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Legal regulation of the shipbreaking industry in Bangladesh: The international regulatory framework and domestic implementation challenges

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ABSTRACT

Shipbreaking is the process of dismantling an obsolete vessel for scrapping or disposal. This activity was not officially declared an industry in Bangladesh until 2006, even though the country is one of the biggest ship-breakers in the world. This industry has dramatically expanded in Bangladesh, at the cost of environmental degradation and severe labour exploitation. Despite environmental and human rights violations, the shipbreaking industry represents a vital source of income for the country and a livelihood for a significant portion of its population. Shipbreaking activities in Bangladesh present both opportunities and challenges for Bangladesh. This article examines the extent to which the existing regulatory framework for dealing with these issues in Bangladesh is congruent with international instruments. This article also examines relevant international instruments which prescribe the core principles for regulating the ship breaking industry and evaluates the legal regulation of the Bangladesh ship breaking industry against these international instruments. The underlying objective of this evaluation is to demonstrate that Bangladeshi instruments could incorporate the core of the international instruments to minimise the environmental damage caused by this industry. This article concludes that Bangladesh should either amend its laws or enact a new legislative scheme that is based on the core values of the *Basel Convention*. This change is vital if Bangladesh wants to ensure a long lasting industry that could serve its need for iron ore and engage its abundant labour force, without the cost of destroying its coastal line which is one of its most valuable natural assets.

1. Introduction

Shipbreaking is the process of dismantling an obsolete vessel for scrapping or disposal. This activity was not officially declared an industry in Bangladesh until 2006, even though the country is one of the biggest ship-breakers in the world. Since 1974, Bangladesh has had approximately 50 shipbreaking yards that have dismantled about 52 per cent of the end-of-life vessels above 200 dead weight tonnage in the world.[1] The booming activity in the port cities of this country is mainly driven by the suitable climate of this long and flat intertidal coastal zone; the abundant supply of cheap labour; and the lax environmental regulations. Based on these factors, this industry has dramatically expanded in Bangladesh, at the cost of environmental degradation and severe labour exploitation. Despite environmental and human rights violations, the shipbreaking industry represents a vital source of income for the country and a livelihood for a significant portion of its population.

Shipbreaking activities in these yards present both opportunities and challenges for Bangladesh; they provide Bangladesh's main source of iron, but it is also a source of environmental

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[1] In this country, Chittagong Steel House first scrapped a Greek ship, the "M.D. Alpine" in1964. The introduction of commercial ship breaking in this country began in 1974 when Karnafully Metal Works Ltd. bought a damaged Pakistani ship, the "Al Abbas". See, Hossain MM, Islam MM. Shipbreaking activities and its impact on the coastal zone of Chittagong, Bangladesh: towards sustainable management. (*footnote continued*) Chittagong: Young Power in Social Action; 2006: 5; Hossain MS, et al. Occupational health hazards of ship scrapping workers at Chittagong coastal zone, Bangladesh. Chiang Mai Journal of Science 2008; 35(2): 370–371.

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pollution in the coastal zone and an example of severe labour exploitation.[2] These yards supply 25–30 per cent of the country's total yearly demand for steel.[3] As of 2012, Bangladesh demolished one and a half million tons of steel, more than the country currently has the ability to buy on the international market.[4] Simultaneously, the shipbreaking yards discharged thousands of tons of toxic substances such as asbestos, lead, waste oil and polychlorinated biphenyls (PBCs) into surrounding soils and seawater, which in turn has seriously damaged the coastal environment and its biodiversity.[5] Solid wastes discharged into the sea from these yards also cause serious marine pollution. At the seashores in the northern part of Sitakunda, where most of the yards are situated, and in the adjoining areas, former natural mangrove forests have vanished completely.[6]

Despite the elusive size of the industry and its grave effects, there is no specific legal regulatory framework in Bangladesh to monitor this ongoing environmental damage. While the global operation of shipbreaking is regulated by a number of international instruments, Bangladesh has neither incorporated any of them nor developed comprehensive domestic legislation addressing these concerns. The Government of Bangladesh is trying to develop some regulatory guidelines, but those initiatives are either biased or insufficient to deal with the need of industrial thrust and the urge of environmental conservation in this country.

This article examines the extent to which the existing regulatory framework for dealing with these issues in Bangladesh is congruent with international instruments. To this end, Section 2 shall describe some international instruments which prescribe the core principles for regulating the ship breaking industry. The Section 3 evaluates the legal regulation of the Bangladesh ship breaking industry against these international instruments. The underlying objective of this evaluation is to demonstrate that Bangladeshi instruments could incorporate the core of the international instruments to minimise the environmental damage caused by this industry. This article concludes that Bangladesh should either amend its laws or enact a new legislative scheme that is based on the core values of the *Basel Convention*. This change is vital if Bangladesh wants to ensure a long lasting industry that could serve its need for iron ore and engage its abundant labour force, without the cost of destroying its coastal line which is one of its most valuable natural assets.

2. International regulation of shipbreaking industry

Although shipbreaking is not a new industry, the regulatory framework for this industry is a relatively new area.[7] In recent decades, awareness of the detrimental potential for both the environment and human health as a result of improper handling and disposal of hazardous wastes has gained renewed impetus. In light of this, there has been increasing international concern regarding the movement of wastes from developed states to less developed ones, which has resulted in the growth of restrictive efforts to both limit and prohibit the transfer of waste.

These days, the heart of this regulatory reform is driven by moral issues concerned with the exploitation of weaker economies and desperate labour forces. However whilst it is still early to comment on this development, what is evident is that this regulatory development has been able to raise awareness toward the devastating consequences of hazardous waste export and raise some important principles related with the threats to the sustainability of the fragile global ecosystem.[8] The section below describes some of the core instruments related to the regulation of ship breaking industry, with the aim of identifying the principles necessary for legal regulation frameworks of end-of-life ship importing countries.

2.1. International Maritime Organisation (IMO) guidelines

The IMO has overall responsibility for coordinating issues associated with ship-recycling and monitoring issues arising during ship design, building and operation which may have an impact on recycling (including preparations for recycling on board). The *IMO Guidelines* adopted in 2003 on ship recycling recognise that, in order to contribute towards improvements in ship recycling, it is necessary to consider the ship throughout its life cycle. Furthermore, the *IMO Guidelines* consider it necessary to minimise the use of hazardous materials already in the design, construction and maintenance of ships, without compromising their safety and operational efficiency, and to prepare ships for recycling in such a manner as to reduce environmental and safety risks and health and welfare concerns as far as practicable.[9]

An interesting preliminary and controversial point noted in the Guidelines is that they consider the process of recycling ships to be "green" since virtually nothing goes to waste. First and foremost, steel is recycled and used as raw material in the various domestic industries, such as the construction industry. However, not only steel, but also the equipment, such as batteries, generators, hydrocarbons, and light fittings, is nearly entirely recycled. The Guidelines highlight the fact that ship recycling as such has the potential to represent a sustainable industry with substantial

[2] Hossain MS, et al. Occupational health hazards of ship scrapping workers at Chittagong coastal zone, Bangladesh. Chiang Mai Journal of Science 2008; 35(2): 370–371.

[3] Miars A. Bangladesh: where ships go to die. Kogod Now (online) September 2012. Available: ⟨http://kogodnow.com/2012/09/bangladesh-where-ships-go-to-die⟩.

[4] Miars A. Bangladesh: where ships go to die. Kogod Now (online) September 2012. Available: ⟨http://kogodnow.com/2012/09/bangladesh-where-ships-go-to-die⟩.

[5] For details see Hossain and Islam, above n 1.

[6] Hossain and Islam, 61.

[7] For some studies on ship-breaking related regulation, see Pelsy F. The blue lady case and the international issue of ship dismantling. Law, Environment and Development Journal 2008; 4(2): 135–148; Bhattacharjee S. From Basel to Hong Kong: international environmental regulation of ship-recycling takes one step forward and two steps back. Trade Law and Development 2009; 1(2): 193–230; Krause K. End-of-life ships: linking European maritime safety to occupational safety on Asian scrap yards. European Transport Safety Council Yearbook 2005: 76–82; Moen AE. Breaking Basel: the elements of the Basel Convention and its application to toxic ships. Marine Policy 2008; 32(6): 1053–1062; Khan K, Chowdhury H, Alam F, Kumar A. Sustainable design of ship breaking industry in developing countries. Asian Journal of Water, Environment and Pollution 2012; 9(1): 1–11; Xiang-jun SHI. Discussion on the ship dismantling anti-pollution regulation. China Ship repair (*footnote continued*)
2012;1–5; Garud P. Incorporation of global environmental norms into Indian legal systems: social and economic challenges, with special reference to ship-breaking. Procedia-Social and Behavioral Sciences 2012; 37: 150–156; Tsimplis MN. Scrapping of vessels and off-shore installations: regulation and liability. Swansea: Sixth IISTL Annual Colloquium on the New Uses of the Sea 9–10 September 2010; Hillyer HH. The hard reality of breaking up: the global transboundary movement of ocean vessel demolition and waste. Vermont Journal of Environmental Law 2012; 13: 755–865.

[8] Anand Ruchi. *International Environmental Justice*, *A North–South Dimension* (Ashgate Publishing, 2004).

[9] The guidelines are available at International Maritime Organization. IMO guidelines on shipwrecking. Last accessed: 10 July 2013. < http://www.imo.org/blast/blastDataHelper.asp?data_id=11404&filename=ResShiprecycling962.pdf > for a discussion on this guideline see Balkin R. The International Maritime Organization and maritime security. Tulane Maritime Law Journal 2006; 30: 1–34; for details see also Trucco P, Cagno E, Ruggeri F, Grande O. A Bayesian belief network modelling of organisational factors in risk analysis: A case study in maritime transportation. Reliability Engineering & System Safety 2008; 93(6): 845–856; Lampe WH. The new International Maritime Organization and its place in development of international maritime law. Journal of Maritime Law and Commerce 1983; 14(3): 305–330; Jensen, Øystein. 'The IMO Guidelines for Ships Operating in Arctic Ice-Covered Waters: From Voluntary to Mandatory Tool for Navigation Safety and Environmental Protection' (2010).