under the Hong Kong Convention, a competent authority of a State Party has the power to monitor proper infrastructural development for the sound management of wastes, and impose sophisticated training requirements in a shipbreaking facility in accordance with their national legislation. These requirements may not be followed as the South Asian countries do not have proper legislation in their own countries requiring them to do so. The Convention is silent on how to monitor a recycling facility or impose the obligations on the State Party. This gap poses a serious

⁷² Some of the international environmental agreements are: *The Convention on Biological Diversity* opened for Signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993); *The Stockholm Convention on Persistent Organic Pollutants* opened for Signature 23 May 2001, UNEP/POPS/CONF/4 (Appendix II) (entered into force 17 May 2004); *The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* opened for signature 10 September 1998, UNEP/FAO/PIC/CONF/5 (entered into force 24 February 2004); *The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* opened for signature 22 March 1989, 1673 UNTS 126 (entered into force 5 May 1992) ('the Basel Convention').

⁷³ According to the Hong Kong Convention a recycling or shipbreaking Company means the owner of the ship recycling or shipbreaking facility or any other organisation that is under the authority to operate the recycling or shipbreaking facilities: at the *Hong Kong Convention* art 2.12.

⁷⁴ Battacharjee (n 50) 224.

doubt as to whether the shipbreaking countries will keep up with the international standards stated in the Hong Kong Convention.

It is evident that South Asian countries are unlikely to adhere to the Convention's sound management principles, as they are yet to enact appropriate legislation for improving their shipbreaking facilities.⁷⁵ Evidence also shows that the unsafe recycling industries have in fact increased dramatically in these countries since 2009 with widespread use of beaching practice.⁷⁶ There does not appear to be any urgency in these facilities to upgrade the standard since the South Asian countries are dependent upon a funding mechanism from large shipping nations to improve the standard. The reason to argue for funding is acceptable as shipping nations are the beneficiary of the unsafe practices, such as beaching.⁷⁷ They are not only able to externalise their high cost of decontamination of their toxic substances, but also earn on an average four to five million more USD from a ship dismantled in South Asian countries than anywhere else in the world.⁷⁸

The cost of establishing a standard method such as a dry dock is high. One estimate suggests that roughly an investment of .97 million USD to 1.7 million USD per ship is required to shift from beaching to dry dock.⁷⁹ This increasing cost will add to the cost of shipbreaking in South Asia. A South Asian shipbreaking company spends around 82% of the total shipbreaking cost to purchase a ship⁸⁰ this additional cost may eventually decrease the purchase price of a ship and face the risk of fewer ships sent to South Asian countries for shipbreaking. This creates a tough choice for South Asia countries that are required to balance between the profit interest of shipping nations and the safety of their own workers and the environmental standard of the Hong Kong Convention.

Ironically, the Hong Kong Convention only considers safety of workers and environmental standard whereas it ignores the technical ability and lack of financial capability of the major shipbreaking countries. For this practical reason, this article argues that these countries need international funding to comply with the Hong

⁷⁵ Saiful Karim (n 12), 104–105.

⁷⁶ According to the United Nations report, beaching is mainly responsible for the degradation of the coastal environment because with beaching it is not possible to stop toxic substances from directly mixing with seawater: at Okechukwu Ibeanu, Special Rapporteur, *Report on the Adverse effects of the Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights*, UN Doc A/HRC/15/22/Add.3 (2 September 2010).

⁷⁷ S.M Mizanur Rahman and Audrey L. Mayer, Policy Compliance Recommendations for International Shipbreaking Treaties for Bangladesh (2016) 73 *Marine Policy Journal* 122–129, 126.

⁷⁸ See for detail about shipowner's sale's profit in page 4 of this article.

⁷⁹ *Ibid*, 128

⁸⁰ *World Bank Report 2010* (n 21).

Kong standards. It appears that the Convention overlooks this imperative subject.⁸¹ Without financial support to change the practices, the Convention may become a 'paper tiger'.⁸² This could easily eventuate if the major shipbreaking countries have failed to follow the environmental and safety standards after ratifying the Convention in future and hence it may be a reason why the shipbreaking countries have shown little interest in ratifying the Convention.⁸³

C Lack of Compulsion for the Shipbreaking States to Ratify the Hong Kong Convention

As of April 2019, none of the three South Asian countries had ratified the Convention and the Convention is yet to come into force.⁸⁴ It could be because the Convention does not stop the ships being sent to these countries if they are not a party to the Convention. There is no express bar in the Hong Kong Convention from sending ships to Non-Party States from Party States.⁸⁵ Whether the South Asian countries ratify and adopt the Hong Kong Convention or not, they may continue to be preferred destinations as long as they can offer high price to shipowners. No compulsion to ratify or accede to the Hong Kong Convention for lack of standards is a major drawback of the Convention.⁸⁶ Their non-party status has no impact on their unsafe practices of breaking ships.⁸⁷

The next part examines whether the Hong Kong Convention complies with the global environment and development principles such as the Common but Differentiate Responsibility Principle (CDRP) and the Polluter Pays Principle (PPP).

⁸¹ Tony George Puthurcheril, 'Limitations of a National Response to Regulate Global Shipbreaking Industry – A Study of the Indian Experience' in David Freestone (ed), *From Shipbreaking to Sustainable Ship Recycling: Evolution of a Legal Regime* (Martinus Nijhoff Publishers, 2010) 325.

⁸² Md. Saiful Karim, 'Environmental Pollution from the Shipbreaking Industry: International and National Legal Response' (2010) 22 *Georgetown International Environmental Law Review* 185, 224.

⁸³ Puthurcheril (n 81) 314.

⁸⁴ See above in Part I. See also Global Union (n 9).

⁸⁵ Bhattacharjee (n 51) 230.

⁸⁶ *ibid.*

⁸⁷ Puthurcheril, (n 81) 320.

V COMPLIANCE WITH THE RIO DECLARATION ON ENVIRONMENT AND DEVELOPMENT

The CDRP recognises the difference of economic and social cost between developed and developing countries. Standard of legal application of training and sound management by developing countries may not be perfect for industrialised countries, so it requires law to reflect the financial and technological weakness of developing countries. According to Principle 11 of the Rio Declaration on Environment and Development, 'legislation must look into the environmental and developmental context of the place of application because standards applied by some states may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries'.⁸⁸

The Hong Kong Convention requires a Party to improve their recycling standards by spending their national budget. It does not address how government of a State Party, such as Bangladesh, can demand internalisation of the cost from shipowners. The Convention requires the State Parties to improve their existing national recycling practice mainly in the area of planning and operation, including facility design to operate in an environmentally sound manner,⁸⁹ and training of workers on emergency operation, and preparedness for accidents and spills. Although such planning and operational requirements are crucial for sound environment and safety, they are too costly for a recycling State, such as Bangladesh, due to their budgetary constraints, including unemployment.⁹⁰ This requires funding from rich nations. Without any explicit provision of funding, it is not clear how a financially capable shipowner shares the cost.⁹¹

Therefore, the article argues that the Convention does not apply the CDRP. This principle has a high practical and historical importance to shipbreaking of India, Bangladesh and Pakistan since one of the main reasons of shifting the challenging shipbreaking process to the South Asian countries has been to transfer the pollution burden from large shipping nations. Yet, the Hong Kong Convention adds more burden on these recycling countries. As a State Party to the Convention, only a recycling State like Bangladesh or Pakistan is required to develop modern

⁸⁸ Report of the United Nations Conference on Environment and Development UN Doc A/CONF.151/26 (Vol. I) (13 June 1992) ('*Rio Declaration*').

⁸⁹ Puthurcherill (n 81) 151.

⁹⁰ According to Puthurcherill's research finding, priority areas include education for all, infrastructural development, unemployment, foreign loan, proper sanitation for all, reducing population growth and many others: at *ibid* 156–160.

⁹¹ See above Part III. See also Gabriela Aguiello Moncayo, 'International Law on Ship recycling and Its Interface with EU Law' (2016) 109 *Marine Pollution Bulletin* 301.

infrastructure by costing her national budget. It appears to be a biased mechanism as the Convention targets ‘equality of non-equals’.⁹² The Convention establishes no fund from the contribution of shipowners to support facility development in recycling States. Due to this, the Convention fails to recognise and apply that the management of decommissioned ships is a common responsibility of all interested parties.

Ignoring Principle 11 of the Rio Declaration on Environment and Development also leads to the denial of PPP. Objectively the PPP extends liability to polluters for any cost related to compliance with pollution control laws.⁹³ Specifically, Principle 16 of the Rio Declaration on Environment and Development provides that the law must identify polluters and propose a mechanism for cost sharing between the polluter and victim states.⁹⁴ It is evident that the real polluters are the shipowners whose commercial use contributes to the wastes generation,⁹⁵ but the Convention does not recognise this and therefore proposes no fund mechanism.

Such a gap in the Hong Kong Convention allows the shipowners to escape liability under the PPP.⁹⁶ The shipping companies may also escape their state and international liability of pre-cleaning by the common use of FOCs. For example, if the United States (US) is a flag state, a US shipping company can reflag the ship to Panama. Panama will then be referred to as the FOC. By reflagging, the nationality of a ship is changed, and the identity of the last shipowner and its state of incorporation is not exposed.⁹⁷ FOC states control 73% of the total tonnage of sea going vessels.⁹⁸ In such cases, the genuine link between the real owner of a vessel and the flag the vessel flies is difficult to find.⁹⁹ Nevertheless, the Convention

⁹² Nikos Mikelis analysed the Convention’s common principles for recycling in all countries: see more at Nikos Mikelis, *Developments and Issues on Recycling of Ships 3* (Web Page, 16 December 2006) http://www.imo.org/includes/blastDataOnly.asp/data_id%3D17980/Developments.pdf.

⁹³ Astrid Kalkbrenner, ‘Compensating for Catastrophic Harm: Civil Liability Regimes and Compensation Fund’ (PhD Thesis, University of Calgary, 2015) 27.

⁹⁴ Principle 16 of *Rio Declaration* provides that National authorities should endeavour to promote the internalisation of environmental cost and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment: at *Rio Declaration* Principle 16.

⁹⁵ NGO Shipbreaking Platform, *Annual Report 2017* (Web Page) <https://www.shipbreakingplatform.org/wp-content/uploads/2018/07/Annual-Report-2017-Final-Spreads.pdf>

⁹⁶ See above Part II.

⁹⁷ Carlos Felipe Linas Negret, Pretending to be Liberian and Panamanian, Flag of Convenience and the Weakening of the Nation State on the High Seas, (2016) 47 (1) *Journal of Maritime Law and Commerce* 1, 4.

⁹⁸ NGO Shipbreaking Platform, *Flag of Convenience* (Web Page) <<https://www.shipbreakingplatform.org/issues-of-interest/focs/>>.

⁹⁹ Ibid.

does not provide any mechanism to control this practice. This could eventually affect the use of correct IHM and IRRC as flag States have the power to issue the IHM and IRRC before recycling. Shipowners may reflag their ships if their state of incorporation denies issuing an IHM and IRRC.

VI CONCLUSION

As discussed in this paper, the Hong Kong Convention has a number of fundamental flaws that may limit its capacity to change the unsafe shipbreaking practices in Bangladesh, Pakistan and India. The Hong Kong Convention also does not address the social and economic context of each Party, but exceedingly depends on the facility developed by an individual State irrespective of her capacity. Indeed such method has an economic consequence and would be too difficult to enforce by a recycling State, such as Bangladesh.

The article argued that the mechanisms proposed by the Hong Kong Convention might not be sufficient to stop ongoing unsafe practices as identified by the World Bank in 2010.¹⁰⁰ As no system of mandatory fund mechanism for financial assistance from shipping countries is proposed, any possibility to influence the sophisticated ship breaking practice in developing countries may remain a far-fetched idea. Though the Convention canvasses the idea that its primary concern is to protect occupational health and safety of workers, the Convention does not have sufficient mechanisms for accomplishing this goal. The principles of sustainable development (considering ship breaking as a green activity by emphasising an inventory for containing hazardous materials) and training of workers, introduced by the Hong Kong Convention, portrays that safety is an important issue in shipbreaking. However, this paper argues that the Hong Kong Convention fails to accomplish its goal of promoting safe recycling because the onus of safety and enforcement is left in the hands of under-resourced ship recycling States and their under-resourced shipbreaking facilities.¹⁰¹

The Hong Kong Convention does not appear to have achieved its intended objectives to promote safe and environmentally sound disposal of ships. This article therefore questions whether the Hong Kong Convention's ability to regulate inter-State movement of contaminated ships by introducing the 'cradle to grave' approach is sufficient to protect the rights of workers at the recycling or shipbreaking facilities in the South Asian countries, and their marine environment.

¹⁰⁰ *World Bank Report 2010* (n 21) 1–5.

¹⁰¹ *Ibid.*