Efficacy & Implementation Gaps in the 'Core Environmental Laws' of Bangladesh: An Overview

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Abstract: Environmental concerns are cross-cutting in nature, touching all sector-specific actions. In recent decades, Bangladesh has been experiencing with loads of environmental issues, leading to persistent deteriorating environmental state. Consequently, the cause of 'environment conservation' has been felt to realize and the primary responsibility vests on the Ministry of Environment, Forest and Climate Change and the Department of Environment, Accordingly, the country is in the constant process of internalizing the international environmental commitments into its national regulatory regime. Approximately two hundred national legal instruments are linked, to some extent, with the diverse aspects of environmental governance. Despite the specific responsibilities as allocated to the different governmental agencies through abundant environmental laws, their implementation status is far behind the international standards. Multiple and interconnected reasons fuel the environmental anarchies, obstructing to ensure the sound environmental management in Bangladesh and a threat to sustainable development. Most importantly, the non-integration of various environmental concerns into the developmental action agendas, at the planning, implementing and monitoring stage is the overarching cause. As 'right to environment' and 'environmental justice' depend on effective environmental legal and policy instruments, this article predominantly attempts to provide an overview of the statutory provisions, efficacy and implementation gaps in those environmental legislations of Bangladesh which are so far officially recognized as 'core environmental laws'.

Keywords: Environment conservation, Environmental issue, Environmental law, Implementation gap, Sound environmental management.

1. Introduction

The state of global environment has diminished to a great extent since the convivial of industrial revolution and has been impacting on the quality of life¹. Consequently,

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ensuring 'environment conservation' becomes a cross-cutting area of concern for all sector-specific initiatives around the globe. A good numbers of international environmental legal instruments, i.e. multilateral environmental agreements (MEAs), customary international laws, environmental principles and case laws, are in place, to deal with various environmental issues and their management aspects.

Following the global path, Bangladesh, as a party to many MEAs, is striving on the cause. To halt and recover from the environmental degradation, it has echoed, to some extent, the MEAs commitments into the national arena. Nearly 200 domestic legal and policy instruments are operative in Bangladesh, touching various management aspects of natural environment, natural resources and eco-system, either directly or indirectly; of them around 180 laws are mostly associated with environmental regulatory regime². However, out of those, only 10 core laws have recognized as 'environmental law' through gazette notification, till date, leaving many significant ones.

1.1 Objectives

The main objectives of this research are to: -

- a. Outline the salient provisions of 10 'core environmental laws' of Bangladesh which are currently recognized as 'environmental laws' through gazette notification.
- b. Identify the implementation gaps in and assess the efficacy of these 10 laws.
- c. Prescribe few recommendations while summarizing the study findings.

1.2 Methodology

To undertake this qualitative research, analyses have been done of the primary and secondary documents namely, laws, case decisions, journal articles and various reports of organizations and news media. A brief description on the environmental issues and the evolution of environmental laws in Bangladesh has also been given to depict the environmental perceptions.



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¹ Farhan Ahmed, *et al*, 'The environmental impact of industrialization and direct foreign investment: empirical evidence from Asia-Pacific region' (2022) Environ Sci Pollut Res, https://link.springer.com/article/10.1007/s11356-021-17560-w accessed 20 January 2022.

² Mohiuddin Farooque, *et al*, '*Laws Regulating Environment in Bangladesh*' (4th edn., BELA 2020).

1.3 Significance and Limitation

The findings of the article will help the policy makers consider bringing future legal reforms necessary to bridge the gaps and to enhance their efficacy, leading to secure environmental rights and justice in Bangladesh. Moreover, the study will increase the legal knowledge base of various stakeholders who are associated with environmental governance, the academics and the researchers.

The article, however, has not shed light on many other significant laws of Bangladesh, which are equally crucial for sound environmental governance as those are not yet officially recognized as 'environmental laws'.

2. Glimpse of Environmental Issues and Other Cross-cutting Concerns in Bangladesh

Despite the presence of many laws to regulate environmental aspects, the state of natural environment and the diversities in the natural resources pool of Bangladesh have constantly been degrading over the period of time and especially during post-independence era. The ominous country profile in terms of environmental management is evident from various world indexes. Bangladesh has ranked 162 out of 180 in the 2020 report of the environmental performance index (EPI) of the world³ and has placed first position in the 2021 most polluted country list⁴. To speed up the economic growth, the country has switched from agro-based initiative to mass industrialization, resulting to succumb gross environmental pollution and health hazard⁵. Consequently, in recent decades, due to the presence of plethora environmental issues, ensuring sound environmental management has surfaced as a serious concern for Bangladesh. The lion's share of environmental issues of Bangladesh derives from multiple sources of pollution, indiscriminate industrialization, haphazard urban and rural planning, encroachment of public properties, eco-system degradation, habitat loss, deforestation, loss of biodiversity, conversion of agricultural lands for other use and improper waste disposal.

Other significant connected natural and man-made concerns include managing huge human population pressure, along with *Rohinghya* influx, within the little land space; recurrence of natural calamities due to funnel shaped

³ EPI 2020, Result,https://epi.yale.edu/epi-results/2020/component/epi accessed 25 January 2022.

World Population Review. 'Most Polluted Countries 2022' https://worldpopulationreview.com/country-rankings/most-polluted-countries accessed 22 March 2022.

Md. Jamal Uddin, Yeon-Koo Jeong, 'Urban river pollution in Bangladesh during last 40 years: Potential public health and ecological risk, present policy, and future prospects toward smart water management' (2021) 7(2) *Heliyon* < https://doi.org/10.1016/j.heliyon.2021.e06107> accessed 26 January 2022.

and low-lying geographical position of Bangladesh⁶; and the impact of global climate change (CC). Bangladesh has ranked 7 among 181 climate vulnerable countries⁷, contrary to its insignificant contribution to the cause. The climate issue may pose a threat to the timely achievement of the sustainable development goals (SDGs)⁸. World's projected temperature rise is 2.7°C by the end of this century⁹, which will exacerbate the adverse impact on Bangladesh's economy and sustainability. However, Bangladesh has ranked 109 out of 165 countries in the overall performance of SDG Index 2021¹⁰. Coping with all these intrinsic issues at post Covid-19 pandemic era may come as a greater challenge for Bangladesh, regarding its trajectory to consistent economic growth, keeping social cohesion and ensuring sound environmental management¹¹. The nexus among the institutional incapacities, malpractices and statutory limitations may help germinate a complex situation in the environmental governance.

In the 'rat race' of becoming an upper middle income country, the 'business as usual' approach, is commonly practiced in Bangladesh¹². Putting due regard to the notion 'environment conservation' per se, is often ignored and remains as a mere rhetoric, in practice, principally due to politician-polluter nexus. As a consequence, while taking decisions for a project or program, the 'top-down approach' (taking decision by top officials for implementing at lower level)

Reach Report, 'Climate Change and Natural Hazards in Bangladesh Show the Need to Focus on Vulnerable Populations', 22 January 2020 < https://www.reach-initiative.org> accessed 23 November 2021.

David Eckstein, et al, Germanwatch, 'Global Climate Risk Index 2020', Briefing paper (German watch, December 2019)

https://germanwatch.org/sites/default/files/20-2-01e%20Global%20Climate%20Risk%20 Index%202020_16.pdf accessed 28 November 2021.

⁸ Citizen's Platform for SDGs, Bangladesh, 'Bridging Climate Actions and Sustainable Development Goals of Bangladesh', Brief, Aug.17, No.6, http://www.icccad.net/wp-content/uploads/2018/03/Citizen%E2%80%99s accessed 26 December 2021.

⁹ UN Climate Press Release, 25 October 2021, https://unfccc.int/news/updated-ndc-synthesis-report-worrying-trends-confirmed accessed 31 October 2021.

Rankings, Sustainable Development Report, https://dashboards.sdgindex.org/rankings, accessed 23 March 2022.

UNICEF Bangladesh, 2020 Report, 'Tackling the Covid-19 social and economic crisis in Bangladesh: Providing universal, lifecycle social security transfers to protect lives and bolster economic recovery'

https://www.unicef.org/bangladesh/media/5256/file/%20Tackling%20the%20COVID-19%20 economic%20crisis%20in%20Bangladesh.pdf%20.pdf> accessed 26 January 2022.

Adam Smith International. 'Towards a Transition to Green Growth in Bangladesh' under the project 'Promoting Green Economy in Bangladesh' (2015-2018) https://adamsmithinternational.com/projects accessed 25 November 2021.

happens mostly and the 'bottom-up approach' (sending proposals from the lower level to the top level) is often bypassed, which reflects the dishonor to 'environmental democracy' as the concerns of the local people are ignored where the project or program is to be implemented.

3. Chronicle of Cascading MEAs into National Legal Instruments

Following the global call of 'environment conservation', Bangladesh, as part of its 'common responsibility', pledges to work on the cause. It is gradually cascading the MEAs commitments into various national legal instruments. Some national legal instruments, concerning the natural resource management, which were enacted during the British and Pakistan regimes, are still operative; for example, the Forest Act 1927, the Protection and Conservation of Fish Act 1950. The wave of global environmental activism, created through notable UN conferences, namely the Conference on Human Environment 1972 and the Conference on Environment and Development 1992, had guided Bangladesh to set up numerous institutions and to frame new laws, rules, policies, etc. Through endorsing the global action agenda of SDGs 2015, Bangladesh has redirected its aspirations and priorities to match with it.

The country has shifted from 'environment pollution control oriented approach' to 'environment conservation oriented approach' by enacting the Bangladesh Environment Conservation Act 1995, repealing the Environmental Pollution Control Ordinance 1977. The new National Environment Policy 2018 has replaced the 1992 one. A dedicated ministry, namely the Ministry of Environment, Forest and Climate Change (MoEFCC) was created in 1989 to protect the natural environment of Bangladesh. The Department of Environment (DoE) and the Forest Department, are the two significant arms of the MoEFCC and are responsible to implement their own statutory commitments. Several other ministries and their subordinate agencies, for example Ministry of Water Resources, Ministry of Agriculture, the Bangladesh Water Development Board, Department of Fisheries, various local government agencies, also undertake many sector-specific projects and programs which are pertinent to the diverse aspects of environmental management. The integration of 'environment conservation' into all relevant policy instruments and their applications are absolutely crucial to pursue a sound regulatory mechanism but remains as a great challenge.

4. Key Provisions and Implementation Gaps in 'Core Environmental Laws' of Bangladesh

It is already mentioned that around 180 domestic laws are either explicitly or implicitly connected with environmental management in Bangladesh. The DoE publication on environmental laws of 2019 has listed 21 national legal instruments as environmental laws unofficially. But under this heading, the key provisions of only 10 laws and their implementation gaps are discussed as these are so far officially recognized as 'environmental laws' through gazette notifications. Hence, these 10 laws can be considered as the 'core environmental laws'.

4.1 Bangladesh Environment Conservation Act (BECA) 1995

BECA is the parent law, aiming at environment conservation, development of environmental standard and to control and mitigate environmental pollution. The DoE is created and empowered through BECA to perform an array of functions¹³. Its Director General has given unfettered power to fulfill the objectives of BECA, applying his discretion; but his qualification is not declared. The specific functions include to: coordinate DoE activities with other agencies; give directions to prevent any probable accidents that may degrade environment; ensure sound management of hazardous substance through regulating its manufacture, use, export, import, disposal, etc.; conduct and assist other agencies in the environmental research; enter, search and examine any place or equipment for pollution control and sample collection; collect and disseminate environmental information; advice the government to avoid using polluting substances; examine the standard of drinking water; warn any industry/establishment to stop, regulate or prohibit any harmful activity, to direct cutting their utility connections, to issue orders to close the establishment for its non-compliance; declare an ecologically critical area (ECA) with a list of prohibited activities and to develop a management plan for its restoration; take various actions on vehicular pollution, use of polythene, hill cutting, hazardous waste management, ship breaking, filling up of wetlands, considering these activities as injurious to public health and degrade the environment and eco-system; issue an environmental clearance (ECI) to initiate/continue/expand an industrial operation/project; assess the damage done to ecosystem by any accident/occurrence; take corrective measures to mitigate emission of excessive pollutant; conduct a public hearing upon any complaint; issue environmental directives, time to time.

BECA has not explicitly recognized 'right to environment' as a right. It reflects few established and emerging international environmental principles,

¹³ Bangladesh Environment Conservation Act 1995, ss 4-13.

namely principle of harm prevention, polluter pays principle and principle of environmental impact assessment (EIA). But few significant ones, such as the principle of sustainable development, wise use principle, 3R principle and principle of intergenerational equity, are yet to reflect. BECA seems to focus curative measures mainly than focusing preventive measures; covers minimally and implicitly the forest and biodiversity issues, through declaring 'ECA' and assessing the damage to ecosystem. It allows ship breaking activity instead of prohibiting it, resulting to deteriorate the environmental quality and causing an irreparable loss to the ecosystem due to weak law enforcement mechanisms¹⁴. BECA justifies the razing of hills and filling up of wetlands, with the label 'national interest' without interpreting the term. Such vagueness in law, provokes adopting unfair means to get such label by the vested interest groups; supplemented by the relaxed application of transparency and accountability, it results to exacerbate the situation. The rampant use of polythene bags, emission of hazardous smoke by industries and vehicles, illegal grabbing of wetlands, open spaces, cutting of hills for housing and other activities, ecosystem degradation through the disposal of untreated industrial wastes have become common practices.

The mode of doing public hearing is missing in BECA. But it permits¹⁵ to: prefer an appeal, challenging DoE decision, to the government, without defining the term 'government'; file cases for environmental offence and compensation, either by the DoE or by an aggrieved person; inflict punishments ranging from fine of Taka 5,000 to 1,000,000, or imprisonment for 1 to 10 years or with both. However, the punishments are faulty against the recurrent offenders of environmental crimes, as imprisonment is a mere option against the fine and no instance of imposing imprisonment for any duration is found yet. Besides, the punishment is equal for natural person and body corporate which should be revised. Moreover, BECA limits the maximum punishments of offences committed under various Rules made under it, as fine of Taka 200,000 or imprisonment for 2 years or with both¹⁶ which is insufficient at present context. It gives immunity¹⁷ to the personnel for their actions taken in 'good faith' but remains silent about their omissions in taking timely and appropriate steps, leading to provoke malpractice. The DoE has currently 45 offices throughout Bangladesh. Its insufficient logistics supports and manpower and many vacancies in its approved posts, projects contradiction to its vast realm of activities assigned by BECA. With only two laboratories, in

¹⁴ NGO Shipbreaking Platform, 'The Problem' < https://shipbreakingplatform.org/our-work/the-problem/> accessed 26 January 2022.

¹⁵ ibid, s 14, 15(1), 15A, 17.

¹⁶ ibid, s 15(2).

¹⁷ ibid, s 18.

Dhaka and Chattogram, it cannot serve effectively, requiring more for other parts of Bangladesh. Therefore, adequate equipping of the DoE is required to perform its statutory obligation under BECA.

4.2 Rules Framed Under BECA

For proper realizing the objectives of BECA, seven Rules have been framed, till date. These Rules deal with specific environmental issues and their management aspects, which are briefly discussed here. It is worth mentioning that Rules on electronic waste management is finalized and Rules on poly chlorinated biphenyls (PCB) is under consideration to be framed. However, rules for EIA and public hearing/participation should get attention for framing.

4.2.1 Environment Conservation Rules (ECR) 1997

ECR mainly focuses on the procedure of obtaining an ECl for different industrial activities categorizing as Green, Orange-A, Orange-B and Red¹⁸, based on their intensity and levels of impacts on environment. The Red ones require submitting more documents for DoE's assessment than other ones, such as, no objection certificate (NOC) from the local authority, initial environmental examination, environmental management plan, contingency plan, EIA report, site clearance (unless situating within a designated export processing zone), etc. An ECl is issued for three years (Green listed) and one year (Orange-A, Orange-B and Red listed) with fees ranging from Taka 1,500 to 500,000¹⁹. Violations of ECR requirements are often reported as most of the industrial establishments have no effluent treatment plants (ETPs) or are not running their ETPs and discharging harmful untreated effluents into environment, some are established in residential areas (which is prohibited) or creating noise or emitting smoke or odor beyond the permitted levels; even the tannery industries which have shifted to Savar from Hajaribag, Dhaka are running without ECl for last 10 years²⁰ and some are getting EIA and ECl through bribing the DoE officials²¹.

ECR sets the standards of environmental quality of air, water, odor and sound; fixes the emission limits of different types of vehicles and sewage discharge, gaseous

¹⁸ Environment Conservation Rules 1997, r. 7, schdl. 1.

¹⁹ ibid, r 8, 14, schdl. 13, 14.

Rashidul Hasan, 'Savar Tannery Estate Must Shut Down' Daily Star (Environment Supplement, Online, 30 November 2021) < https://www.thedailystar.net/news/bangladesh/elections/news/savar-tannery-estate-must-shut-down-2905911> accessed 29 January 2022.

²¹ Editorial, 'Department of Pollution or Collusion?' *The Daily Star* (Online, 06 January 2022). https://www.thedailystar.net/views/editorial/news/department-pollution-and-collusion-2933791 accessed 27 January 2022.

and liquid wastes from various industrial activities²². It also mentions different procedures²³ to: declare an ECA; control air pollution through infrastructural construction; seek a relief from any damage done to the ecosystem; serve notice for sample collection; obtain 'pollution under control certificate' for vehicles.

ECR was last amended in 2021 but still has some gaps. It lacks provisions on consultation with local people, before renewing the ECl, to assess any suffering caused by such activities; misses the procedure of NOC procurement and the details of the modes and criteria of doing and approving an EIA (no separate EIA rules exists till date); has nothing about soil standards, light and thermal pollution; has nothing about the consequence of the failure to dispose applications in time. Few activities listed under Orange-B category are equally harmful like the Red ones, for example, carbon rod, printing ink, stone crushing, ship breaking, battery assembling, re-rolling, etc. Activities not mentioned in ECR, like sand and stone extraction need to be inserted. So, ECR amendment is vital to ensure expected implementation.

4.2.2 Ozone Layer Depleting Substance (Control) Rules 2004

Bangladesh is bound to mirror the Vienna Convention for the Protection of the Ozone Layer 1985, the Montreal Protocol on Substances that Deplete the Ozone Layer (MP) 1987 and the latest Kigali Amendment 2016 at domestic level. This Rules enumerates detailed procedures to control the use and phase out of 96 types of ozone depleting substances (ODS), commonly found in various products including air conditioning units of vehicles, refrigerator, heater, air cooler, dehumidifier, compressor, aerosol, fire extinguisher, insulation panel, prepolymer, etc.

ODS Rules prohibits to: produce, use, export/import, sell/project, collect, distribute, store ODS containing products; establish/expand ODS manufacturing process (unless specifically exempted for specific period, having ECl, to give specific services)²⁴. It mandates to: obtain ECl for manufacture, export and import of compressors having ODS; keep and submit proper records to the DoE by the manufacturer, importer, exporter, seller of ODS and compressors; issue/cancel a licence/permit; submit an annual report of the Ozone Cell, DoE to the government; exempt its application for any lab, research or other purpose, if authorized under any rules²⁵.

²² Environment Conservation Rules 1997, r. 12, 13, schdl. 2-12.

²³ ibid, r 3-6, 7A, form 4.

²⁴ Ozone Layer Depleting Substances (Control) Rules 2004, r. 4-9, schdl. 1-5.

²⁵ ibid, r 10-15, schdl. 6-9.

Schedule 2 provides different base years and the maximum amount of ODS import and use; the timeframe of ODS phasing out, from 1987 to 2031; allows ODS use and import, falling under group VI of the MP, necessary for servicing of refrigeration and air conditioning, till 2040. Schedule 3 restricts the terminal uses of numerous groups of ODS; allows 19 types of ODS related activities with different timelines; allows manufacturing of any essential product, servicing of any firefighting device, manufacturing and charging of any automobile's air conditioner, manufacturing of refrigeration and air conditioning (except compressors), till 2031, servicing of any refrigeration and air conditioning, till 2041.

Rule 16 directs to punish, following Section 15(1) of BECA (maximum imprisonment for 10 years or fine up to Taka 1,000,000 or both), however, the provisions of Section 15(2) of BECA bars imposing imprisonment beyond 2 years or fine beyond Taka 200,000 or both, for committing an offence mentioned in any Rules made under BECA. Therefore, an amendment of ODS Rules or BECA or both is required to lift the contradiction in legal provisions. Regarding the compliance of the MP, Bangladesh has awarded from international organizations and is aiming to reduce 67.5% of HCFC by 2025²⁶. Therefore, regular and proper monitoring of ODS phase out by the duty bearers is essential to bring expected result within the fixed timeline.

4.2.3 Noise Pollution (Control) Rules 2006

This Rules is enacted to control noise pollution (NP). It specifies the limits and timing of making noise but exempts sound of airplane, train, ambulance, any religious functions, any governmental actions during natural calamities, etc. NP Rules requires to: put signboards of five types of areas, namely residential, commercial, industrial, mixed and silent area; examine by the DoE, the sound level of a confined and an open space; follow the maximum sound limits (ranging from 40 to 75 decibel) in those five areas during day (6am to 9pm) and night (9pm to 6am) times; limit sounds (ranging from 85 to 100 decibel) from the silencer pipes of mechanized vehicles and boats. It prohibits to: exceed the permitted sound limits, for events like wedding, sports, fairs, social, cultural, political nature in the open or semi-open spaces, over 5 hours and beyond 10pm, unless relaxed by authorities (except silent areas); use vehicle horns making excessive sounds and prohibited horns in silent areas²⁷. However, Rule 12 allows making excessive sounds with instruments (except silent areas) for national, local or statutory

²⁶ BBS. 'Bangladesh Working Successfully to Protect Ozone Layer: Shahab', (News Agency of Bangladesh, 18 September 2021) < https://www.bssnews.net/news/18019> accessed 28 January 2022.

²⁷ Noise Pollution (Control) Rules 2006, rr 4-9, schdl. 1-4.

body's election, from the date of declaring the election schedule till 48 hours prior to the election date, following the directions of the Election Commission or other relevant authorities.

In picnic venues, the use of instruments creating excessive noise is permitted from 9am to 5pm; but not permitted while going to or returning from picnic venues, during prayer time, in unauthorized picnic spots, or even in the designated picnic spot (i.e. spots situated at least 1km beyond a residential area) if the noise may impede the breeding ground of any wildlife²⁸. Rule 11 prohibits using stone crusher and mixture machines within 500 metres of the outskirt of a residential area and building construction machines, from 7pm to 7am, inside any residential area. In the silent area, the use of building construction machine (but not stone crusher and mixture machine) may be permitted for the duration, approved by the local authorities. It requires taking steps by: the owner/occupier of any confined place not to transmit the sound produced therein to its adjacent areas, or to cross the permitted sound limit; the factory/industry owner to prevent or reduce any injury caused to the workers/visitors by NP, created by an activity or machines of the industry. It directs to apply Sections 7, 8 and 10 of BECA for causing or possibility to cause injury through NP²⁹.

The non-application of this Rules is evident from daily life. The residents of metropolitan cities, big townships, especially school going children and elderly persons, are the worst sufferers of various types of NP such as shrill horns, heavy noises from building constructions, etc. The punishment, stated in Rule 18, is insignificant, rather incites creating NP, as no minimum punishment is mentioned; the maximum punishments are imprisonments ranging from one to six months or fines not exceeding Taka 10,000 or with both. Hence, its penal provisions need an amendment to get appropriate remedy. The necessity to change this Rules is imperative as the NP of Dhaka has elevated triple times from the permissible limit³⁰.

4.2.4 Medical Waste (Management and Processing) Rules 2008

This Rules regulates matters regarding the safe management and processing of medical wastes (MW) emanating from various medical service outlets in Bangladesh. It defines 'MW' as any solid, liquid, gaseous and radioactive

²⁸ ibid, r 10.

²⁹ ibid, rr 13-17.

^{30 , &#}x27;Dhaka's sound pollution triple to tolerable level' *The Daily Star* (Online, 29 April 2021) https://www.thedailystar.net/city/news/dhakas-sound-pollution-triple-tolerable-level-2085641, accessed 29 January 2022 .

substance which harms the environment through its emission, release or dumping from any activity of medical treatment, prevention, diagnosis, research and also wastes mentioned in Schedule 1; 'MW processing' means the collection, segregation, packaging, destruction, incineration, treatment, refine and disposal of MW; 'MW management' means the transportation, storage, record keeping, review, observation and supervision of MW³¹. Schedule 1 mentions 11 types of MW and different modes of treatment, refining, destruction, disposal mechanisms.

The divisional 'Authority' is to: issue, renew/cancel licences for MW management and processing; supervise the activities of and give directions to the licencee/occupier; collect and publicize information on MW pollution; submit an annual report to the MoEFCC, through DoE, on MW management activities³². The decision of the 'Appellate Authority' is final and binding; and a 'National Advisory Committee' advises the government to frame guidelines on MW management and processing³³.

The MW occupier must take approval from the appropriate Authority to: opt disposal method for pit method disposal, use the incinerator, having proper fume emission facilities; shred or puncture saline/urine/blood bags, pipes and other plastic products to stop their re-use. Rule 5 compels taking licence for i. segregation, packaging, storage, destruction and incineration, ii. collection and transportation, and iii. treatment, refining and disposal, unless done by the local government authorities (LGA); and a 'provisional licence' to assess one's competency. Rule 6 obliges MW occupier to take various steps to: not to cause any adverse impact on human health and environment; destroy and refine MW in non-infectious way, following the 'ideal standard', mentioned in Schedule 6; train his personnel to ensure their safety; notify steps for accident prevention and submit an annual report of the amount and types of MW to the Authority; keep records for at least three years; be liable, legally and financially, for ensuring environmentally sound management and processing of MW.

Rule 7 prohibits keeping MW beyond 48 hours or mixing with other wastes. It requires to: keep various MW at their production sites in 6 different colour coded covered plastic containers, projecting 10 different WHO approved labels of symbols, prior to their storage, transportation, treatment and destruction, following Schedule 3 and 4; transport MW in designated vehicles for treatment, in the covered and labelled containers showing additional information, as per

³¹ Medical Waste (Management and Processing) Rules, rr 2 (e), (f), (g).

³² ibid, r 3-4.

³³ ibid, rr 15-16.

Schedule 5; store in an isolated, earmarked and protected place/rooms, having sufficient air ventilation and water supply facilities, ensuring locking of the unused rooms and allowing restricted access; transport the refined/treated MW in due time and manner, as directed by the Authority; notify LGA about the safe disposal of treated or untreated hazardous MW, in the designated dumping place, before MW destruction and incineration.

Regarding MW treatment, refining and disposal, Rule 9 and 10 direct the occupier to: undertake activities within the time and the standard, mentioned in Schedule 6, using appropriate technology, personal protective equipment (PPE) and paying service charge; depict in easy Bangla, necessary information and instructions on MW containers; dispose of hazardous MW in non-infectious manner; assist the DoE personnel to perform his functions. The punishment, under Rule 11, is imprisonment for maximum two years or fine of maximum Taka 10,000 or with both. Rule 12 compels submitting a written report of DoE to file a case, which contradicts Section 15A and 17 of BECA. Hence its amendment, permitting direct access to court, is required to erase such contradiction in laws.

In practice, MW is often found dumped into common waste bins or in household waste disposal grounds and it poses a grave threat to human health of poor waste collectors while collecting for sale or re-use and spread infections into the environment³⁴. Managing massive volume of plastic MW is a threat to human health and natural ecosystem in the Covid-19 pandemic³⁵; currently the MW generates 6.8 times higher than pre-pandemic period³⁶. The strict implementation and monitoring of this Rules is imperative but also challenging. The divisional Authorities are not functional; the competency of the licencee and compliance of all safety mechanisms; designating dumping sites for MW are yet to be ensured through proper monitoring. However, no law utters any consequence of non-monitoring, rather immunity is given in disguise of 'good faith'.

4.2.5 Hazardous and Ship Breaking Wastes Management Rules 2011

Bangladesh has stepped into large scale industrialization and is generating harmful industrial wastes. This Rules regulates different types of hazardous substance

³⁴ Bahreen Khan, 'Managing the Medical Wastes in Bangladesh: Review of Current Legal Mechanisms', in Mizanur Rahman (ed.), '*Human Rights and Environment*' (ELCOP, December 2011) 97, 99.

³⁵ Muhmmad Mainuddin Patwary and ATM Zakir Hossain, *Covid-19 Impacts on Waste in Bangladesh* (Jagrata Jubo Sangha 2021) https://ipen.org/sites/default/files/documents/final_jjs_covid_waste_report_29_june_2021.pdf, accessed 26 January 2022.

³⁶ Uttama Barua and Dipita Hossain, 'A review of the medical waste management system at Covid-19 situation in Bangladesh', Journal of Material Cycles and Waste Management, 23, 2087-2100 (2021), https://doi.org/10.1007/s10163-021-01291-8, accessed 30 January 2022.

(HS), hazardous wastes (HW) and ship breaking (SB) wastes. It defines HW as a waste which, due to its natural, physical, chemical, reactive, toxic, flammable, explosive or corrosive characteristics, either individually or through contact with other HS or HW, may cause damage to human health or environment and include (i) wastes listed in Schedule 2 column 3; (ii) wastes, the ingredients of which are composed of one or more of the substances listed in Schedule 3, having a concentration level of either equal or above of the standard, mentioned in Schedule 3; (iii) wastes mentioned in List A or List B of Schedule 4 Part 1, exhibiting the HS characteristics, mentioned in Schedule 4 Part 2.

The National Technical Committee (NTC) is created to recommend on the overall management of HW including to: approve the import/export, transportation across the country; set the procedure to identify the HW characteristics; publish, disseminate and implement the guidelines to reduce HW production; identify HW processing, storage and disposal sites; issue public notice and conduct public hearing. A Management Cell is created to: collect and preserve all data and information on HW; prepare and submit an annual report to the NTC. This Rules obliges the DoE to³⁷: conduct inspections on safety assessment and on accident; submit an annual report on major accidents to the MoEFCC; review, verify the safety information report; issue an ECl, following ECR 1997.

The HW operator is required³⁸ to: preserve HW properly, train personnel and aware local people on accident prevention; keep records of use, manufacture, sale, supply and disposal; ensure availability of safety equipment; submit to the DoE: a preliminary safety report, an annual safety assessment report, a contingency plan, an annual report on HW production and disposal, notify any accident within 48 hours of occurrence and prepare a safety data sheet for DoE review. Rule 20 prohibits the producer/operator to: sell, transfer any non-ferrous metal waste, use oil or waste oil (mentioned in Schedule 13) to anyone who has no ECl for 120 days; gift, handover, transfer, sell HW oil (exceeding the limit mentioned in Schedule 14) without incinerating in the HW incinerator; possess HW oil without an ECl; store HW for more than 90 days of its production. The operator/producer, the recycler, re-refiner and incinerator operator of non-ferrous metal HW, waste oil (mentioned in Schedule 14) are compelled to submit annual reports and to follow environmentally sound technology or process while doing activities.

Regarding the import and export, Rule 14 mandates to: take ECl from the DoE, before the opening of Letter of Credit and the shipment of HS or DoE may

³⁷ Hazardous and Ship Breaking Management Rules 2011 [BD], r. 7, 10, 12, 15.

³⁸ ibid, rr 5-12, schdl. 5-9.

relax its conditions, if export requires for lack of necessary processing/refining facilities; keep the records, by the importer, of imported HS (following Schedule 9) for DoE review during collecting sample from the store, while transporting or in use. Rule 15 prohibits issuing ECl for import of: any HW into Bangladesh; any article consisting of HW ingredients (mentioned in Schedule10); any ship for breaking, enlisted as hazardous by the Green Peace; any ocean going ship, oil taker, fishing trawler for breaking, having no approval of its HS pre-cleaning completion. This Rules prohibits granting any import/export licence/permit of a HS, before getting the ECl; requires following the Basel Convention; compels the exporter to take return and where return is not possible, to destroy it at the cost of the importer/exporter, following all safety measures, if illegal movement of HS/HW is proved³⁹.

For managing the SB wastes, Rule 19 directs to: follow the ECR 1997, the DoE guidelines of SB; take ECl for the ship and the SB yard; submit a report, upon conducting a pre-assessment of ship containing HS amount and nature, by an impartial expert team; keep necessary records of safety information of HS (following Schedule 11), HW buying/selling and disposal; take precautionary measures for HW handling; provide necessary training and PPE to the personnel; submit a contingency plan to the DoE (following Schedule 12); aware local people about accident hazards; keep the records for at least three years from its final disposal date.

The Rules directs following the Bangladesh Labour Act 2006 to ensure the occupational health, safety, welfare and compensation for accident of the workers and the BECA for compensating environmental harms. The SB waste disposal directions of this Rules are seldom practiced and violations are frequently reported⁴⁰. This Rules covers some important aspects of HW management under the Basel Convention but is silent about the Stockholm Convention on persistent organic pollutants (POPs). So, it requires an amendment to include provisions of POPs Convention, especially the timelines to ban and phase-out HW. Its complete application depends on the regular monitoring and taking stringent actions against the violators. This Rules should impose a strict liability upon the HW operators and SB yard owners for causing massive harm to the ecosystem. Besides, The Bangladesh Ship Recycling Act 2018 and the Ship Breaking and Recycling Rules 2011 also regulate SB activities but these are not officially recognized as 'environmental laws'.

³⁹ ibid, rr 16-18.

⁴⁰ Human Rights at Sea. 'Bangladesh Supreme Court Denounces Illegalities and Lack of Transparency in Shipbreaking Sector' (*Press Release*, 19 November 2019) https://www.humanrightsatsea.org/bangladesh-supreme-court-denounces-illegalities-and-lack-transparency-shipbreaking-sector accessed 08 February 2022.

4.2.6 Bangladesh Biosafety Rules 2012

This Rules urges taking safety measures to undertake activities associated with bio technology and genetic engineering. Four different committee run under this Rules namely, National Biosafety Committee, Biosafety Core Committee, Institutional Biosafety Committee, Field-level Biosafety Committee. Rule 3 allows the import, export, production, sale, purchase and commercial use and marketing of products made from genetically modified organisms (GMO), taking approvals from the MoEFCC, Ministry of Commerce, Ministry of Agriculture or other concerned authorities, complying the National Export and Import Policy, the Biosafety Guidelines 2007 and any other rules. Any research or project on GMO must follow the Biosafety Guidelines, unless it contradicts with any law; the package containing GM products must display the details and labelling of the GMO from which it derives⁴¹. However, GMO labelling is mostly not found in Bangladesh.

It requires to: seek assistance by the committee or the DoE from relevant organizations, for any accident or occurrence caused due to the use of GMO or GM products which may lead to harm to environment, human health or biodiversity; notify steps taken for mitigation by the concerned person, organization; impose fine for negligence⁴². Rule 8 directs the authorized person, organization to: prepare a contingency plan to deal any emergency situation, accident inside and outside of the GMO field trial area, consulting and engaging local people; notify and furnish relevant information to the committee to review the impacts and implementation of activities. As per Rule 9, the GMO or GMO products manufacturer, exporter, importer, dealer, supplier and retailer will be held liable for polluting the environment or damaging the ecosystem unless his direct connection disproves. Punishments under this Rules is imprisonment for maximum two years or maximum fine of Taka 10,000 or both; it allows administrative appeal and institutional revision; and it directs the DoE or the committee to submit a biannual report to the government⁴³.

Due to technological advancement, GM products are being produced but requires enough caution. The indiscriminate use of GMO, without maintaining all safety aspects, may cause serious and long-lasting impact on environment, ecosystem, biodiversity and human health. The debate encircling GMO safety is often highlighted⁴⁴; the use of glyphosate rich Roundup in agriculture is already

⁴¹ Bangladesh Biosafety Rules, rr 4-5.

⁴² ibid, rr 6-7.

⁴³ ibid, rr 10-13.

⁴⁴ Marina Qutab, 'How do GMOs impact people and the environment-and do they produce more food?' https://www.onegreenplanet.org/environment/how-do-gmos-impact-people-and-the-

challenged through a PIL⁴⁵. Therefore, the rigorous application of this Rules is required, however, ensuring its intensive monitoring remains as a big challenge.

4.2.7 Ecologically Critical Area (ECA) Management Rules 2016

This Rules creates six different committee (local to national) to ensure ecosystem restoration of ECA⁴⁶. Before recommending to declare an ECA, Rule 4 requires the National Committee (NC) to consider various factors including, the current situation and reasons of degradation of nature, biodiversity, forest, wetland, wildlife habitats, mangrove, protected areas and coasts of that specific area; potential threats to and remedial approach towards native and migratory species; other existing conditions, if declared for that area by other law; livelihood, religious and social culture of local people; any establishment, monument or site of cultural, historical or archaeological importance, etc. The NC may: recommend an alternative livelihood plan for the ECA dependant people; supervise the implementation of ECA development plan.

It requires the DoE⁴⁷ to: evaluate village conservation group (VCG)'s achievement in taking, implementing schemes/projects and maintaining infrastructures or facilities; prepare an annual list of VCG (contributed significantly) to give incentives; fix the prohibited activities inside the ECA, considering and assessing the factors or the damage caused to environment and ecosystem; approve changing the nature of ECA, if necessitates; adopt a guideline, consulting all relevant ministries, to manage any 'Sairat Mohal' inside the ECA; develop a site specific Development Plan for the ECA; allow public-private management, assessment, investigation, survey or research by any private individual, paying fees; submit an annual evaluation report and an ecological report in every five years of the ECA. Rule 27 provides punishments of maximum imprisonment of two years or maximum fine of Taka 200,000 or both.

The Government has declared 13 ECAs till date and listed 9 prohibited activities. However, the application of this Rules is not at all satisfactory, for example the Buriganga River is in a moribund situation, the St. Martin Island, country's only coral island is engulfed with severe ecological degradation by indiscriminate tourism activities. Numerous PILs have been filed to protect ECAs⁴⁸.

environment/> accessed 01 February 2022.

⁴⁵ Bangladesh Environmental Lawyers Association and Others v. Bangladesh and Others, Writ Petition 14614 of 2019.

⁴⁶ Ecologically Critical Area Management Rules 2016, rr 4, 6, 8, 9, 12-13.

⁴⁷ ibid, rr 15-22, 25-28.

⁴⁸ See, for example, Writ Petitions #10703 of 2011; #3676 of 2010; #3503 of 2009; #6848 of 2009.

Hence, its strict enforcement and monitoring by the committee and the DoE must be done to notice palpable changes for restoring sound ecosystem.

4.3 Environment Court (EC) Act 2010

This Act is enacted to ensure speedy justice, through establishing three types of environment courts, to enforce the 'environmental law' as defined and recognized in Section 2(c), namely, this EC Act, BECA, any Rules made under EC Act or BECA, any other law and rules as framed by the government through gazette notification to fulfill the purpose of this Act. So, only the ten laws which are discussed under current broad heading of this research article are recognized as 'environmental laws', providing a very narrow definition, leaving many other pertinent laws to get such official recognition including, the Forest Act 1927, Protection and Conservation of Fish Act 1950, Open Space Act 2000, Bangladesh Wildlife Act 2012, Bangladesh Water Act 2013, National Commission for River Protection Act 2013, Bangladesh Biodiversity Act 2017, Bangladesh Ship Breaking Processing Act 2018. Therefore, it is absolutely crucial to declare a bulk of laws as 'environmental law' officially to come within the ambit of EC Act.

The special magistrate court (SMC) entertains only those offences under an 'environmental law' for which maximum punishment is fine of Taka 5,000,00 or imprisonment of 5 years or both, upon filing a case before it or filing an *ejahar* (First Information Report) to the police station, following the Criminal Procedure Code (CrPC) 1898; besides administering a mobile court by executive magistrate⁴⁹. The EC addresses both the environmental offences and the compensation claim for any environmental damage under an 'environmental law', following CrPC and the Code of Civil Procedure (CPC); it can inspect the site of offence before passing an order⁵⁰.

These courts: get 180 days usually for case disposal, which may extend for another 90 to 180 days; may order to spend the fine to incur the costs of the case or to pay compensation to the victim; may punish the offender with maximum imprisonment of 5 years or fine of Taka 500,000, for violating court's direction, counting it as a separate offence; may dispose up cases through compromise, for the first time offence violating Sections 4(2&3) and 5(4) of BECA, upon depositing an amount of minimum Taka 50,000 and submitting a compliance report or giving an undertaking to the DoE of no future committing⁵¹. The environment appellate

⁴⁹ Environment Court Act 2010, s. 5-6, 9, 12(11).

⁵⁰ ibid, ss 4, 7, 14, 17.

⁵¹ ibid, ss 8, 10, 14-15, 18.

court (EAC) deals with appeals and revisions made before it⁵² within 30 days of the date of pronouncing the judgment by the SMC or the EC. These courts should have authority to impose any rigorous punishment to the corporate offenders for causing environmental degradation, treating as their strict liability. The EC Act bars direct access to these courts, requires filing cases through the written report of inspectors which clearly contradicts BECA⁵³.

This Act aims to provide speedy justice, however, allows around 275 days for case disposal. The responsibilities of these courts are additional to their usual responsibilities as a civil or a criminal court, which delay in getting environmental justice. Like the National Green Tribunals of India, these courts should be entrusted with exclusive responsibilities to ensure speedy remedy. These courts should be authorized following any procedure, besides CPC and CrPC, to step out of 'window-dressing approach' and allowing 'wiggle-room' to ensure prompt and efficacious justice⁵⁴. Moreover, they have little or no expertise in dealing with such technical issues, which a specialized court requires. The law is silent to coopt technical experts as members or to make a panel of judges, comprising of environmental/technical experts to ensure efficacious remedy.

These courts must be allowed with epistolary jurisdiction, taking *suo moto* cases to actualize environmental justice, besides amending the law to allow direct access to justice; should recognize the peremptory norms of international law, accommodating environmental principles⁵⁵. Considering its complexity to apply, the DoE mostly imposes fines through mobile court instead of filing cases in these courts due to the bureaucratic procedural formalities; all have resulted to paucity of cases comparing to the occurrences of environmental offences⁵⁶. Therefore, these anomalies and gaps in the EC Act need an urgent amendment to make these courts functional.

4.4 Brick Manufacturing and Brick Kilns Establishment (Control) Act (BMBKEA) 2013

With the rapid urbanization and industrialization in Bangladesh, the brick demand

⁵² ibid, ss 19-20.

⁵³ ibid, rr 6(3), 7(4), 12.

Md. Ahsan Habib, 'Reflections on environmental adjudication regime of Bangladesh', BDLD 12 June 2015, https://bdlawdigest.org/bangladesh-environment-court-act-2010.html accessed on 07 February 2022.

⁵⁵ ibid.

Masrur Salekin, 'Restricted access to environmental justice' *The Business Standard* (Supplement, Online 27 January 2022) https://www.tbsnews.net/supplement/restricted-access-environmental-justice-363046 accessed 03 February 2022.

booms sharp. BMBKEA is enacted to stop the traditional brick burning methods as they pollute environment and damage ecosystem and biodiversity. It compels the brick kilns (BK) to obtain the ECl from the DoE and a licence (for three years) from the District Commissioner, upon recommended by the investigation committee⁵⁷; licence is not required to manufacture blocks (not using sand, cement, fly ash or soil and not through burning). It directs⁵⁸ to: manufacture bricks in the BK as designated by this law, having modern technology to reduce air pollution and are energy efficient; fix the numbers of BK of a particular area; manufacture hollow bricks and blocks of certain amount, as an alternative of bricks; use imported coals of certain standard (not exceeding the amount of ash, mercury, Sulphur, etc.); use soils of any derelict pond, lake and abandoned land, taking due approval; release the liquid and gaseous wastes from BK, following the ECR 1997; suspend/cancel the licence, if violates its conditions or commits an offence under BMBKEA or founds harmful to environment or human health; inspect any BK without notice to assess, examine, verify records, or to collect samples.

BMBKEA prohibits⁵⁹ to: use the soil of agricultural land or hill as raw material of brick; use of firewood in BK; establish BK inside and around the prohibited areas (i.e. any residential, reserved, commercial, city corporation, municipal, *upazilla sadars* areas, agricultural land, ECA, government or private owned forests, sanctuaries, wetlands and degraded air shed areas), any place not designated for BK by the hill district authority, any special establishment or structure, railroad, educational or research institution, hospital or clinic, at a distance ranging from half to two kilometer of that area/structure, after the enforcement of BMBKEA; issue ECl and licences to establish BK or to continue operation, inside the prohibited areas; export bricks, violating the Export Policy Order of Bangladesh.

The Act provides no minimum punishment; the maximum punishment is imprisonment for 1 to 5 years or fine of Taka 100,000 to 2,000,000 or with both⁶⁰. The offences are non-cognizable and bailable, in nature; can be dealt by the mobile court and by the EC, following the CrPC and the Information and Communication Technology Act, 2006, if necessary⁶¹. The law was amended last in 2019 for its better application, however, the situation has not changed significantly. The prime cause of air pollution of Bangladesh results from illegal

⁵⁷ Brick Manufacturing and Brick Kiln Establishment (Control) Act 2013, ss 4, 9.

⁵⁸ ibid, ss 4A, 5(2) (3), 5A, 7, 7A, 11, 13.

⁵⁹ ibid, ss 5(1), 6, 8, 8A.

⁶⁰ ibid, ss 14-18.

⁶¹ ibid, ss 19, 21, 23.

BK operations; even the direction of the high court to shut down such BK is not following⁶². The local influential people are mainly the owners of traditional BK, operating those disregarding legal provisions. Sometimes these vested interest groups 'manage', 'manipulate' or 'intimidate' the inspectors, who usually monitor the implementation of BMBKEA. Moreover, allocating suitable places for BK, as per this law, is tough because of the close proximity of each prohibited area. The law misses to describe any procedure to take approval from the appropriate authority; define the term appropriate authority; and to mention the specific standard of coal. BMBKEA should allow giving incentives to BK owners who maintain the international standard and to persons who help identify the offenders. A rules, under BMBKEA, with necessary details is needed to ensure its proper application and to curb air pollution through the traditional BK.

5. Efficacy of 'Core Environmental Laws' of Bangladesh

In the previous heading, the major gaps in the 'core environmental laws' have been depicted while explicating the vital provisions of these laws. In this head, a short view as to the efficacy of these 'core environmental laws' is discussed.

To assess the efficacy of a law, it is required to check the quality of the law, its comprehensiveness and the ability to achieve its intended benefits. For that, some factors need to be perused, including the text's structure and content, its timely implement ability using the legal and administrative system, at what rate its purpose is being served against the violators and most importantly, whether it brings intended change in the society or delivers real-life results⁶³.

All of these 'core environmental laws' though have specific objectives to fulfill, however, their efficacy is somewhat debatable. To keep in mind that these laws have been enacted to accommodate the basic provisions of MEAs of which Bangladesh is a party. But few significant requirements under different MEAs have yet to reflect; for example, the HW phase out mechanism under the Stockholm Convention 2001 is missing in the HW Rules 2011, no Rules on EIA is framed yet, and the established environmental general principles are not incorporated in their texts.

It is not meant that these laws are completely ineffective, rather found less

⁶² 'Operation of illegal brick kilns must stop' *New Age* (Opinion, Online, 04 February 2022) https://www.newagebd.net/article/161772/operation-of-illegal-brick-kilns-must-stop accessed 5 February 2022.

Maria Mousmouti, 'The 'effectiveness' test as a tool for law reform',(2014) (Special Issue) 2(1) *IALS Student Law Review* 4-8 https://sas-space.sas.ac.uk/5752/1/2116-3099-1-SM.pdf accessed 17 May 2022.

efficacious due to their textual gaps and/or for want of necessary capacity of the implementing institutions to initiate and monitor actions, consistently. It is worth mentioning that Article 18A of the Constitution of the Peoples republic of Bangladesh 1972 obliges the State to conserve and develop environment, to ensure the protection and safety of natural resources, biodiversity, wetland, forest and wildlife for the benefit of present and future citizens. Moreover, the 'right to life' as enshrined in Article 31 and 32 of the Bangladesh Constitution through the judicial interpretation now recognized as 'right to healthy environment'⁶⁴. Unfortunately, such recognition has not been expressly reflected in any of these laws, which otherwise proves less emphasize on securing people's right, rather leaves a scope for the implementing agencies to use it as a plea.

The textual gaps of these laws, in other way, corroborate their less effectiveness, as they hinder the smooth implementation process and achieving expected results. Sometimes, using such gaps, the vested interest groups do and continue malpractice. The punishments under these laws are improper for the corporate and repetitive violators; some laws have no minimum punishments, for example, the NP Rules, leading to the recurrence of offences. The textual contradictions in these laws are making them less useful; for example, BECA allows direct access to court, whereas none of its Rules and the EC Act endorse it. Moreover, the EC Act provides a narrow definition of 'environmental law'; courts have no exclusive jurisdiction to entertain environmental cases, resulting to pile up of cases and delaying the justice; its intention to provide speedy justice is compromised as it permits around 275 days for case disposal, forcing the DoE towards mobile courts. The implementation of BMBKEA is frustrating; the offences are non-cognizable and bailable, resulting repetitive violation and placing Bangladesh as one of the top air polluter countries in the world.

Besides, the institutional gaps, in terms of resource allocation, weaker enforcement and monitoring mechanisms, backed by the relaxed good governance, in many cases, jeopardize accomplishing the goals of these laws. With the continued violation of laws, without quick and appropriate intervention or with biased application, will lead to deteriorate the state of environmental components, deprive people from 'right to environment' and sustainable living standards. Consequently, such deprivation may rise social unrest.

Therefore, it can be said that these 'core environmental laws' need intensive perusal to enhance their efficacy along with building necessary capacity of the implementing institutions. The legal system in the lower judiciary of Bangladesh

⁶⁴ Dr. Mohiuddin Farooque v. Bangladesh and Others, 48 DLR (HCD), 438.

is complex and time consuming, which sometimes discourages victims to resort it. Alternately, writ petition in the form of public interest litigation (PIL) is being filed in the High Court Division, as a better option to get quick remedy than filing cases before the lower courts⁶⁵. However, without their timely and complete enforcement, the benefits of the judgments, would remain far to accomplish, rather illusive.

6. Findings and Recommendations

In the previous headings, the salient provisions of 10 officially recognized 'core environmental laws', are described, their implementation gaps are analyzed and their efficacy is assessed. Based on that, the major study findings along with recommendations are mentioned as follows:

- **a.** The state of environment of Bangladesh is diminishing at an alarming rate as evidenced from the latest EPI 2021. Bangladesh has topped the 'polluted country list' for the last few years. Bangladesh has few inbuilt limitations including, little land space, huge human population and extreme dependence on natural resources. In such backdrop, the impact of global CC and the aftershock of Covid-19 may further aggravate country's environmental situation and delay in achieving the SDG targets. So, an effective global/regional cooperation can help reduce and eliminate the external factors, impacting the internal ones adversely.
- **b.** The environmental issues are manifold, posing different challenges for all sector specific developments in Bangladesh. The most common and persistent environmental issues include the pollution of air, water and soil; encroachment of public properties; ecosystem degradation; resource depletion; improper waste management, biodiversity loss, etc. To graduate as an upper middle income country, Bangladesh has taken numerous developmental projects, mostly bypassing the environmental considerations. Hence, prioritizing and integrating 'environment conservation' in developmental agendas are vital. The current 'stop-gap approach' in environmental management needs replacement by concrete, comprehensive sustainable governance mechanism to realize 'environmental democracy'.
- **c.** Bangladesh is committed to reflect the MEAs obligations into its national laws, necessitating to identify MEAs which are yet to be accommodated in the domestic laws. Around 200 national legal instruments cover, either explicitly or implicitly, the environmental management and governance. Of these, only 10 core legal instruments are so far officially recognized as 'environmental laws' through

⁶⁵ Abdullah Al Faruque, *Environmental Law: Global and Bangladesh Context* (1st edn, New Warsi Book Corporation 2017) 223.

gazette notification. Thus, it is imperative to declare officially more pertinent national laws as 'environmental laws' and to enact laws to control high-impacting issues, like air pollution and plastic pollution, disposal of e-waste and several chemical wastes.

- **d.** The MoEFCC and the DoE are primarily responsible to protect the environment of Bangladesh. Despite its enormous statutory power, the DoE has significant lacking in logistics, manpower, upgraded lab facilities, own fund source. It depends mostly on foreign funding, focuses mainly on 'project oriented approach' than 'program oriented approach' and depends heavily on mobile courts to enforce 'environmental laws'. Institutional malpractice is a great concern. Several governmental institutions work for environmental management; it is tough to ensure smooth coordination among them and to establish institutional good governance. Therefore, a systematic plan of action with proper chain of command is required to ensure better institutional performance and 'one-stop environmental service' should be considered.
- e. Neither the Constitution of Bangladesh nor the domestic laws has explicitly recognized the notion 'right to environment'. 'Environment conservation' is recognized in the Constitution as a fundamental principle of state policy and 'right to healthy environment' has been recognized by the judicial interpretation of 'right to life'. The superior courts give redresses to environmental anomalies, through the PILs as the lower court system is time consuming and complex. So, 'right to healthy environment' should be recognized directly both in the Constitution as a fundamental right and also in the 'core environmental laws'. The environmental general principles and the newly globally defined term 'ecocide' should also be reflected in these laws to enhance their efficacy.
- **f.** BECA is the umbrella law, empowering the DoE for environment conservation. This law needs proper amendment to cater the needs of the DoE. More preventive provisions should be inserted; some provisions need clarification; more rules are required to adopt for BECA's proper application. The punishments mentioned in BECA should be increased and be different for punishing the natural offender and the body corporate.
- **g.** Altogether seven Rules have been made till date, under BECA, covering different aspects of 'environment conservation'. The ECR sets the environmental standards of air, water and odor; fixes the emission limits of various types of solid, liquid and gaseous wastes; provides details of ECl taking procedure for four different colour groups activities. But it needs an amendment to add more activities under those four groups and to shift some activities from Orange-B to Red. The ODS Rules provides different timelines to manufacture, use and import/

export of ODS; has contradictory punishment provisions with BECA, requiring an amendment for clarification. The MW Rules obliges to identify, segregate various types of MW and their disposal. It bars on direct access to justice, contradicting the BECA provision which must be amended. The HW Rules describes the liabilities of the operator/user of different HW, focusing the Basel Convention; requirements under the Stockholm Convention need to be covered in this Rules. The Biosafety Rules empowers different committee to oversee the research on GM products; compels obtaining import approval and putting GMO labels on packages.

However, common people are ignorant about GMO, requiring this Rules' wide awareness and strict monitoring. The ECA Rules directs various committee to prepare and implement ECA restoration plan and site-specific development plan; but its relaxed implementation evidences from the poor state of the declared ECAs, the Buriganga and Sitalakkhya Rivers, for example. So, its stringent compliance is the only remedy for which ensuring institutional good governance is crucial. The NP Rules provides lists of prohibited activities that cause sounds inside and around various zones; specifies the permitted sound limits and timing. Its enforcement is mostly ignored due to lack of monitoring, plus it provides petty punishment with no minimum limit; hence, it needs an amendment.

- **h.** The EC Act narrowly defines the term 'environmental law', excluding bulk of significant laws from its ambit; the courts are entrusted with responsibilities as additional to their regular tasks, in contrast with providing speedy justice as its objective. The Act negates any direct access to courts, contradicting with BECA provision. Hence, necessary reform is vital to make this law functional.
- **i.** The provisions of the BMBKEA regarding the placement of BK are practically tough to implement, as the country is densely populated with small land size. The local influential people and political leaders apply undue influence to issue, suspend and cancel licences, in most cases. Therefore, this law needs an amendment to provide incentives to people for identifying crimes and to ensure strict enforcement.
- **j.** Most of these 'core environmental laws' have no minimum punishments and nominal fine is only given rather imposing imprisonment; the offences generally bailable; the terms 'actions taken in good faith' in the laws otherwise incite doing or allowing malpractice. Relax monitoring accelerates committing environmental harms and hinders realizing 'right to environment'. Consequences of the duty bearer's omission or negligence is missing in these laws. Hence, all the gaps in these laws, as discussed in previous chapters, must be addressed to ensure sound environmental management and to make laws more effective.

7. Conclusion

The natural environment of Bangladesh is in an abysmal condition as a consequence of multiple factors including, resource depletion, encroachment of public property, ecosystem onslaught, plethora of pollution, unregulated developmental activities and the impact of global CC. Bangladesh has enacted many laws and created plenty governmental organizations to establish sound environmental governance. However, there are substantial gaps in these laws, hindering their effective implementation process. Being the prime duty bearers, the MoEFCC and the DoE are loaded with challenges to maintain a minimum level of environmental standards. Proper inter-governmental coordination, public participation, integrating environmental concerns into respective policies and action agendas are necessary to ensure 'environmental democracy'. As 'environment conservation' is a cross-sectoral matter, all pertinent ministries and agencies necessitate capacity development to apply their far sight in accomplishing the SDGs, to ensure 'right to environment' and to practice environmental good governance.

Therefore, Bangladesh needs to enact and harmonize necessary national policy instruments at par with the MEAs, considering the 'anthropocentric' and 'eco-centric' approaches. A thorough review of the existing national legal and administrative frameworks is crucial to bridge the implementation gaps in the environmental regulatory regime. The 'core environmental laws', as recognized through gazette notifications, need revision to equip the concerned institutions effectively in performing their statutory functions. Other significant laws which are closely associated with various environmental aspects, especially with natural resources exploitation and ecosystem service, should be officially recognized as 'environmental laws'. The development of comprehensive legal tools, their timely and neutral implementation will help establish environmental rights and promote sustainable living conditions in Bangladesh.