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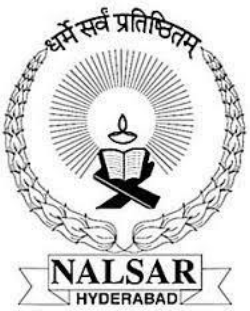

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EDITORIAL

The Editorial Board of Environmental Law and Practice Review (ELPR) takes immense pleasure in bringing forth Volume 9. Committed to its vision and mission, the present volume seeks to encourage interdisciplinary discourse and scholarship in the legal areas that interacts with environmental protection and climate change. As we navigate the complexities of the 21st century, the urgency of environmental protection and climate change has never been more apparent. We stand at a critical juncture, where the choices we make today will shape the world for generations to come. It is imperative that we not only enhance existing laws but also foster interdisciplinary collaborations for scholarly discourse by encouraging contributions that explores new legal frameworks, case studies of successful initiatives, and critiques of current practices. By fostering dialogue and sharing knowledge, we can inspire actionable solutions that resonates across borders and disciplines.

In the first contribution, author Philippe Cullet in the article '*Faecal Sludge and Septage Management- Rights and Regulatory Dimensions'* addresses the necessity of unitary law for Faecal Sludge and Septage Management, thereby pushing for a robust, comprehensive sanitation regulation in India. Much sidelined, FSSM is the central mechanism that would help achieve the overall sanitation targets. The exposition delves into the existing FSSM regulatory framework, the rights dimensions of FSSM, decentralization in the sanitation sector, its interconnections with other relevant laws, the regulatory and administrative gaps therein.

Author Thangzakhup Tombing in '*Tribal Justice and Burning of Deadwood: The Manipur Ethic Conundrum'* provides the readership a detailed picture of the complex issues around ancestral ownership of land and traditional forest rights associated ethnic clashes between Meitei and Kuki-Zomi communities in Manipur as a repercussion of the increasing population, scarcity of access to natural resources related insecurity, the historical land administration , further aggravated by the land bills under special constitutional provision intended to protect and preserve tribal lands, thus bringing forth relevant questions of inclusivity and uniformity, local participation in decision making, and traditional rights in natural resources management. The article highlights the factors of urbanisation, population growth, undemocratic sanctions of developmental projects and policies, administrative failures in understanding of the indigenous rights/statuses backed by unresolved historical differences ultimately links to the ineffectiveness in environmental governance and protection which needs immediate attention.

Author Sujit Koonan & Vishakha Singh in '*Environmental Law In India: Towards Balancing of Interests or a Neoliberal Turn?*' gives an overview of the development and the subsequent transformation of the Indian environmental law under the neo-liberal paradigm that regulates environment through the free-market agenda for economic growth sidelining the overall interconnected objective of environmental protection and justice. The article also highlights the role of state in eimizing the corporate (and convenient) way of things concerning environment, thereby diminishing the force of the law

originally intended to protect the interests of the affected marginalized groups directly dependent on natural resources. In its extensions, are the tangled issues that concern the judicial decisions offering relaxation to the non-compliant industries towards the cause of the social justice of the workers in 'appropriate cases' and the executive agencies through its office memorandums allowing ex post facto clearances for 'ease of doing business'. The article allows the readers an opportunity to rethink on the diluted environmental law and calls for wholistic and protective approach towards environmental sustainability.

Author Santosh Kumar in '*Environment at ICC: Problems and Perspectives'* explores the possibility of green jurisprudence within the evolving aspects of international Criminal Law and jurisprudence that potentially places accountability for environmental crimes under the International Criminal Court Statute. The Author discusses the need for the prevalence of environmental protection at all times, during conflicts as well as peace, for which legal obligations must be ensured towards the international community irrespective of any immunity or national identities of perpetrator or victims. Through the principles recognized in the international law, the exposition argues that restrictive interpretative approach would hinder the evolutionary growth of the principles of international responsibility and liability towards addressing environmental crimes.

Author C. Anunanda in '*Navigating Global Climate Law: Examining the Scope, Extent, and Legal Implications of the Upcoming ICJ's Advisory Opinion on States' Obligations Towards Climate Change'* examines the various possibilities in which ICJ's advisory opinion on state's

obligations towards addressing the effects of climate change could be taken by the State Parties. In the light of the slow-paced nature of the climate negotiations with state centric pledge system after Paris Agreement, the paper articulates that the advisory opinion by world court would help accelerate negotiations, encourage ambitious Nationally Determined Contributions by providing broad directions to the State Parties towards their climate obligations.

Keeping the state obligations towards climate change at the background, India's commitment to reduce emissions intensity of its GDP by 45% by 2030, Authors Kshitij Malhotra and Kunal Acharya in '*Rethinking India's Nuclear Energy Law in Light of Evolving Needs*' analyses the potentiality of private partnerships in nuclear energy investment and research towards achieving Net Zero Carbon emissions through India's governing laws. Authors argue that the over-arching powers of the Central Government that concerns the regulation, operational responsibilities, liabilities, patent, disclosure of information, dispute resolution of nuclear energy would pose challenges on the private entities to invest in the Indian market. Keeping the national security and nuclear safeguard issues into consideration, the exposition recommends certain flexibility in the regulatory laws to ensure fair and balanced approach towards innovation and public interest towards exploring nuclear energy as a lucrative source of energy for climate action.

Posing the legal lacuna within and around the question whether territorial obligations only allow for territorial breach, author Sean Shun Ming Yau in '*Complicity for Wrongful Greenhouse Gas Emissions as a*

Form of Extraterritorial State Responsibility for Climate Change' addresses the pertinent issue on extraterritoriality and state responsibility under International Climate Law. The author explores other international treaties in tandem with the existing recognized principles under international law that help construct and extends beyond the territoriality clause to move towards a broader approach that seeks to achieve climate justice for the wronged state.

Author Ayaan Vali and Ishaan Pandey in '*Integrating Market-based Instruments and Environmental Regulations for Sustainable Corporate Practices'* analyses the role of carbon pricing in promoting business sustainability, while addressing its effects on native rights and environmental justice. While carbon pricing can cut emissions and foster corporate sustainability, the authors argue it must be part of a broader strategy that includes regulatory oversight, protection of indigenous rights, and environmental justice to achieve effective, equitable outcomes.

The Board of Editors would like to thank the Patrons, Advisory Board and the Authors who contributed and the peer reviewers Dr. Anju Pandey, Ms. Arkaja Singh, Dr. Arup Poddar, Dr. Fazil Jamal, Dr. Gayatri Naik, Dr. Jiya Mathrani, Dr. Neeraj Gupta, Dr. Nivedita Chaudhary, Dr. Parna Mukherjee, Dr. Pasumarti Srinivas Subbarao, Dr. Rohan Cherian Thomas, Dr. Sanu Paul, Dr. Shachi Singh for their time and invaluable support towards the publication of this volume.

FAECAL SLUDGE AND SEPTAGE MANAGEMENT: RIGHTS AND REGULATORY DIMENSIONS

*Philippe Cullet**

Abstract

The focus on sanitation and toilet building has not been matched with the same amount of attention given to the resulting waste, or septage, produced. In a context where on-site sanitation is prevalent throughout the country, Faecal Sludge and Septage Management (FSSM) has been given increasing attention. This is due to the fact that improper disposal of septage has the potential to reverse the gains in terms of public health and environmental protection achieved through toilet construction. The regulatory framework concerning FSSM is fragmentary and made of sometimes unconnected elements. This article argues that further thinking is needed to address the social, environmental and work-related dimensions of FSSM.

Keywords: Faecal Sludge, Septage Management, Sanitation, Faecal Sludge and Septage Management (FSSM), Sanitation Workers

1. INTRODUCTION[1]

Sanitation can be understood as comprising 'personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and

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1 This paper was part of the UKRI (UK Research and Innovation) Collective Fund: Global Challenges Research Fund (GCRF) project 'Towards Brown Gold: Reimagining off-grid sanitation in rapidly urbanising areas in Asia and Africa' (Project code: ES/T008113/1).

waste water disposal'.[2] It has been an area of interest for policymakers at least since the colonial period.[3] Yet, the focus of sanitation policies has been put mostly on some specific aspects of sanitation. Particular emphasis has been put on toilets, as reflected in the Centrally Sponsored Rural Sanitation Programme and later policies and schemes,[4] and on the particular issue of manual scavenging.

With regard to access to toilets, special emphasis has been put on networked sanitation in urban areas for decades but coverage remains limited.[5] In rural areas, access to toilets had progressed over time but remained limited by 2014. A major push was initiated with the launch of the Swachh Bharat Mission (SBM) in 2014. The implementation of various sanitation interventions led to the declaration of the end of open defecation in 2019.[6] SBM thus, has led to an exponential increase in the number of toilets in the country. At the same time, this may require a further push as a number of factors call for additional toilet building and behaviour change requires in

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2 Guidelines, Nirmal Bharat Abhiyan, 2012, s 1.2.

3 Susan E Chaplin, *The Politics of Sanitation in India: Cities, Services and the State* (Orient Longman 2012) 40.

4 Centrally Sponsored Rural Sanitation Programme, General Guidelines for Implementation, 1993, s 2.1; Tanvi Bhatkal, Lyla Mehta & Roshni Sumitra, 'Neglected second and third generation challenges of urban sanitation: A review of the marginality and exclusion dimensions of safely managed sanitation' 3/6 *PLOS Water* e0000252 (2024) <https://doi.org/10.1371/journal.pwat.0000252>.

5 Around 40 percent of the urban population had access to a sewerage network by 2021. Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021, p. 53.

6 Mahesh Langa, 'Prime Minister Modi declares country open defecation-free', *The Hindu* 2 October 2019 <https://www.thehindu.com/news/national/india-open-defecation-free-says-narendra-modi/article29576776.ece>.

many places a longer term strategy.[7]

In the first phase of SBM, the focus was overwhelmingly on eradicating open defecation.[8] This has now evolved in SBM 2.0, with the concept of Open Defecation Free Plus (ODF Plus) that puts the focus on 'solid and liquid management activities'.[9] This new emphasis reflects two distinct gaps in the previous interventions. Firstly, there are crores of toilets that are not connected to a sewerage network. These qualify as on-site sanitation systems, which produce septage that needs to be disposed of at some point. Secondly, the lack of sufficient septage treatment options potentially leads to a situation where the eradication of open defecation may lead in the longer term to creating new negative environmental and health impacts where septage is disposed of improperly.[10]

In this broader context, an emphasis on 'resource recovery and (re)use of shit and wastewater' is crucial.[11] Faecal Sludge and Septage Management (FSSM) is one such mechanism and can contribute to

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7 Pritam Ghosh & Sanjit Sarkar, 'Open Defecation in India – An Assessment of Swachh Bharat Mission (2015–16 to 2019–21)', 58/44 *Economic & Political Weekly* 15-20, 18 (2023); Ana Maria Munoz Boudet et al., Lifting the Lid: Process and Delivery of the Swachh Bharat Mission 21 (Gramin) (World Bank, 2023).

8 Swachh Bharat Mission (Grameen), Phase II Operational Guidelines, 2020, s 4.1

9 Ministry of Urban Development, Guidelines for Swachh Bharat Mission, 2014, s 2.1.1; Ministry of Drinking Water and Sanitation, Guidelines for Swachh Bharat Mission (Gramin), 2014, 2.1.a.

10 A report highlights that a truckload of faecal sludge 'dumped indiscriminately is equivalent to 5000 open defecations'; See, D Kone et al., 'Helminth Eggs Inactivation Efficiency by Faecal Sludge Dewatering and Co-composting in Tropical Climates' 41(19) Water Research 4397 (2007).

11 Bhatkal, Mehta & Sumitra (n 3) 8.

achieve the broader environmental and health goals of SBM. Even in urban areas, this is more critical than issues surrounding networked sanitation in a context where almost 60 percent of urban India relies upon on-site sanitation systems.[12] In the case of Uttar Pradesh, it is, for instance, estimated that only 31 urban local bodies out of 762 have some form of sewer coverage.[13] In rural areas where there are essentially only unconnected toilets, the vast increase in toilet numbers over the past decades calls for a major push to ensure that septage is safely disposed of. This is increasingly widely recognised as a policy priority and is now at the centre of efforts 'to achieve the SDG target 6.2 of adequate and inclusive sanitation for all in a timebound manner.'[14]

At present, the regulatory framework for FSSM can be characterised as comprising three main dimensions. First, it is guided by existing laws, which have provided the framework for sanitation over decades, even though septage and sewage were not necessarily distinguished. Secondly, it is guided by a growing array of administrative directions and policies specifically geared towards FSSM. Thirdly, FSSM falls within the context of the fundamental right to sanitation, which theoretically functions as the apex framing for sanitation law and policy. In addition, it is also governed by the regulatory framework concerning the prohibition of manual scavenging.

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12 NITI Aayog, Faecal Sludge and Septage Management in Urban Areas Service & Business Models 2 (2021).

13 Centre for Science and Environment, Guidance Note on Operation & Maintenance (O&M) of Faecal Sludge & Septage Management (FSSM) Projects and Economics of Desludging in Uttar Pradesh 7 (2023).

14 NITI Aayog (n 11) 2.

Some aspects of FSSM are well articulated in this existing legal framework, while others are largely absent. The latter include, for instance, the rights dimensions, inequality and questions concerning manual scavenging. The problem is that there can be no real move forward with sanitation policy in the broader sense, and FSSM more specifically, unless the regulatory framework that informs it addresses issues arising through the multiple lenses that are relevant. This requires moving ahead of the emphasis on ending open defecation and access to (individual) toilets. In relation to community and public toilets, this includes, for instance, ensuring that resources get allocated to pay workers maintaining these facilities, without which they cannot be used.

This article starts by introducing the regulatory framework for FSSM, including the statutory and policy framework, examining some of the different elements taken up in various instruments. It then moves on to consider the rights dimensions of FSSM that are not covered in FSSM-specific regulatory instruments. These include the fundamental right to sanitation, the fundamental and statutory rights of manual scavengers and the rights of sanitation workers. The third section builds on this to highlight some of the main elements that need to be addressed to strengthen the FSSM law and policy. It focuses on some of the elements that are either missing or not sufficiently emphasised in the current regulatory framework. This includes the need to frame FSSM much more directly around issues of dignity and inequality to reflect the central role of socially marginalised communities in the sanitation sector. Further, the relatively strong

framework of rights needs to be better integrated, particularly in a context where duties of individuals are increasingly emphasised. Finally, the environment needs to be given much more importance.

2. LAWS AND POLICY INSTRUMENTS FOR FSSM

The regulation of sanitation focused for a long time mostly on issues around access to toilets and sanitation infrastructure centred around networked sanitation. The realisation that this does not address some of the main challenges arising in the context of improved access to toilets has led to a progressively more significant, but still limited emphasis on FSSM. The need for separate consideration arises from the fact that sewage (linked to networked sanitation) and septage (linked to on-site sanitation systems) need to be addressed separately and their treatment is also distinct.

FSSM can be defined as 'the process of safe collection, conveyance, treatment and disposal/ reuse of faecal sludge and septage from on-site sanitation systems such as pit latrines, septic tanks'.[15] It concerns the management of faecal waste that is not conveyed by a centralized sewerage system and may involve desludging of a septic tank, storage and transportation of the collected waste to a treatment facility and disposal or recycling/reuse of the treated waste.

In urban areas, FSSM constitutes a crucial part of a comprehensive urban sanitation policy, in part because a conventional sewerage system is not economically and technically viable in all urban

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15 Ministry of Jal Shakti, Toolkit for District Level Officials on Faecal Sludge Management, 2021, p. 37.

areas. Reasons include the high cost of laying the pipe network necessary for networked sanitation and the narrow lanes that characterise some localities. The importance of FSSM in practice needs to be reflected in law and policy, something that is yet to be effectively achieved.

At present, there is no unitary law for FSSM. According to the Constitution of India, sanitation and water are State subjects.[16] In other words, state governments are vested with the power to make laws on these subjects. However, there was no comprehensive FSSM law and policy framework in the states until recently. The Central Government also plays a key role in FSSM because sanitation interventions in urban areas are being undertaken often through programs and policies adopted at the national level.[17] Further, the Constitution of India promotes decentralization. According to the 74th Constitutional Amendment Act, 1992, responsibility for the planning and delivery of urban services, including sanitation, lies with urban local bodies under local municipal laws.

The framework within which FSSM is regulated is complex because it involves multi-level governance from local bodies to the Central Government and because FSSM has connections with various other sectors, such as in the environment. The rest of this section introduces the relevant legal framework, dividing it between statutory and policy instruments. This acts as a basic structuring factor in the

16 Constitution of India, Seventh Schedule, List II – State List, Entries 6 and 17.

17 eg Ministry of Housing and Urban Affairs, Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021.

sanitation sector where a lot of the content is found in administrative directions and allied policy frameworks rather than in legislation.[18]

2.1. Laws Guiding FSSM

Despite having regulatory competence over sanitation, no state has adopted a framework sanitation law. The measures that exist tend to be more specific. For instance, states have sought to give effect to the decentralisation mandate through certain specific measures. Regarding urban areas, most municipal acts contain a chapter dealing with water supply and sanitation, which makes all sanitation related tasks a responsibility of the concerned local bodies.[19] These laws tend to focus on the provision of infrastructure. This is the case, for instance, of the Bihar Municipal Act, 2007 that has little to say about sanitation for individuals but devotes a whole chapter to drainage and sewerage.[20] The Act recognises, for instance, that municipalities have a duty to construct and maintain drains and sewers.[21] With regard to treatment, storage, disinfection and disposal of sewage, the obligation is less stringent and the Act provides only that municipalities 'may' construct, operate, maintain, develop and manage works within or outside the municipal area.[22] The Act also provides that the municipality must levy a sewerage charge on the owners of premises for connection of such premises to sewerage mains.[23]

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18 For a broader discussion, see Philippe Cullet, 'The Right to Sanitation – Multiple Dimensions and Challenges', in Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 75 (New Delhi: Oxford University Press, 2019).

19 Eg. Himachal Pradesh Municipal Corporation Act, 1994, s 43(a) that concerns obligatory functions of the Corporation.

20 Bihar Municipal Act, 2007, ch XXIII.

21 ibid s 193.

22 ibid s 194.

23 ibid s 216.

Some of the measures found in these local laws are relevant to FSSM, which is not surprising since no city has universal sewerage coverage. At the same time, in a context where the ideal is understood to be water-based individual toilets connected to centralised sewerage systems,[24] there is little emphasis on alternatives. This bias in favour of water-based sanitation has remained in place despite increasing water scarcity and the cost of setting up these systems for different reasons. On the one hand, hiding and flushing human excreta has been understood for decades as most desirable by policy-makers around the world. On the other hand, in the case of India, water-based sanitation has also been opposed to dry latrines associated with the practice of manual scavenging.[25]

In the case of rural areas, most panchayat Acts assign certain duties to panchayats. Thus, in Haryana, gram panchayats have a duty to plan for rural sanitation. Under this broad head, the Act includes a variety of functions from the maintenance of 'general sanitation' to the cleaning up of drains, the construction and maintenance of public latrines, the maintenance of cremation and burial grounds as well as the management of washing and bathing *ghats*.[26] In certain cases, a responsibility to build toilets is included, as in the case of Karnataka where the panchayat is given a duty to build sanitary latrines for not less than ten percent of the households every year.[27] Panchayats can

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24 Shubhagato Dasgupta, Neha Agarwal & Anindita Mukherjee, 'Moving up the On-Site Sanitation ladder in urban India through better systems and standards', 280 *Journal of Environmental Management* 111656, at 1 (2021).

25 On manual scavenging, see section II.

26 Haryana Panchayati Raj Act, 1994, s 21.

27 Karnataka Panchayat Raj Act, 1993, s 58(1A) i.

also take health-related measures. They have the power to regulate the 'conditions of sanitation' to remove and prevent the spread of epidemics.[28] At the Block level, the *panchayat samiti* is tasked with the implementation of rural sanitation schemes, as well as carrying out environmental sanitation, health campaigns and educating the public.[29] In some states, rural sanitation is envisioned as having a link to water supply. Thus, in Uttar Pradesh, the *zila parishad* or *kshettra samiti* has the power to prohibit landowners from keeping toilets or drains within 50 feet from a source of drinking water for public use.[30]

Apart from these local laws, statutes like the Water (Prevention and Control of Pollution) Act, 1974 [Water Pollution Act] are relevant since they give powers to state pollution control boards to take appropriate action in respect of sewage/septage treatment and disposal. The direct link between sanitation and water pollution is not negated, but the laws that exist fail to make the link in such a way that they would be considered jointly. For instance, domestic sewage falls under the purview of the Water Pollution Act but this is not linked to policies that would work towards reducing the amount of sewage generated.[31] The contribution of these laws to the realisation of the right to sanitation thus remains at best fortuitous, and the absence of a link does not ensure effective comprehensive thinking around water pollution and sanitation.

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28 ibid s 25.

29 ibid s 75.

30 Uttar Pradesh Kshettra Samitis and Zila Parishads Adhiniyam, 1961, s 195.

31 Lovleen Bhullar, 'Ensuring Safe Municipal Wastewater Disposal in Urban India: Is There a Legal Basis?', 25/2 *Journal of Environmental Law* 235-60 (2013).

The Environment (Protection) Act, 1986 and the Water Pollution Act provide a framework for the control of domestic effluents. The Environment Protection Act applies in principle to every establishment, agency, or individual discharging any pollutant into the environment. The term 'pollutant' includes treated or untreated faecal sludge. The Water Pollution Act explicitly prohibits dumping of all pollutants beyond the prescribed limit to any stream, well or sewer. It also empowers the Central Pollution Control Board (CPCB) at the central level and the State Pollution Control Board (SPCB) at the state level to take regulatory measures to prevent and control water pollution.[32] Thus, direct discharge of untreated FSS on land or into water is undoubtedly not permissible under these laws. Violators are liable to be prosecuted and punished under these laws.

These laws also regulate treatment and disposal operations. Setting up of sewage treatment plants (STPs) or faecal sludge treatment plants (FSTPs) is subject to a consent procedure under the above-mentioned laws,[33] which means that their working is subject to the terms and conditions stipulated by the concerned SPCB. The consent procedure under the above-mentioned laws is a general one to prevent and control environmental pollution from various operations and it gives regulatory powers to the concerned SPCB.[34]

These operations are also subject to the effluent discharge

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32 Water (Prevention and Control of Pollution) Act, 1974, ss 16-17.

33 ibid s 25.

34 See generally Lovleen Bhullar, 'The Environmental Dimension of the Right to Sanitation', in Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 261 (New Delhi: Oxford University Press, 2019).

standards prescribed under the Environment (Protection) Rules, 1986. These Rules were amended in 2017 to include a new entry laying down effluent discharge standards for STPs that are applicable to all modes of disposal.[35] The amendment further provides that reuse/recycling of treated effluent shall be encouraged and in cases where part of the treated effluent is reused and recycled involving possibility of human contact, the abovementioned standards are applicable.[36] It is the responsibility of the SPCB to ensure that the FSSM chain functions properly so that risk to the environment due to FSS is minimum or within the permissible limit. These laws give an overarching supervising power to the CPCB and the Central Government to step in to take necessary actions if required.

The Environment Protection Act, 1986 also empowers the Central Government to issue notifications, rules and directions in order to achieve the objectives of the laws. STPs and FSTPs are subject to environmental impact assessment and environmental clearance under the Environment Impact Assessment Notification, 2006. This provides for further scrutiny of such projects by the Central Government and pollution control boards from an environmental perspective. The Solid Waste Management Rules, 2016 provide for disposal and treatment of faecal sludge, before or after processing, at landfills and for use as compost; and final and safe disposal of post-processed residual faecal sludge to prevent pollution.[37] Further, they

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35 Environment (Protection) Amendment Rules, 2017, G.S.R. 1265(E), 13 October 2017, Schedule I - Sl. No. 105.

36 ibid note vi.

37 Solid Waste Management Rules, 2016, S.O. 1357(E), 8 April 2016.

apply to final and safe disposal of post-processed residual faecal sludge to prevent contamination of groundwater, surface water and ambient air.

Overall, the statutory framework addresses FSSM mostly indirectly. This includes some allocation of responsibility from the local to the national level, some entry points through environmental regulation but there is no real integration to sanitation law. In other words, FSSM is seen as a distinct, partly managerial issue, which does not engage directly, for instance, with caste-related issues that play a central role in sanitation. This is not entirely surprising in a context marked by the lack of comprehensive sanitation regulation overall. At the same time, in a context where sanitation has mostly been considered as an addendum to water for decades, this leaves regulatory gaps since FSSM includes a number of dimensions that are less centrally concerned with water than networked sanitation.

2.2. FSSM Policy Framework

In a context where the statutory framework for FSSM is limited, the gaps have progressively been filled through a multiplicity of administrative directions and policies. These have the advantage of flexibility compared to legislation but do not provide, for instance, the same framework for accountability. These various instruments that address FSSM directly or indirectly arise at different levels. At the national level, the National Policy on Faecal Sludge and Septage Management, 2017 sets out to address issues such as design of on-site sanitation systems, frequency of desludging, operational safety of sanitary workers, tariff for cleaning of faecal sludge, penalties to be

imposed for unsafe sanitation related practices, registration of private sector providers. This is complemented in some states by state-level policies and guidelines.

At present the SBM-Urban 2.0 Guidelines offer the broad objective to be achieved by 2026 in this regard.[38] This objective is to ensure that 'all used water including faecal sludge, especially in smaller cities are safely contained, transported, processed and disposed so that no untreated faecal sludge and used water pollutes the ground or water bodies'.[39] Different elements have been taken up more specifically in the policy framework, some of which are specifically considered in this section.

2.2.1. Design, construction and maintenance

The regulation of design, construction and maintenance of toilets and the related on-site sanitation systems has been covered in various contexts. At present, there are no legally binding standards on the design, construction, and maintenance of on-site sanitation systems. At the same time, detailed norms and standards on these aspects are provided under various instruments at the national level.

The Bureau of Indian Standards (BIS) makes it mandatory to have septic tanks in areas that are not connected to sewer networks. The Standards also address issues such as the location of septic tanks and their size. For instance, they provide that septic tanks are not to be constructed in swampy areas or areas prone to flooding, and that

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38 Ministry of Housing and Urban Affairs, Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021.

39 ibid s 2.1.

they should be accessible for cleaning.[40]

The Central Public Health and Environmental Engineering Organisation (CPHEEO) Manual lays down norms regarding the location of pits, size and design of pits/septic tanks depending on the local topography, the minimum distance between the on-site sanitation unit and drinking water sources, depth of pits in accordance with geological and hydrological feature of the area.[41]

The SBM-Urban 2.0 Guidelines recommend different technological options for on-site sanitation systems, such as septic tanks. They also provide details of technical features and specifications for toilets that cover almost all aspects of FSSM, such as design/technology of the superstructure of the on-site sanitation system, different types of storage systems, and the transportation and treatment of septage.

According to the National Building Code, 2016 everyone is required to obtain permission from the concerned authority to install waterborne sanitary or drainage installations.[42] It further prescribes the design parameters to be followed while constructing sanitary fixtures such as water closets and urinals.[43] It also lays down a minimum distance of 18 metres between septic tanks and wells. The Code underlines that on-site sanitation systems like septic tanks is a preferred system in rural and peri-urban areas where the underground system

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40 Bureau of Indian Standards (BIS) Code of Practice for Installation of Septic Tanks (IS:2470) 1985.

41 CPHEEO, Manual on Sewerage and Sewage Treatment Systems, 2013.

42 National Building Code, 2016, Part 9, para 3.2.

43 ibid Part 9, para 4.5.1.3.

may be neither feasible nor economical.[44] At the same time, building regulations in various states seem to generally make on-site containment facilities a requirement only where no sewerage connection is available. Further, the focus remains on construction and there are insufficient links with the other aspects of the FSM chain.[45]

Overall, the above-mentioned regulatory instruments reveal that there is a growing but limited governance of design, construction and maintenance of toilets and the related on-site sanitation systems. There are guidelines to ensure that on-site sanitation systems are constructed and used in an environmentally safe manner but these norms and standards are not legally binding. Further, these norms and standards tend to be developed first at the national level, and only subsequently incorporated in state-level/city-level FSSM policy and guidelines.

2.2.2. Desludging, collection, and transportation

Another element taken up is desludging, collection, and transportation. On-site sanitation systems require proper and periodic desludging. Three main issues emerge. Firstly, there is the question of the frequency in which the users must undertake the desludging process. Secondly, there is a concern around the availability of service providers to carry out desludging and safe transportation to a treatment facility. Thirdly, questions arise concerning the manner in

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44 ibid Part 9, para 4.5.14.5.2.

45 Arkaja Singh, Building Regulations For Faecal Sludge Management: Review of Building Regulations From Indian States 7 (New Delhi: Centre for Policy Research, 2018).

which the process of desludging and transportation are carried out. There are non-binding guidelines as to how to carry out all these steps:

The BIS Standards provide that 'half yearly or yearly desludging of septic tank is desirable'.[46] The Standards further state that 'small domestic tanks, for economic reasons, may be cleaned at least once in 2 years provided the tank is not overloaded due to use by more than the number for which it is designed'.[47] They also discourage desludging too frequently, as it may inhibit the anaerobic action in the tank.

The CPHEEO Manual prescribes that the minimum acceptable design interval between successive manual desludging of each twin leach pit could be eighteen months.[48] However, to provide a reasonable degree of operational flexibility, it is deemed desirable to provide storage volume for three years in urban areas and two years in rural areas. In the case of septic tanks, it underlines yearly desludging of septic tanks as 'desirable'. In case yearly desludging is not feasible or economical, the CPHEEO Manual provides that septic tanks should be cleaned 'at least once in two-three years, provided the tank is not overloaded due to use by more than the number of persons for which it is designed'.[49]

In yet a different take, the Advisory Note of the Ministry of

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46 Bureau of Indian Standards (BIS) Code of Practice for Installation of Septic Tanks (IS:2470) 1985, s 5.1.

47 ibid.

48 CPHEEO, Manual on Sewerage and Sewage Treatment Systems, 2013, Part A: Engineering, s 9.3.3.1.2.5.

49 Ibid s 9.3.4.3.

Urban Development suggests that 'though desludging frequencies vary, it is generally recommended to desludge tanks once every two to three years, or when the tank becomes one third full'.[50] The SBM-Urban 2.0 Guidelines also prescribe desludging of septic tanks every three years.[51]

Overall, there is similarity between the different instruments addressing desludging, collection, and transportation. These have not proved to be effective, in part because of the lack of specificity and advisory nature, as reflected in the use of the word 'desirable' in different instruments. This is not surprising in a context where local bodies tend to have limited capacity to implement and enforce strict provisions. At the same time, moving towards regular desludging is acknowledged as beneficial.[52] On the whole, there remain many challenges that need to be addressed both at the level of policy and implementation, in the context of the fast increasing number of non-networked toilets constructed.

2.2.3. Mechanisation

The need for mechanisation of the sludge removal process is also emphasised in some contexts. For instance, the BIS Standards specifically underline the need for mechanisation of the sludge removal process and provide that 'manual handling of sludge should be

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50 Ministry of Urban Development, Advisory Note - Septage Management in Urban India, 2013, s 5.2.

51 Ministry of Housing and Urban Affairs, Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021, p. 64.

52 eg Jigisha Jaiswal, Dinesh Mehta and Meera Mehta, 'Impacts of Scheduled Desludging on Quality of Water and Wastewater in Wai city, India', 49/8 *Environment and Planning B: Urban Analytics and City Science* 2216 (2022).

avoided'.[53] The Advisory Note categorically states that manual desludging of septic tanks 'is tantamount to manual scavenging'.[54] It suggests the mechanisation of sewage cleaning services to avoid manual scavenging. Further, it recommends that there should be stringent restrictions and punitive measures for all private parties offering manual septage clearance services. The SBM-Urban 2.0 Guidelines separately underline that urban local bodies 'will need to carry out periodic desludging of pits'.[55]

The emphasis on mechanisation is crucial and is something that has also been taken up in the context of attempts to eradicate manual scavenging with which it is directly linked. The limitations of a framework that lacks enforcement is particularly visible here and can be compared with the 2013 manual scavenging legislation discussed below, which offers statutory answers that seem indispensable in a context where various actors may not have sufficient incentives to comply with the policy instruments reviewed in this section.

Overall, the existing law and policy framework concerning FSSM lack in specificity and integration. The various elements that make up the regulatory framework do not add up, in part because they are not linked through a series of principles, which framework legislation would include. Further, existing instruments fail on the whole to address the human dimensions of FSSM. As a result, they are,

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53 Bureau of Indian Standards (BIS) Code of Practice for Installation of Septic Tanks (IS:2470) 1985, s 5.3.

54 Ministry of Urban Development, Advisory Note - Septage Management in Urban India, 2013, s 5.2.

55 Ministry of Housing and Urban Affairs, Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021, s 5.1.4.

for instance, mostly delinked from rights discourses. The next section takes this up in terms of the fundamental right to sanitation, the specific situation of manual scavenging and the rights of sanitation workers.

3. RIGHT TO SANITATION, MANUAL SCAVENGING AND RIGHTS OF SANITATION WORKERS

The Constitution of India, includes no specific right to sanitation. It is the higher judiciary that progressively considered issues related to sanitation and recognised its existence as a derivative right. The judiciary started linking the right to life with sanitation in the late 1980s.

In *LK Koolwal v State of Rajasthan* the case concerning 'insanitation' in Jaipur, the High Court of Rajasthan asserted that '[m]aintenance of health, preservation of the sanitation and environment falls within the purview of Article 21 of the Constitution as it adversely affects the life of the citizen and it amounts to slow poisoning and reducing the life of the citizen because of the hazards created'.[56] A few years later, the High Court of Madhya Pradesh went a step ahead in *Dr KC Malhotra v State of Madhya Pradesh* wherein it was alleged that the Municipal Corporation of Gwalior and the Public Health Engineering Departments had failed in their duty to avoid the spread of an epidemic of cholera, resulting in the death of 12 children in 1991 and further deaths in 1992.[57] The High Court, rebutting the

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56 *LK Koolwal v State of Rajasthan* 1986 SCC OnLine Raj 43, para 3.

57 *Dr KC Malhotra v State of Madhya Pradesh,* AIR 1994 MP 48.

Municipal Corporation's assertion that it did as much as it could, made a specific point about the need for the right to be realised for everyone, regardless of class and stated that while 'inhabitants of the locality may be of backward class or weaker sections of the society or community at large [they] have got a fundamental right under Article 21 of the Constitution entitling them to live as human beings'.[58] This implied in that specific case having a separate sewage line from which filthy water could flow out, covering the *nalla* and the provision of proper lavatories for public conservancy which should be regularly cleaned. The High Court further made the link between Article 21 and Article 47 of the Constitution, thus recognising the intrinsic relationship between Part III (fundamental rights) and Part IV (Directive Principles of State Policy) of the Constitution.

The Supreme Court has also derived the right to sanitation from the right to life. In *Virendra Gaur v State of Haryana*, the Supreme Court was debating Haryana's Town Planning Scheme in a case concerning the Municipal Committee of Thanesar's proposed land-use change for an area earmarked for open spaces. In this context, the Court asserted that the 'right to life with human dignity' encompasses sanitation with pollution-free water and air and the broader protection of the environment.[59] Overall, the right has been well recognized by courts but the various judgments concerning the right to sanitation have not been followed by any incorporation in the legal or policy framework.

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58 ibid para 14.

59 *Virendra Gaur v State of Haryana* (1995) 2 SCC 577, para 7.

The case law concerning the right to sanitation does not engage much with elements directly relevant to FSSM. Yet, the manner in which desludging, collection, and transportation of faecal sludge and septage from households is carried out is in principle subject to strict legal regulation. In fact, manual handling of human excreta amounts to manual scavenging and it is prohibited under law.[60] Further, according to the Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993, employment of manual scavengers is a criminal offence.[61] This law is complemented by the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, which is broader in scope and application.[62] The Act specifically includes manual cleaning of septic tanks and sewers under the definition of 'manual scavenging' and bans 'hazardous cleaning' in relation to sewers and septic tanks.[63] Manual cleaning of sewers and septic tanks, if necessary, may be carried out only in very controlled situations, with adequate safety precautions, and in accordance with specific rules and protocols for the purpose. Overall, these two laws together prohibit manual scavenging in the contexts of on-site sanitation systems such as septic tanks and pits. At this juncture, manual desludging amounts to manual scavenging and

60 Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, s 2(1)g.

61 Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993, ss 3.1, 14.

62 See generally, Shomona Khanna, 'Invisible Inequalities: An Analysis of the Safai Karamchari Andolan Case', in Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 299 (New Delhi: Oxford University Press, 2019).

63 Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, s 7.

asking anyone to manually clean septic tanks or pits is a crime.

The Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2013 make it mandatory to provide adequate protective gears and safety devices to ensure the safety of any person engaged to clean a septic tank or a pit. Rule 4 provides an illustrative list of 44 protective gear and safety devices to prevent or control exposure of sanitation workers to hazardous substances and gases while cleaning septic tanks.[64] The list is not meant to be exhaustive. The Rules also include an illustrative list of 14 cleaning devices that are to be provided to the workers. It is the duty of the local bodies to ensure that the workers are using the prescribed cleaning devices so that they do not need to clean sewers manually.[65]

Manual scavenging has remained a live issue. As recently as 2023, the Supreme Court had to restate that '[t]he Union and the States are duty bound to ensure that the practice of manual scavenging is completely eradicated'.[66] This statement is reflected in a report declaring that manual scavenging has been eradicated only in 508 districts.[67] In addition, there remain issues concerning the definition of what constitutes manual scavenging and the distinction with sanitation work.

One of the developments in the 2013 legislation is to bring

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64 Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2013, s 4.

65 Prohibition of Employment as Manual Scavengers and their Rehabilitation Rules, 2013, s 5.

66 *Dr Balram Singh v Union Of India* 2023 SCC Online SC 1386, para 105.

67 Abhinav Lakshman, '508 Districts in Country are Free of Manual Scavenging: Ministry Report', *Indian Express* (7 June 2023) p 8.

sanitation work under the purview of the legislation. At the same time, it leads to an emphasis on the technical aspects of sanitation work, such as protective gear and machines over broader issues of dignity and effective rehabilitation for manual scavengers away from sanitation work.[68] The belief that sanitation work is caste-based work also appears to underpin measures purportedly being undertaken for FSSM while also supporting the implementation of the 2013 manual scavenging legislation.

Developments in Odisha indicate, for instance, that where the responsibility of operation and maintenance of community/public toilets in some wards in Berhampur is handed over to Self-Help Groups (SHGs) in order to empower them, SHGs comprising of members of scheduled castes are also expected to clean these toilets.[69] Similarly, in Cuttack, it was proposed to 'rehabilitate' manual scavengers by providing them with a cesspool emptier vehicle.[70] While these measures appear to be well meaning, they perpetuate the link between caste and sanitation work instead of delinking the two.[71] As persuasively argued by Bezwada Wilson of the Safai Karamchari Andolan, the problem is that, at present 'manual scavenging is a caste-based occupation' and what matters to ensure change is that 'any work

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68 Shruti I., 'Of Sewage, Struggle, and the State: Caste and Contractorization in Contemporary Sanitation Work', *in India Exclusion Report 2019–2020* at 163, 168 (Three Essays Collective with Centre for Equity Studies, 2020).

69 Sujith Koonan, Philippe Cullet & Lovleen Bhullar, Faecal Sludge and Septage Management in Odisha: A Review of the Law and Policy Framework (New Delhi: Centre for Policy Research, 2019).

70 ibid 35.

71 eg Subhash Gatade, 'Silencing Caste, Sanitising Oppression – Understanding Swachh Bharat Abhiyan', 50/44 *Economic & Political Weekly* 29 (2015).

or occupation including sanitation work should not be linked with caste'.[72]

The progress that has been made over the past couple of decades with regard to the eradication of manual scavenging is not necessarily as straightforward as it seems. This is illustrated, for instance, in the case of people cleaning septic tanks. These are often reported as sanitation workers, for instance, when accidents occur and serious injury or death is reported.[73] The qualification as sanitation work or manual scavenging may hinge on the provision or absence of protective gear and devices.

In practice, where the necessary safety measures are not used, local officials sometimes argue that workers are not 'comfortable' using them.[74] This seeks to shift the responsibility back to the individual. Where private sector actors are involved, the problem is informal service providers are not always recognised or regulated, leading to issues related to health, environment and exploitation of the workers remaining unaddressed. This leads to situations where only alcohol may be provided instead of protective gear and devices.[75]

Further, the reduction in the number of appointments as permanent government employees and the growing practice of

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72 Conversation with Bezwada Wilson, 'Safai Karmachari Andolan, An Insider's Account', in Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 287, 295 (New Delhi: Oxford University Press, 2019).

73 eg The Hindu Bureau, '2 Workers Die While Cleaning Water Tank', *The Hindu,* 24 November 2023, p 5.

74 Koonan, Cullet & Bhullar (n 68) 35.

75 ibid.

outsourcing the provision of government services such as sweeping, solid waste management, and cleaning of septic tanks to private operators adversely affects the ability of members of scheduled castes who work as sanitation workers to make ends meet. The employer may force them to work in unsafe environments and they are unable to raise their voice against violations of the provisions of laws that are designed to protect their rights and interests.[76]

The question of safety for sanitation workers is a serious issue as there is widespread violation of the law.[77] Yet, instead of considering this primarily as a question of strict enforcement of law, there seems to be a tendency to treat it as an issue to be addressed through soft policy approaches, such as those that emphasise mechanisation. While provisioning of technology and awareness creation is appreciated, this does not absolve state governments and urban local bodies from enforcing existing laws. In particular, they cannot use financial and human resource constraints as a shield, since the Supreme Court of India declared decades ago that such a government or local bodies have no right to exist if it is unable to fulfil its mandatory legal obligations.[78]

Overall, the analysis of the rights dimensions of FSSM and sanitation more generally indicates that various rights are recognised but their realisation remains patchy. The fundamental right to

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76 P. Sakthivel, M. Nirmalkumar & Akshayaa Benjamin, 'Rights of Sanitation Workers in India', in Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 346 (New Delhi: Oxford University Press, 2019).

77 cf Shruti (n 67) arguing that the problem is not simply one of faulty implementation of the law.

78 *Municipal Council, Ratlam v Vardichand* (1980) 4 SCC 162.

sanitation exists but lacks content insofar as it is not reflected in either statutory or policy instruments. The rights of manual scavengers are well recognised in law but the need for multiple central legislation and judgments on the same issue illustrates the difficulties in ensuring their realisation. In fact, the constitutional prohibition of untouchability should have been sufficient to ensure the eradication of manual scavenging decades before the 1993 legislation was adopted.[79] With regard to sanitation workers, the questions that arise are narrower in the sense that they concern in large part the conditions of their employment. This remains a significant concern because existing norms are not well implemented and because the work of sanitation workers in relation to FSSM has the potential to qualify as manual scavenging if all safeguards are not effectively enforced.

4. NEED FOR FURTHER CONCEPTUALISATION OF THE FSSM FRAMEWORK

The preceding two sections indicate that there are multiple law and policy instruments that are relevant to FSSM. Yet this does not amount to a comprehensive framing. Further, even where the statutory framework exists, such as in the case of environmental and manual scavenging legislation, their enforcement is far from perfect in relation to FSSM.

One of the issues arising is the fact that law and policies remain largely focused on a balance of rights and obligations between the state

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79 Constitution of India, art 17. See also Kimberly M. Noronha, Tripti Singh & Mahima Malik, Manual Scavenging in India: A Literature Review (CPR Research Report, 2018).

and citizens. This leaves out the fact that private sector actors are increasingly important in FSSM.[80] In addition, existing debates tend to focus on the rights of individuals and fail to capture the growing push towards strengthening duties of citizens. In other words, there is a growing disconnect between the formal legal framework and the realities that it is meant to address. This is also reflected in the increasing focus on technology as a solution to issues identified, even where social and cultural dimensions may be just as or more important than the technical aspects of the solution. This is in keeping with the focus in sanitation debates on infrastructure, such as toilet building, that have structured the sector's understanding of issues arising for decades.

Further, the existing rights framework is largely built around the idea of universal rights that do not necessarily manage to effectively capture situations of marginality. This makes the assertion of rights much more difficult for some, where the promise of universality is tarnished by social or economic inequalities, which constrain the effective realisation of a minimum level of realisation of rights for all.

This section takes up three distinct but related elements that need to be addressed when considering the need to strengthen the existing framework. These speak to the need to take a broader view of FSSM, which would put social and environmental concerns at the centre of the debates, rather than questions of infrastructure and technical solutions.

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80 Shubhagato Dasgupta et al, Small to Beautiful – Doing FSSM Business in India (New Delhi: Centre for Policy Research, 2020).

4.1. Dignity and Inequality

In a context where FSSM is one of the instruments to realise the promise of the right to sanitation and the imperatives of the prohibition of manual scavenging, it is crucial that issues of dignity, equality and equity should be prioritised. This should be obvious from a rights perspective since the Supreme Court has confirmed that the Constitution 'has its own internal morality based on dignity and equality of all human beings'.[81]

At a general level, the expectation is that sanitation interventions, such as the construction of community or public toilets, would focus on vulnerable groups and people, including women, children, the elderly, disabled persons, landless people, migrant workers, and scheduled castes and scheduled tribes. At present, for some categories such as the elderly, there is insufficient attention to their specific needs, such as for people who find squatting difficult or impossible. In the case of women, sanitation interventions have not always contributed enough to fostering gender equality. The limited focus on public toilets in a context where it is socially acceptable for men to urinate in public but not for women leading them to restrict their water intake with negative health consequences is a case in point.[82]

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81 *National Legal Services Authority v Union of India and Others* (2014) 5 SCC 438, para 123.

82 Sujith Koonan and Lovleen Bhullar, 'Sanitation, Gender Inequality, and Implications for Rights', *in* Philippe Cullet, Lovleen Bhullar & Sujith Koonan eds, *Right to Sanitation in India – Critical Perspectives* 380 (New Delhi: Oxford University Press, 2019).

Dignity needs to be given a much more central place in FSSM policy. Manual scavengers are particularly concerned since the practice of manual scavenging itself is deeply degrading and dignity can only be recovered by eradicating it, something that seems to be a yet-to-realised goal.[83] Yet, the eradication of manual scavenging itself will be no guarantee that the dignity of manual scavengers has been restored. This is why rehabilitation is seen by manual scavengers as a central element of a comprehensive framework for addressing the eradication of manual scavenging. This requires much deeper engagement with the problem since, in practice, sanitation work is often carried out either by former manual scavengers who have failed to move to other occupations or other people of low caste backgrounds. Further, sanitation workers regardless of their caste often face conditions of work and social exclusion that are no better than those of manual scavengers.

The need to give more attention to the plight of sanitation workers is highlighted by conditions on the ground, such as the frequent deaths reported in the context of cleaning septic tanks.[84] Over the years, courts have taken up the conditions of work of sanitation workers on some occasions.[85] In the case of the Delhi Jal Board, the Supreme Court observed, for instance, that there was no appropriate

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83 The Hindu Bureau, 'Eradicate Manual Scavenging, SC tells Centre, States', *The Hindu* 21 October 2023, p 6.

84 eg ENS, Four Dead While Cleaning Waste Tank in Jhajjar, *Indian Express* (4 August 2022) p 6.

85 *Praveen Rashtrapal v Chief Officer, Kadi Municipality* (2006) 3 GLR 1809 and *A Narayanan v The Chief Secretary, Government of Tamil Nadu and Others*, Writ Petition No 24403 of 2008 (High Court of Madras, Order of 20 November 2008).

mechanism to ensure the protection of unorganised workers employed by contractors for services meant to benefit the public at large that are 'inherently hazardous and dangerous to life'.[86]

Yet, such interventions remain limited in the absence of a statutory framework that specifically ensures that they are treated at par with other workers and work only in conditions of dignity. This requires going beyond the necessity to provide them with appropriate tools and protective clothing to address the broader social and legal consequences of engaging in sanitation work. As a starting point, discriminatory provisions need to be removed from the statute book. This includes the recognition of sanitation workers as a special category of workers on whom special restrictions are imposed. This is found, for instance, in the Delhi Municipal Corporation Act, 1957 that defines sweeping as an 'essential service' and introduces specific restrictions on the right of sweepers to resign from employment, including sweepers employed for doing house scavenging.[87] In a context where municipal recruiters have tended to recruit only dalits, specifically from a 'sweeper caste',[88] the burden of such a restriction falls overwhelmingly on specific groups of people.

Beyond sanitation work, the FSSM law and policy framework raises various issues of dignity and inequality. This is true with regard to gender equality and the need to ensure that progressive sanitation measures do not further entrench or aggravate gender inequality. This

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86 *Delhi Jal Board v National Campaign for Dignity and Rights of Sewerage Workers and Allied Workers* (2011) 8 SCC 568, para 3.

87 Delhi Municipal Corporation Act, 1957, ss 387, 388.

88 Shruti (n 67) 167.

became such a concern that special gender-focused guidelines were adopted in 2017 in the context of SBM.[89] The ODF Plus protocol also provides for specific attention to be given to transgender and the disabled.[90] Yet, the structural inequalities remain to be effectively addressed.

4.2. Rights and Duties

FSSM has been conceived in large part as a pragmatic response to the necessity to think beyond networked sanitation. At the same time, it shares the same limitations of the existing law and policy framework. The focus remains mostly on toilets and people are largely seen as beneficiaries of top-down government policies working for the greater common good.

This is what has allowed the FSSM policy framework to be much more attentive to infrastructure concerns than to the needs of rights holders. The main novelty in FSSM-related instruments is at the level of operationalization where the government's role is often assumed to be more of a facilitator, in keeping with broader neoliberal reforms. A similar shift was undertaken in the context of water where the demand-led paradigm has driven policy development since the end of the twentieth century.[91] In the sanitation sector, people are not necessarily 'demanding' access to a toilet in the same way that everyone

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89 SBM (Gramin), Guidelines on Gender Issues in Sanitation, Annexure to Letter S-11018/2/2017-SBM (2017).

90 Ministry of Housing and Urban Affairs, Swachh Bharat Mission - Urban 2.0, Operational Guidelines, 2021, s 5.2.5.1.

91 World Bank, India – Water Resources Management Sector Review – Initiating and Sustaining Water Sector Reforms (Report No. 18356-IN, 1998) vii.

'demands' access to water as a matter of immediate survival. As a result, it has proved much more difficult for the state not to remain centrally involved in sanitation than in the case of water.

The main underlying issue remains the lack of engagement with the rights framing. This leaves individuals and communities at the mercy of an understanding of sanitation driven much more by a focus on infrastructure development than social priorities. The focus on infrastructure building shows its limits, for instance, in the case of community toilets that are not well maintained and therefore insanitary, which leads users to go back to open defecation.[92]

The lack of emphasis on rights is also linked to a shift in understanding of the rights and duties paradigm. The original framing of fundamental rights opposes entitlements of individuals to the duties of the State. Yet, in recent years, there has been increasing emphasis on the duties of individuals. The progressive shift can be identified in the way the rights holders (individuals) have been known for decades as 'beneficiaries'.[93] This can go further, as where the right to a toilet may become something that is seen as a duty of the individual. One example of this is the case of districts where pressure was put on BPL card-holders by suggesting that they would be denied their ration if

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92 Kathleen O'Reilly & Jessica Budds, 'Sanitation Citizenship: State Expectations and Community Practices of Shared Toilet Use and Maintenance in Urban India', 35/1 *Environment & Urbanisation* (2023) <https://doi.org/10.1177/09562478221148027>. [2, 12]

93 General Guidelines for Implementation of Centrally Sponsored Rural Sanitation Programme, 1993, s 4.2.2.2 and Guidelines for SBM (Gramin), 2017, s 5.2.9.

they had not built a toilet at home.[94] Another example is the introduction of a requirement to have a functional toilet to be able to be elected to the three tiers of panchayats in Haryana.[95] The challenge to this legislative amendment was dismissed by the Supreme Court on the ground that candidates have a duty to set an example.[96] This was done without reference to the right to sanitation and the reasoning therefore did not discuss the relationship between political rights and the right to sanitation.

Overall, the shifting discourse around rights and duties reflects the changing nature of the state's engagement with individuals. The traditional framing that saw individuals as rights holders and the state as duty bearer is shifting towards a system where there is limited institutional space for individuals to hold the state accountable. This evolving situation has triggered campaigns calling, for instance, to the adoption of laws guaranteeing the delivery of public services.[97] This helps where sanitation is considered as a public service. However, even in the laws that do, this is framed in limited terms, such as connection

94 eg Milind Ghatwai, 'Sheopur Adm Gives Rations only to Villagers with Toilets' *Indian Express* (25 January 2017) 2. For the disputed case of Ajmer district see KumKum Dasgupta, 'With Stiff Target for Building Toilets under Swachh Bharat Abhiyan, States are Flouting Citizens' Rights' *Hindustan Times* (4 April 2017) 11.

95 Haryana Panchayati Raj Act, 1994 as amended by the Haryana Panchayati Raj (Amendment) Act, 2015, s 175.

96 *Rajbala v State of Haryana* Writ Petition (Civil) No. 671/2015 (Supreme Court of India, 2015).

97 see eg Kerala State Right to Service Act, 2012; Uttar Pradesh Janhit Guarantee Adhiniyam, 2011 and Rajasthan Guaranteed Delivery of Public Services Act, 2011.

to sewerage.[98] Such measures do not yet provide a comprehensive accountability framework for the different components of the right to sanitation.

4.3. Environment

The focus on health in the sanitation sector, including in FSSM does not leave sufficient space for considering the treatment and safe disposal of faecal sludge and septage (FSS) as important components of the FSSM chain, given its potential to pollute the environment. In fact, there is a significant disconnect between sanitation and the environment, both at the regulatory level and on the ground. The sanitation framework is still largely silent on the broader environmental consequences of the different sanitation options. There is thus little that contributes to understanding and addressing the environmental consequences of building crores of toilets, such as the impacts of unregulated disposal of septage.

With regard to toilet construction, one of the problems is the increasing number of improperly constructed or maintained toilets, which poses a significant threat to the environment and more specifically to water. This is, for instance, the case with unlined pits, which raise the issue of faecal contamination of groundwater sources in the area. A study conducted in Kerala underlined the impact of such

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98 Kerala Water Authority, Notification of 8 April 2013, No KWA/JB/E1/9387/2012. See also Government of NCT of Delhi, Circular No. 6(39)/IT /2011/2319-2388 – Delhi (Right of Citizen to Time Bound Delivery of Services) Act, 2011, 5 April 2016 mentioning connection, disconnection and mutation of water connections.

toilets on groundwater.[99] The toilets that are connected to septic tanks also pose risks to environmental quality. It is quite common for people to understand a septic tank as a storage system and therefore to build oversized tanks to avoid cleaning it or emptying it periodically. This practice is also linked to the absence, or inadequacy, of mechanisms such as suction emptier trucks, trained workers and safety equipment to facilitate the regular cleaning or emptying of septic tanks.[100] Ideally, septic tanks are to be desludged every couple of years, or when the tank becomes one-third full. However, this hardly happens in practice. Septic tanks are quite often cleaned or emptied when they are full or leaking.

Environmental issues may also arise due to improper transportation and disposal of FSS. The prevailing practice regarding the construction of toilets coupled with the lack of proper FSSM facilities leads to the direct dumping of faecal sludge and septage on open land, or into drains or fresh water bodies.[101] An empirical study conducted in a few towns in Tamil Nadu confirmed that urban local bodies and private parties often dispose untreated septage on open land or agricultural land and into freshwater bodies.[102] Septage from on-site sanitation systems is worse than open defecation from an

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99 PU Megha et al, 'Sanitation Mapping of Groundwater Contamination in a Rural Village of India', 6 *Journal of Environmental Protection* 34 (2015).

100 World Bank, 'Environmental and Social Systems Assessment: Swachh Bharat Mission-Gramin' (World Bank, 2015).

101 Ministry of Urban Development, Advisory Note – Septage Management in Urban India (2013) p 12.

102 Water Aid, 'An Assessment of Faecal Sludge Management Policies and Programmes at the National and Select States Level' 98 & 104 (Water Aid 2016).

environmental and public health point of view as it carries higher levels of pathogens and microorganisms when compared to sewage.[103] It also causes a host of diseases and a study notes that the number of infections that faeces can transmit is fifty.[104]

One of the issues arising is that it is difficult to empty and dispose of FSS in an environment-friendly manner. This situation has paved the way for the entry of (unregulated) private operators who dispose of the septage clandestinely, including into water bodies.[105] In turn, this leads to an understanding that these activities are 'illegal' or 'unauthorised' and secrecy is therefore maintained. The level of secrecy, in turn, makes it extremely difficult to regulate them even if the urban local bodies or SPCBs wish to do so. At the same time, the absence of these private parties would also create problems as individual households have no other option to empty or clean septic tanks and pits, unless urban local bodies step in and provide adequate facilities and services. In an attempt to bridge the regulatory gap, licensing and registration of operators collecting and transporting FSS has been proposed.[106] Provision for liability of the operator in case of damage to the environment is also recommended.[107]

Improper disposal of FSS is also due to lack of adequate

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103 ibid 33.

104 Rose George, The Big Necessity: The Unmentionable World of Human Waste and Why it Matters 175 (Metropolitan Books 2008).

105 SK Rohilla et al, 'Urban Shit: Where does it All Go?' *Down to Earth* (1-15 April 2016) <www.downtoearth.org.in/coverage/urban-shit-53422>; B Harris-White, 'The Politics of Waste Management' *The Hindu* (7 October 2015).

106 Department of Urban Development, Government of Uttar Pradesh, State Model Bye-Laws for Faecal Sludge and Septage Management, 2023, s 6.

107 ibid s 18.

facilities such as STPs and FSTPs. While there are still relatively few FSTPs, there are a number of STPs. Hence disposal should not be a major problem in places where STPs are operational. However, the situation is more complicated. In some cases, STPs are too far and the operators do not find it economically feasible to travel there. In some other cases, STPs may not be ready to receive FSS from operators, especially from private operators. These issues arise in part because the concept of STPs originated with the conventional off-site sanitation model where a sewerage network carries sewage. This idea needs to be modified both technologically and in terms of its perception to convert STPs into co-treatment plants where both sewage and FSS are treated.

It is also not uncommon in urban areas that toilets are neither connected to a sewerage system nor to an on-site mechanism, such as pits or septic tanks. In areas without sewer lines, the storm water drainage system or freshwater sources such as lakes and ponds are used for disposal of wastewater including human excreta.[108] In fact, it is estimated that more than 70 percent of septic tanks in urban areas discharge inadequately treated wastewater directly into stormwater drains.[109]

As a result, human excreta is directly exposed to the environment. Thus, the implementation of sanitation interventions (toilets, in this case) represents a complicated scenario where they may also cause environmental pollution and pose serious risks to public health.

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108 Anna Zimmer, 'The Need for An Integrated View on Urban Waste Water: A Case Study of Delhi' (South Asia Network on Dams, Rivers and People, 2012).

109 Dasgupta, Agarwal & Mukherjee (n 3) 2.

Overall, the potential of FSSM to address the negative environmental consequences of toilet construction remains to be realized. It necessitates not only solutions on the ground, such as viable options for disposing of septage but also a much more integrated policy framing, which links, for instance, much more directly the rights to sanitation, to health and to a clean environment.

5. CONCLUSION

Overall, the regulatory framework for FSSM is marked by a dichotomy between the relatively fast development of a non-binding policy framework and limited legal provisions in this regard. At the same time, there are various legal provisions that concern FSSM, such as those with regard to manual scavenging and the environment, even though they are specifically framed around FSSM. One answer could thus be that a legal framework that is more specifically devoted to FSSM is needed. Yet, in practice, the issue seems to be just as much regulatory gaps as the limited implementation and enforcement of existing legal provisions. This is, for instance, the case with regard to environmental laws where SPCBs can contribute significantly to the enforcement of appropriate practices regarding FSSM, such as the regulation of construction of household toilets, service providers, and treatment plants. This requires, however that SPCBs should not understand their role narrowly, as limited to cases of industrial pollution or to monitoring of river water quality and STPs. Officials of SPCBs also need to discharge their statutory duties, powers and functions in respect of FSSM. This includes development of the process and standards for recycling/reuse of treated septage and sludge.

Another reason for non-implementation or ineffective implementation could be lack of awareness, lack of financial resources and/or lack of trained people. This highlights the need for financial and human resources to ensure effective implementation of the regulatory framework. Therefore, mere formulation of a regulatory framework, howsoever robust it may be, is not enough to achieve the desired goals. It must also provide the necessary funds and human resource to ensure the working on the ground. To put it differently, effective implementation of the regulatory framework is a cost-intensive and technology-intensive process.

All this leaves a number of questions unanswered with regard to the societal potential of FSSM. There is hope that it can contribute to unlocking value, for instance, in terms of new livelihoods. At the same, this needs to happen within the broader context of the implementation of existing legal provisions and the realization of related rights, in particular the fundamental rights to sanitation, water, health and environment. This remains a challenge that will require much more structured answers.

TRIBAL JUSTICE AND BURNING OF DEADWOOD: THE MANIPUR ETHNIC CONUNDRUM

*Dr. Thangzakhup Tombing**

Abstract

The peace-loving people of Manipur in the North Eastern region of India have been pushed into turbulence of ethnic clash since May 03, 2023. Before the mayhem broke out the state was on the path of achieving many milestones after witnessing decades of insurgency related disturbances. Presumably though the epochal mayhem is directed towards communal animosity between the dominant Meitei community and the Kuki- zo communities, the genesis of distrust and the ugly dance of fratricidal hatred may have been be due to penned up resentment and the presumed alienization of Meiteis from access to land in the hill districts of Manipur. Peculiarly, via Article 371 C of the Constitution, Manipur State has a dual system of administration, one for the Valley Area and the other for the Hill Areas. According to the Manipur Land and Revenue Act, 1966, land in the hill areas were omitted from its operation for the purpose of protection and preservation of tribal lands and tribal ways of life. In 2015 the Government of Manipur passed three bills with the policy of achieving uniform use and access to land in the entire state of Manipur. The three bills were fiercely opposed by the hill communities as they felt that it was designed by the state to alienate them from their ancestral ownership of land and their traditional forest rights. The

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distrust among hill tribes at that time led to a law-and-order crisis in the hill district of Churachandpur, which culminated in the death of 09 civilians. Though the Bill was finally withdrawn, the concerns and aspirations of Manipur to enact uniform land laws lingered on. Meanwhile, owing to the stalemate and the piling of deadwood due to complex political claims and counter claims among the communities regarding unrestrained denuding of forest covers and the alleged illegal poppy plantation in vast tracts of land in the Hill Areas xenophobic insecurities against the targeted Kuki-zo communities simmered among the larger Meitei Community, succumbing to the designs of the propaganda of othering the entire Kuki- Zomi communities. It ultimately led to flaring up of deep-rooted hatred which had consumed the very social fabric of the state of Manipur. The paper, therefore, attempts to study and examine how divergent land laws based on ethnic and ancient tribal ownership and usage of land in the absence of an inclusive and effective land use policy could lead to environmental degradation and the extreme tragedy of ethnic violence.

Keywords: Ethnic Clash, Tribal Land, Land Use Policy, Forest Rights.

1. INTRODUCTION

Manipur witnessed the gory dance of ethnic violence on May 03, 2023 between two prominent communities of the State. It has continued to simmer with no end in sight. So far, mayhem had left a

trail of more than 226 civilian deaths.[1] Around 60,000 civilians from both sides of the warring parties- the Meiteis and the Kuki-zomi communities, were rendered internally displaced.[2] The genesis of the conflict is purported to have its roots in the perceived negative impacts of unregulated demographic growth in the recent past. And due to xenophobically polarizing allegations of encroachment by illegal immigrants who are engaged in illegal plantation and cultivation of poppy in the hill tracts of Manipur. Also, in some kind of virtue signaling, the Kuki- zomi communities were viciously accused of causing environmental degradation in the State. It is claimed by the Meitei community that all these complex issues emanated from the lack of uniform policy for land use and also from the existence of a duality of nuanced administrative systems that separate the valley from the hills.

Manipur's topography, as described by Professor Bimol Akoijam, is a hill state with valley, nestled in the midst of hills. The state capital Imphal, located in the valley is where the seat of power, and other major public and economic institutions is established. It is a place thriving with all sorts of economic activities and opportunities; it is also, home to different composite ethnic communities of the State. In one way all the residents, and migrants hailing from all the districts of Manipur and from other parts of the country are boxed in the

1 Sukrita Baruah, '226 death, 1500 injured, 60,000 displaced and 28 'missing'- one year on the Manipur toll' The Indian Express (Guwahati, 03 May 2024) < https://indianexpress.com/article/india/manipur-marks-one-year-of-conflict-counting-the-cost-amid-tears-9304527/> accessed 22 August 2024.

2 ibid.

limited stretch of the valley area of Imphal. In the last two decades, unprecedented pressure on land due to non-availability of land in the valley, scarcity of water, environmental degradation has been a brewing concern. Among the majority Meitei community, which comprises more than 50 percent of the population, a sense of deprivation, insecurity, and growing concerns for environmental degradation had alarmed or caused political stir/ demand in the valley to re-examine the state land laws and law use policy. This demand is hinged on the menace of drug abuses, illegal immigration, deforestation, poppy cultivation etc. On the other hand, the hill communities view these developments as a partisan politics sinisterly implored by the valley-based Meitei community to deprive and usurp the tribal ancestral land for their own personal gains.

2. OBJECTIVES OF THE PAPER

Apart from the social, political and economic consternation that led to the conflagration between the Meitei and Kuki- zomi communities, at the heart of the conflict also exists anguish against complex and nuanced dual administrative systems of land and forest between the valley area and in the hills areas. Thus, for brevity and for a better understanding of the complex issues that resulted in the epochal mayhem, the paper attempts to explore the following objectives:

1. Historical and constitutional arrangements of administration of land in the state of Manipur.
2. Growing pressure on land and its implications on political

narratives of forest rights of the hill tribes and linking it with the issues of environmental degradation.

3. Allegation of illegal immigration and its impact on the demography of the state pertaining to access to land and resources.

4. Administrative challenges that led to the ethnic conflagration in the State.

3. HISTORICAL CONNOTATION OF MANIPUR

The history of Manipur can be templated on historical development in the pre-British era; during the British Rule; and post the independence of India.

3.1. Manipur in the Pre-British Era

According to scholars, the pre-historic Manipur was known as Kangleipak. Historical account suggests that after migrating from Yunnan province of China,[3] the seed of this tiny kingdom sprouted in an around 33 CE with the ascension of the first Meitei king, Pakhangba at Kangla.[4] As recorded in their ancient text known as '*Cheitharol Kumbaba*' a royal chronicle of the Kings of Manipur, the shrouded mystical evolution of this tiny kingdom was attributed to the gradual evolution of their ancestor gods and goddesses.[5] With the passage of

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3 Yash Mishra, 'Sanamahism: The Religion of Manipur' (2021) <https://www.peepultree.world/livehistoryindia/story/living-culture/sanamahism-manipur> accessed 22 August 2024.

4 Oinam Ronnie Chanu, 'The Myth of the Origin of the Meiteis of Manipur: Rethinking the pre-Vaishnava narratives' (2019) 10 Research Journal of Humanities and Social Sciences 1, 43.

5 *Mishra* (n 3).

time, the indigenous religion of Meitei called '*sanamahi'* was established during the reign of Nogda Lairen Pakahangba (r.33- 154 CE) .[6] The evolution of *snamahi* religion helped improve state crafts, rituals and practices which were recorded in the *puyas* or the religious text.[7]

As the erstwhile kingdom of Kangleipak expanded- Kabow valley of Burma in the East; Cachar and Tripura in the West; and Kohima in the North during the reign of King Khagemba (1597- 1652 CE), they got exposure to other communities religion and agriculture patterns.[8] As a result of which, the influence of Vaishnavism started to peak during the reign of King Charairongba (1697 – 1709 CE).[9] Ultimately, it was during the reign of King Pamheiba (1709- 1748), who after his initiation into Vaishnavism under the tutelage of Guru Gopal Das, not only embraced the name 'Garib Niwas' but also decreed the rigorous adoption and imposition of Vaishnavism in the Kangla valley in 1724.[10] In due course of time under the influence of Guru Shantidas Das Goswami, he renamed Kangleipak as Manipur.[11] Later, Vaishnavism reached its zenith during the reign of King Bhagyachandra (1749- 1798).[12]

On the other hand, historical accounts suggests that the hill people of Manipur, which included the Nagas and the Kuki-zo

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6 Ibid.

7 *Chanu* (n 4) at 40-41.

8 Yumnam Oken Singh and Gyanabati Khuraijam, 'The Advent of Viahnavism: A Turning Point in Manipuri Culture' (2013) 1 European Academic Research 9, 2738.

9 Singh, Khuriajam (n 8) 2738.

10 ibid 2739.

11 ibid 2740.

12 ibid 2738.

communities, predominantly inhabited the hill areas surrounding the valley. According to some historians, Meitei Kings would form alliances with tribal chiefs against Burmese invasion and for peaceful co-existence without any interference. The hill polity was treated beyond the administrative jurisdiction of the Manipur King.[13] As they were more advanced and better organized than the hill tribes, some kind of social distance between them and the hill tribes was also the norm. Meitei would use the generic term *hau* to address the hill tribes.[14] According to Meitei scholars, after embracing Vaishnavite Hinduism the social distancing between the Meitei and *hau* mutated into mild casteism, maybe borrowed from the innate nature of casteism which is ingrained in the Hindu structure and nature of religion.[15] Some Kuki scholars suggests that under the influence of the casteism, the derivative of the *hau* terminology like *hauthu* or *minai* were accentuated with derogatory, spiteful or slavish connotations.

Against the well-structured syncretic religion of *sananahism* and *Vaishnavism* of the Meiteis, *the* hill tribes practiced animism until the arrival of Christianity in the late 18th century coinciding with the expansion of the British expedition.[16] Some scholars from among the

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13 Gangumei Kamei, 'Hill Area Committee (HAC) of Manipur Legislative Assembly: An Assessment Part – I', *E- Pao* (Imphal, 13 March 2018)<https://e-pao.net/epSubPageExtractor.asp?src=news_section.opinions.Politics_and_Governance.Hill_Area_Committee_of_Manipur_Legislative_Assembly_An_assessment_Part_1> accessed 05 August 05 2024.

14 Singh, Khuraijam (n 7) 2737.

15 Mawon Somingam, 'Understanding the origin of the terms 'Wung', 'Hao'and 'Tangkhul'', (May 2014) 3 International Research Journal of Social Sciences (5) 36.

16 Ibid 37.

hill tribes ideate that the colonialist British might have contributed to the disparaging othering of the hill tribes of Manipur. They premised that since the tribal communities of hills did not have their own written history, they became victim of '*colonizing by discourse*- physical and narrative'.[17] This insinuates that the politics of othering of tribes as savages and uncivilized initially propagated by the colonialist British later got perpetuated and replicated among the Meiteis in the valley.[18]

3.2. British Intervention in Manipur

Contact with the British expansionists reached its peak in Manipur in the year 1824. During this period, Manipur was under the dominion of the Burmese from 1819 to 1825, also known as 'seven years of devastation'.[19] The Burmese invaders humiliated and reduced the population of Manipur to half.[20] They were tortured, harassed and taken captives to Burma to be employed as labour force.[21] Many including King Margit Singh fled to Cachar.[22] The Burmese invaders while pursing them to Cachar came in contact with the British expedition team. The British felt the Burmese invaders were a serious threat to the British expansion plan in the Northeast region.[23] Due to

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17 RR. Ziipao, Infrastructure of Injustice: State and Politics in Manipur and Northeast India 20 (Routledge, New Delhi, 2020).

18 ibid 9, 13.

19 Veronica Kangchian, 'Understanding Conflict in Manipur: A Socio Historical Perspective' (2019) 6 Social Change and Development", (2) 43 <https://www.socialchangeanddevelopment.in/downloads/july2019/article-3_3.p> accessed 05 August 2024.

20 Ibid.

21 Ibid; S.C. Sharma, *Insurgency or Ethnic Conflict: With Reference to Manipur* (Magnum Business Associates, New Delhi, 2000).

22 Ibid.

23 R. Gopalakrishna, *Insurgent North- Eastern Region of India* (Vikas Publishing House, Delhi, 1995).

this the British agreed to form alliance with the young Manipur King Gambhir Singh against the Burmese. The alliance succeeded to finally end the Burmese dominion of Manipur with the treaty of Yandaboo in 1825.[24] Though Manipur restored its independence, but it eventually came under the protectorate of the British empire who exercised their influence over Manipur through their 'Political Agents'.[25] However, the giving away of Kabow valley to the Burmese by the British in the treaty strained the Manipur King. The worsening of relation finally led to the Anglo- Manipur War 1891. On 27 April, 1891 Manipur was annexed under the British Colonial Rule.[26]

After the conquest of Manipur, the British employed indirect rule in the Hill Areas of Manipur without interfering with the internal affairs of the hill tribes.[27] Though Raja Churachand, a minor, was handed the administration of Manipur, his jurisdiction was confined to the valley area. The Hill areas on the other hand came under the rule of the British Political Agent who acted on behalf of the Raja Churachand. They made the chief or headmen of villages responsible for administration of villages and also for the collection of the Hill House Tax of Rs.3/- per household annually.[28] It was during this time the that the British bifurcated the North East Frontier without any consideration for ethnic ties of the tribals of the region. In the process

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24 Alexander Mackenzie, History of the Relations of the Government with the Hill tribes of the North East, Frontier of Bengal (Calcutta, 1884, Reprinted 2001).

25 *Kanngchian* (no 18) 45; Phanjaobam Tarapot, *Bleeding Manipur* (HarAnand Publications, Private Ltd., 2003).

26 Ibid.

27 *Kamei* (n 12).

28 Ibid.

many of the ethnic tribal communities ended up being permanently scattered under different State territories, and within the territorial confines of Myanmar and Bangladesh. The British also introduced the concept of 'excluded and partially excluded or the inner line rule'[29] to regulate entry and restriction of trade, possession of land to certain classes or foreigners beyond the schedule inner line without a license.[30] It was intended to protect the backward Hill tribes and their natural resources against the exploit of the more economically advanced and better organized plain people. This rule also found similar expression in the Government of India Act, 1935 as well.[31] Later, similar principles and policies were incorporated in the Constitution of India for administration of the hill tribe areas in the NE Region.

3.3. Constitutional Provisions and the Hill Tribes

The Constitution of India envisages to achieve justice- social, economic and political,[32] for all its citizenry without any discrimination based on caste, race, religion and place of birth etc. These ideals are to ensure fraternity and brotherhood, based on mutual respect and dignity, among all its citizenry in their social, economic, and political interactions. It makes it imperative that Constitutional equality is established for all sections of the society in India. For the administration of the Hill tribes a constitutional scheme of a

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29 The Bengal Eastern Frontier Regulation of 1873 (Notification No. 13) s 2 (IND).

30 B.K. Roy Burman (Rev.*), Alexander Mackenzie, The North East Frontier of India* (1st edn Mittal Publication, Delhi 2016) 255- 256.

31 Kusum and P.M. Bakshi, Customary Law and Justice in the Tribal Areas of Megalaya (1st edn ILI, New Delhi, 1982) 7.

32 The Constitution of India, Preamble (IND).

constitution within a constitution was conceived in the Constitution.[33] The landlocked, underdeveloped, and backward parts of the NE Region is also a sensitive geopolitical zone as it has contiguous borders with China, Bangladesh and Myanmar. The states of Nagaland, Manipur and Mizoram share a 1700 km long porous border with Myanmar. As well, it has a history of protracted insurgency movements in the state of Assam, Nagaland, Manipur and Mizoram.[34]

Special Constitutional provisions of Article 371 A for the state of Nagaland, Article 371 G for the state of Mizoram and Article 371 C for the state of Manipur were promulgated to preserve, protect, and promote tribal ways of life, customs, and customary institutions. This unique creation of the Parliament, also known as 'asymmetric federalism' helps create a platform to voice socio-political and economic aspirations and an equitable environment for self-governance among diverse ethnic tribal groups in these States.[35] The Sixth Schedule is another scheme for tribal self-governance under Articles 244 (2) and 275 (1) of the Constitution which are in place in the states of Assam, Meghalaya, Mizoram, and Tripura. In the state of Manipur Article 371 C is contested by the hill tribes of Manipur on the ground that the Hill Areas administration and governance in terms of land ownership, access to forest lands and forest rights are mired in

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33 Justice Hidayatullah made this pertinent observation in the *State of Nagaland* v. *Ratan Singh*, 1967 AIR 212 (IND).

34 Mizoram MNF movement was finally resolved with the signing of peace according in 1986 after a protracted period of 26 years.

35 Kham Khan Suan Hausing, 'Asymmetry in Local Democracy: An Overview of North East India's Experience' (2003) 2 Indian Journal of Federal Stadies, 105-106.

confusion as it (A.371 C) does not explicitly lay out the powers and functions of Hill Areas Autonomous District Councils unlike the Sixth Schedule provisions.

4. MERGER OF MANIPUR AND CRITICAL EXAMINATION 371-A

Manipur, the jewel of the North East is also locally known as '*sanalaibak'* which can be literally translated as 'land of gold'. This literal allegory is drawn to refer to the highly fertile land in the valley area of Manipur. When India got independence from the British, Manipur was also independent though for a brief period of more than two years from 14th August 1947 to 15th October 1949, during which it enacted its own Manipur State Constitution of 1947.[36] This brief independence was done away with the merger of Manipur into the Union of India (UoI) in October 1949 during the reign of Maharaja Bhodhachandra Singh through a merger agreement reached between the King of Manipur and the Union of India. After its merger to India, Manipur till the 're-organisation of the North Eastern States'[37] was locally self-governed under the Territorial Council Act of 1956, and then under the Union Territories Act of 1963, UT Act, as a part C State, administered by the President through the Chief Commissioner or the Lieutenant Governor.[38]

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36 The Manipur State Constitution Act, 1947 (IND) <www.ohchr.org/sites/default/files/libdocs/HRBodies/UPR/Documents/Session1/IN/COHR_IND_UPR_S1_2008anx_Annex_IV_Manipur_State_Constituti on_Act%2C_1947.pdf> accessed 22 August 2024.

37 The North Eastern Areas (Re-organisation) Act, 1971 (Act 81 of 1971) s 9 (IND).

38 *The Constitution of India* (n 32) art. 239 (1) Save as otherwise provided by

S. 52 of the UT Act is a special provision for the safeguard and protection of tribal ways of life in Manipur. This provision envisions an idea of dual administrative system, one form of administration for the valley area, and another form for the administration of the Hill Areas as declared by the order of the President. It envisages the constitution of Standing Committee (SC) from among the members of the Manipur Legislative Assembly elected from the Hill Areas to oversee administration in the Hill Areas.[39] This SC was mandated to exercise its jurisdiction in the Hill Areas on scheduled matters pertaining to land holdings, regulation of jhum cultivation, managements of forest (other than reserved forest), appointments or successions of Chiefs, social customs, marriage, divorce, inheritance of property etc.[40]

When Manipur achieved full Statehood in 1972,[41] Article 371 C was inserted into the Constitution of India as special provision to protect, preserve and promote the rights of tribals in the Hill Areas of Manipur.[42] Cl.1 envisages the participation of hill tribes in developmental processes in the Hill Areas through tribal self-governance under the supervision of a Hill Areas Committee, HAC.[43]

Parliament by law, every Union territory shall be administered by the President acting, to such extent as he thinks fit, through an administrator to be appointed by him with such designation as he may specify.
(2) Notwithstanding anything contained in Part VI, the President may appoint the Governor of a State as the administrator of an adjoining Union territory, and where a Governor is so appointed, he shall exercise his functions as such administrator independently of his Council of Ministers.

39 Union Territories Act of 1963 (Act No. 20 of 1963) s.52 (1) (IND).

40 ibid s.52 (4).

41 The Manipur State Constitution (n 36) s. 3 (IND).

42 Ibid s. 5.

43 *The Constitution of India* (n 32) art. 371 C (1) (IND).

In furtherance, Cl.2 envisages that the power of the UOI will be extended to give direction to the State of Manipur regarding administration of the Hill Areas based on annual report submitted by the Governor to the President.[44] This arrangement is distinct from the Sixth Scheduled areas. In the Sixth Scheduled areas, the Governor is to exercise its power on the aid and advice of the Council of Ministers as was duly established by the Supreme Court in the case of *Pu Myllai Hlychho v. State of Mizoram*[45]. In a way, it can be premised that the Union of India vide the Governor, in a similar connotation of Governor in Article 239, is indirectly assigned to administer its function in tandem with the recommendations of the HAC.

Simultaneously, the Manipur (Hill Areas) District Councils Act, 1971, the 1971 Act, was enacted by the Union of India with the objective of creating Autonomous District Councils, ADC, in the Hill Areas of Manipur. The passage of the 1971 Act effected the replacement of the Standing Committee with the 'Hill Areas Committee'[46]. In the case of *M.L. Markson and others*[47], a Single Bench of the Manipur High Court held that the 1971 Act was enacted by the UoI as a stand-alone Act unique to the State of Manipur for the Hill areas inhabited by the Scheduled tribes of Manipur.[48] The 1971 Act has been amended four times since its enactment in 1971. Though the Manipur District Councils (Second Amendment) Act, 2000 provided

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44 ibid art. 371 C (2) (IND).

45 Pu Myllai Hlychho v State of Mizoram (2005) 2 SCC 92 (IND).

46 The Manipur (Hill Areas) District Councils Act, 1971 (Act no. 76 of 1971) s. 2 (g) (IND).

47 M.L. Markson and others v State of Manipur (2019) 01 MAN CK 0007 (IND).

48 ibid para 13.

for the repeal of the principal Act of 1971 it was, however, not brought into force. The Amendment Act of 2000 was later repealed by the Manipur District Councils (Third Amendment) Act, 2006.[49] Despite another amendment of the 1971 Act in 2018, the District Councils continued to be empowered to exercise its jurisdiction in statutory matters pertaining to land holdings, regulation of jhum cultivation, managements of forest (other than reserved forest), appointments or successions of Chiefs, social customs, marriage, divorce, inheritance of property etc.[50] The 2018 Amendment additionally provided that all land or other property transferred to the District Council other than those that are allotted or transferred or leased for public purposes under the seal and power of the District Commissioner are to be vested in the District Council.[51] Thus, the sixteen District Councils in the Hill Areas are empowered to administer land and forest under their jurisdiction except for those which are declared reserved forests or protected forest areas by the State.

4.1. Land Pressure and Politicalization of Environmental Degradation in Manipur

The bone of contention for the Meitei majority community, which comprises of around 53 percent of the total population of

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49 The Manipur (Hill Areas) District Councils Act, 2006 (Manipur Act No. 10 of 2006) s. 54 Repeal- The Manipur (Hill Areas) District Councils Act, 2000 is hereby repealed.

50 The Manipur (Hill Areas) District Councils (Third Amendment) Act, 2008 (Manipur Act No.7 of 2008) (IND)

51 Ibid s.44 r.w. s. 44 A (inserted via the The Manipur (Hill Areas) District Councils (Second Amendment) Act, 2006 (Manipur Act No.10 of 2006)).

28,55,744,[52] had always been as to why they have been restricted and boxed in the limited valley area while all the other tribal communities in Manipur have access to land and ownership of land in the valley as well as in the Hill Areas. Manipur, consists of two geographically distinct regions - a small and oval shaped valley at the center covering 2,238 sq. km which accounts for 10% of the total area of the State, encircled by nine hill ranges on all sides, which comprises of 90% of the total geographical area of the state i.e., 20,089 sq. kms.[53] As per available census the population density in Imphal area stands at '631 persons per km^2'[54] while the average State population density is only '128 persons per km^2'.[55] This gap is due to relatively low population density in hill areas i.e. 44 persons per km^2. Rapid urbanization, mobilization and economic progress owing to relative peace in the last decade had created unprecedented pressure on land in the Imphal area. As around 90 per cent of the land mass in Manipur has been scheduled as Hill Areas. Prior to the outbreak of the 2023 ethnic violence there were already sharp and intense contestations among the valley Meitei and tribal hill communities on issues of unequal access to land and resources. These pressing concerns from the masses, and for the need for more accessible land prompted the State Government to re-evaluate land use and revenue policies. Thus, in 2015 the Manipur state government passed the three infamous Bills.

52 2011 Census (IND).
53 Government of Manipur. Economic Survey 1 (2020-21).
54 Ibid.
55 2011 Census (IND).

4.2. The Three Infamous Bills of 2015

The three infamous bills namely the Protection of Manipur Peoples Bill, 2015; Manipur Land Revenue and Land Reforms (Seventh Amendment) Bill, 2015 and the Manipur Shops and Establishments (Second Amendment) Bill, 2015 were passed in the Manipur State Legislative Assembly on August 31st, 2015. It came at a time when ethnic tension and concerns were simmering among the different inhabitants of the State with the signing of the peace accord between the UoI and the NSCN (IM). There was an air of anxiety among the majority Meitei community that the framework might lead to the disintegration of the territory of the State. Through different Civil Society Organisations, CSOs, the majority Meitei intensified their dual demands- the re-implementation of Inner Line Permit, ILP, and the inclusion of the Meitiei community in the Scheduled Tribe, ST, list. The demand for the re-implementation ILP turned volatile when a 16-year boy was accidentally killed in a protest rally. In the aftermath of the tragic incident all educational institutions in Imphal valley were forced to be closed.[56]

For the valley-based Meitei community who were confined within a mere 10 per cent of the total land mass of Manipur, the passing of the Bills was seen as an attempt to correct the lopsided distribution and access to land, a positive step initiated by the State. But in the Hills, the passing of the three Bills reverberated as an attempt by the State to

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56 Phanjoubam, Pradip, 'Manipur in Flames Again Over Demand for 'Inner Line Permit' Protection' *The Wire* (Guwahati 07 July 2015 <www.thewire.co.in/2015/07/12/manipur-in-flames-again-over-demand-for-inner-line-permit-preotection-6106/> accessed 05 August 2024.

subsume the ancestral rights of the hill tribes in their access to land, ownership, and enjoyment of their age-old connection with their ancestral land. The ILP demand and the three Bills turned out to be communal and divisive rather than an inclusive demand as was unexpected the by the Meiteis.[57] On August 18th, 2015 tension erupted between Meitei and Kuki protester in the Manipur- Myanmar border town of Moreh despite the imposition of an indefinite curfew. It resulted in the burning of several houses, including the Office of the Meitei Council.[58]

The hill tribes strongly opposed the three Bills as they feared that it would abrogate constitutional protection enjoyed by them under Article 371 C. They also contested that the Bills would dilute the autonomy of the District Councils, and also curtail the jurisdiction of the District Councils in the scheduled matters pertaining to land holdings, regulation of jhum cultivation, managements of forest (other than reserved forest), appointments or successions of Chiefs, social customs, marriage, divorce, inheritance of property etc. Anticipating that the three bills were a systematic ploy of the Government to erode and decimate their autonomy. Consequently, Churanchandpur, a South District of Manipur, witnessed a sudden outburst of violence on the ensuing night of the August 31st, 2015. During the protest,

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57 Nehginpao Kipgen, 'The Fractious Demand for ILP in Manipur' *The Hindu* (August 27, 2015) <www.thehindu.com/opinion/columns/Comment-article-of-Nehginpao-Kipgen-The-fractious-demand-for-ILP-in-Manipur/article56845192.ece> *last modified 16 November 2021.*

58 "ILP Rally Sparks Clashes at Moreh", *The Imphal Free Press* (Imphal 18 August 18, 2015) </http://kanglaonline.com/2015/08/ilp-rally-sparks-clashes-at-moreh-as-police-remain-mute-indefinite-curfew-clamped/< accessed 05 August 2024.

protesters, mostly from the Kuki-zomi communities, burnt the house of one Member of Parliament, and seven other houses belonging to members of the Manipur State Legislative Assembly elected from different constituencies under Churachandpur District.[59] Nine protesters, including one minor boy, age 11, were tragically killed in cross firing by the Manipur Police Commandos.[60] This unfortunate violence that unfolded on the night of August 31, 2015 may have been the penultimate triggering point that planted the seed of hatred and distrust among the Meitei and Kuki-zo communities which would finally manifest itself in the undoing of the epochal mayhem between the Meitei and Kuki- Zo communities on May 03rd, 2023.

4.3. Politicalization of Environmental Degradation and Influx of Illegal Settlements

In the past few years, it has dawned on the Government of Manipur that there has been unprecedented urbanization, unregulated demographic growth, deforestation, and concerns against jhuming cultivation, and the menace of poppy plantation which are presumed to be creating environmental havoc in the State. Simultaneously, Manipur also has multiple ongoing projects like construction of roads, multiple dam projects etc. Under the aegis of the Act East Policy, it also has grand plans to start trans Asian railways, oil exploration, oil drilling and installation of oil pipeline.[61] According to Jajo Themson,

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59 The Telegraph (02 September 2, 2015) also coverage of the same was made by NDTV.

60 Ibid.

61 IFP Bureau, 'Recognise Indigenous peoples' rights over their Land and forests'

an environmental activist, such grand plans of the Government were against the spirit of sustainable agriculture as 777 villages and 50,000 hectares of prime agricultural land were submerged due to construction of Mapithel dam and Loktak Multipurpose project.[62] He flagged that the proposed 1500 MW Tipaimukh dam in Manipur could potentially potential destroy about 27,000 hectares of forest.[63] He also highlighted that an unaccounted number of birds and honey bees were drowned, and a huge catchment of fish was killed in the Mapithel dam reservoir every year.[64] He further highlighted that these dams were constructed or their construction were initiated by bypassing Environmental Impact Assessment, EIA or without any genuine Detailed Impacts Assessment (DIA) or Holistic Impacts Assessments (HIA).[65]

Of late, environmental degradation political narratives in recent years in Manipur has been linked to an idea to unregulated demographical growth in the Hill Areas dominated by Kuki- zo communities. It is alleged that illegal migration of Kuki-zo communities from neighboring Myanmar, post the military coup in 2021, has caused the mushrooming of villages, encroachment of land and illegal plantation and cultivation of poppy which is causing an

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The Imphal Free Press (Imphal, 28 February 2023) <www.ifp.co.in/manipur/recognise-indigenous-peoples-rights-over-their-land-and-forests> accessed 05August 2024.

62 Jajo Themson, 'Climate Change and Flawed Solution in Manipur' *E- Pao* (Imphal, 23 September 2023) <https://e-pao.net/epPageExtractor.asp?src=features.Climate_Change_and_flawed_solution_in_Manipur_By_Jajo_Themson.html> accessed 05 August 2024.

63 Ibid.

64 Ibid.

65 Ibid.

environmental imbalance in the Hill Areas. Eventually this will cause environmental degradation in the valley areas too.[66] In late 2022, with an apparent attempt to mitigate the alleged environmental degradation in the hill areas, the State gave show cause notices to many villagers in hills on the pretext of climate solution for conservation of forest.[67] In order to quash the genuine claim of the villagers against the show cause notices the State notified the nullification of Forest Settlement Officers, FSO, order of 1971 which excluded three genuine Kuki villages from Khoupum protected forest area in Churachandpur vide the1961 order.[68] Consequently, the villagers received two simultaneous show cause notices, one during late 2022, and the other in January 2023. The villagers contested the allegations of illegal encroachment by annexing relevant documents, dating back to the mid- 19th century, along with the 1971 FSO exclusion notification order of their villages in support of their legitimate claim. The Government anyway displaced them by razing down their village on the last week of February, 2023.[69]

With the publication of a fresh report of mushrooming on around 200 new villages in Churachandpur district , and around 500 new villages in Kangpokpi District in recent years and in continuation with the Government overdrive on illegal village eviction, the State

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66 P.K. Devi, 'Manipur intensifies efforts to tackle illegal migration and protect forests, says CM N Biren Singh' *India Today NE* (Guwahati, 26 February 2023) <www.indiatodayne.in/manipur/story/manipur-intensifies-efforts-totackle-illegal-migration-and-protect-forests-says-cm-n-biren-singh-518979-2023-02-26> accessed 05 August 2024.

67 Ibid.

68 Manipur Report, (2023) 29 <https://cpiml.net/sites/default/files/2023-09/20230924_Manipur%20report_CPIML_AIPWA_AILAJ_Du-w.pdf> accessed 05 August 2024).

69 Manipur Report (n 68) 29-30.

announced the formation of the Population Commission of Manipur in February, 2023 to detect and prove the influx of illegal immigration in the State.[70] On February 15, 2023 in pursuance of the State directives to the Deputy Commissioner, DC, of Churachandpur ordered verification drive in several villages under the Churachandpur and Mualnuam sub-divisions in South Manipur to identify probable 'illegal immigrants' from Myanmar.[71] In furtherance to the same, eviction would be carried out by bringing in JCBs, and by deploying hundreds of police personnel and paramilitary forces to prevent any untoward incident.[72] In the valley area too, concerns were raised by the villagers over the arbitrary declaration of the famous Loktak wetland as forest land and wildlife sanctuary without weighing the drastic implication on the villager's rights to fishing, farming etc.[73]

Despite the cacophony of linking environmental degradation with unregulated demographic growth; illegal plantation and cultivation in the hills and the valley, it is worth noting that traditional cultivation or the practice of permanent cultivation of wetlands in the valley area among the Meiteis covers around 4.97 per cent of the valley area.[74] While the slash and burn technique of jhum (shifting) cultivation

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70 Ibid.

71 Land Conflict Watch, Declaration of village land as protected forest areas in the Hill district of Manipur triggers statewide protest (18 April 2023) <www.landconflictwatch.org/conflicts/declaration-of-village-land-as-protected-forest-areas-in-the-hill-district-of-manipur-triggers-statewide-protests > accessed 05 August 2024.

72 Ibid.

73 Manipur Report (n 68).

74 Planning Department, Government of Manipur, 'Executive Summary', Manipur Vision 2030: Leaving No-one Behind – Achieving inclusive growth and the sustainable development goals (November 2019) 23- 9.

popular in the hill areas cover a mere 5.55 per cent areas in the hill districts of Manipur.[75] Thus, the total cultivated areas in the hill and valley regions are 1,49,430 hectares and 1,94,190 hectares respectively which amounts to around 10.37 per cent of the entire geographical area of Manipur.[76] On the other hand the India State of Forest Report states that in 2017, Manipur had a forest cover of 77.69% of its total area i.e. 17,346 sq.km, which was an increase of 1.18% from 2015, when forest cover was 76.51% of the total geographical area of the State.[77] This increase of 263 sq.km. of forest cover has been attributed to the conservation and plantation activities as well as the re-growth of shifting cultivation areas.[78]

4.4. Sustainable Growth Policy and its Politicalization

In order to balance economic growth and sustainable growth, the Manipur State has encapsulated multiple short- term and long term missions like the State Mission for Ecosystem, Biodiversity & Livelihood Sustainability, Water Resource, Sustainable Agriculture, Health, Forest resources conservation, Enhanced Energy Efficiency & Conservation, Urban Planning and sustainable Habitat and Climate Change Strategies-Knowledge and Information.[79] These policies are to accentuate massive government economic policies pertaining to exploration and exploitation of the Ophiolite Belt which extends from Jessami (Ukhrul District) in the north to Moreh (Tengnoupal District)

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75 Ibid.
76 ibid 23.
77 Manipur Report (n 68); Planning Department (n 74) 160.
78 Manipur Report (n 68) 31.
79 *Themson* (n 62).

in the south rich in metallic and non-metallic minerals like limestone, chromite, PGE (Platinum Group of Elements like platinum, nickel, vanadium, etc.).[80] As well as to expand exploration on the Western margin of Manipur including portions of the districts of Tamenglong, Jiribam, Churachandpur and Pherzawl, which are reportedly rich in hydrocarbons (oil and gas) and falls under the Assam-Arakan Basin.[81]

The Kuki- Zo communities objected to the issuance of license for oil and gas exploration which were proposed to be carried out in two blocks 'spread over the districts of Pherzawl, Churachandpur, Tamenglong and Jiribam'[82] on the ground that these are areas predominantly inhabited by the Kuki–zo communities. On the other hand, the Meiteis are apprehensive that the proposed exploration has the potential to destabilize their economic aspirations, and also feared that they might be left out from the prospects of huge economic benefits from it due to the constitutional restrictions of Article 371 C. In the absence of any durable solution in sight to undo this sharp contestation between the Meitei community and the hill tribes, the only plausible 'trade off' for Meiteis was to embrace 'oneness in social and constitutional status of ST' like the rest of the tribal people in the Hill Areas. Incidentally, the valley saw exponential call among the Meiteis for revival of their indigenous *sanamahi* religion. This was followed by the formation of the Schedule Tribe Demand Committee of Manipur,

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80 Dilip Kh. Singh, 'Oil and gas scenario in Manipur' *The Sangai Express* (Imphal, 17 March 2023) <www.thesangaiexpress.com/Encyc/2023/3/17/Kh-Dilip-SinghEastern-margin-of-Manipur-also-known-asOphiolite-Belt-in-geology-extending-from-J.html> accessed 05 August 2024.

81 Ibid.

82 Manipur Report (n 68) 24.

STDCM, in 2012. The STDCM has oriented its academic discourses to accentuate and establish that Meiteis were already entered as one of the tribes of Manipur in the Official Records during the British Raj itself.83 They articulated that, as an indigenous tribe themselves, they are naturally equipped to manage, protect, and preserve nature and natural resources. A prominent Meitei woman leader, an adviser to the famed "*meira paibi*", claimed that the indigenous ancient *sanamahi* religion promote reverence of forest, and hence destruction of forests hurts their sentiments.[84]

5. ADMINISTRATIVE CHALLENGES TO MEITEI ST DEMAND AND THE FLARING UP OF THE EPOCHAL MAYHEM

The conception of tribe in British India was mostly on the basic criteria of the kind of life an isolated community led in backward areas or land locked hill areas who are not yet assimilated in the main body of people.[85] Post independence, the Constitutional conception of Scheduled Tribe under Article 342 and Article 366, on the other hand is premised on the 'deeming of' certain section of society or community who may be for reasons of backwardness; or due to historical and systematic exploitation are deprived of social, economic, and political upliftment. The state may recommend recognition for

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83 Census of India 1891 A General Report, 194; Census of India 1901 Volume 1, p.121; Census of India 1931, Vol. 1, p. 430, para 181 <www.stdcm.org/about.html> accessed 05 August 2024.

84 Manipur Report (n 68) 31.

85 L. Lam Khan Piang, 'Meiteis have not been 'Denied' ST Status. Exclusion Was Their Choice' *The Wire* (Guwahati, 26 May 2023) <https://thewire.in/caste/meitei-st-status-exclusion-choice> accessed 05 August 2024.

certain deprived section within its territory to be included in the ST list in order to uplift them. Therefore, a tribal community or a collective group or an individual is deemed to be a 'Scheduled Tribe' in their respective relation to the State for the purposes of positive discrimination. The Constitutional provisions of Articles 342 and Article 366 (25) are, thus, constitutional schemes extended to ST communities to achieve social, economic, and political upliftment.

5.1. Meitei ST Demand and the Historical Undoing

In Manipur except for the Meiteis, the majority of the tribes have been listed in the ST category since the President's (ST) Order 1950[86] and also, vide the modification list of 1956.[87] The STDM demand for ST got momentum in the early 2012 wherein they contended that in the British Census from 1891 to 1949, they were already officially recorded as one of the tribes of Manipur.[88] In the JH Hutton Census Report of 1931on depressed classes, they were classified as wholly Hindu tribe but retaining their distinctive language and culture.[89] According to the STDM, their non-inclusion in the ST list excluded them from the constitutional safeguard of Article 371 C. They argue that the lack of constitutional safeguards for Meiteis impeded the preservation of their ancestral land and ethnic identity.[90] It had also disadvantaged them in their interaction with other hill

86 These Orders were based on the list of depressed classes framed by Dr JH Hutton in his Census Report 1931.

87 These orders were based on KaKa Kalelkar Backward Classes Commission report of 1956, the Second Backward classes Commission.

88 *Piang* (n 84).

89 Ibid.

90 Ibid.

tribes, and restricted their access to land and its natural resources in the hill areas.[91] It is their arduous demand that the Meitei be enlisted as ST. They harp that once the constitutional errors of 1950 and 1956 are corrected, Manipur will become a composite ST State where there is equal respect for all indigenous communities or *Yelhoumee* in Manipur.[92] Aspiring to succeed, a writ petition was filed in the Manipur High Court pleading for the recognition of Meitei as a Scheduled Tribe.[93]

5.2. Protest Against the Manipur High Court Order and the Unleashing of the Ethnic Mayhem

The Single Bench of Manipur High Court in the case of *Mutum Churamani and others v. State of Manipur,*[94] heard the petitioner's plea for inclusion of Meitei in the ST list with utmost concern and empathy. Concurring with the argument of the petitioner, the Court commented that,

> "*…the State was violating the right to equality and right to life with dignity enshrined under Article 14 and 21 of the Constitution, as in the case of other tribes of the State, the respondent State had recommended the inclusion in the list of Schedule Tribe, without any hesitation, but in the case of the Meitei community, which is one of the major tribes of Manipur, the recommendations were not made by the respondent."*[95]

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91 Ibid.
92 Ibid.
93 Mutum Churamani and others v. the State of Manipur WP(C) No. 229 of 2023 (IND).
94 ibid.
95 ibid para 15.

The Court further commented that the petitioners and other unions have been fighting for long years for the inclusion of the Meitei community in the tribe list of Manipur.[96] After the final hearing, the Single bench of Justice M.V. Muralidaran directed the State to submit its recommendation in reply to the letter dated 29-05-2023 of the Ministry of Tribal Affairs, Government of India.[97] The Court also directed to submit the recommendation in reply to the letter dated 29-05-2023 of the Ministry of Tribal Affairs, Government of India within four weeks.[98]

In protest to the High Court's direction for the recognition of the Meitei as ST, the All Tribal Student Union of Manipur, ATSUM, organized a 'solidarity march' in Churachandpur on May 03rd 2023. ATSUM contended that Meitei community was much more advanced than the other Hill tribes, and thus their inclusion to the ST list would impede their prospects of admission to higher education and also job prospects, thereby causing existential threat to their well-being. They further lamented that it was the ploy of the Meitei community to grab their ancestral lands, and an attempt to extinguish their age old connect with their tribal land and their tribal ways of life. They persisted that the Meitei ST demand is nuanced as they themselves have opted out of it, once in the 1950 census and again for the second time in the re-modification of the ST list during the Kalelkar Commission of 1956.[99]

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96 ibid.

97 ibid para 16.

98 ibid para 17 (ii).

99 Nagaranmi Shimray, The Kalelkar Commission of 1956: Meitei Exclusion from

At that time, they considered it denigrating for chaste Hindus like the Meiteis, to be termed as ST.[100]

In the valley, on the same day of May 03rd 2023 a counter blockade against the solidarity march of ATSUM was organized by some valley-based organizations. By evening, skirmishes between the Meitei and Kuki- zomi communities escalated into a full-fledged ethnic violence of an epochal scale. There were reports of attacks, burning of houses and places of worship, and reports of killings and counter killings in both the Imphal Valley and Churachandpur District. According to latest report, more than 175 people have been killed; more than 386 places of worship (254 Churches and 132 temples) have been desecrated and burnt to the ground; more than 4,786 houses burnt down; and more than 70,000 people have been internally displaced from their homes.[101]

5.3. Condemnation and consternation of the Manipur High Court Judgement

The Single Bench order of the Manipur HC in the *Mutum*

ST List is by their own choice' *The Sangai Free Press* (Imphal, 09 October 2023) <www.thesangaiexpress.com/Encyc/2023/10/9/Ngaranmi-Shimray-1-KaKa-Kalelkar-Backward-Classes-Commission-report-of-1956-also-known-as-the-Second-Backw.html> accessed 05 August 2024.

100 Ibid.

101 HT Correspondent, 'Manipur Violence : Death toll reaches 175 mark, few stolen weapons recovered, says Police' *Hindustan Times* (Imphal, 15 September 2023) <www.hindustantimes.com/india-news/manipur-toll-175-few-stolen-weapons-recovered-police-101694716778763.html> Yaqut Ali, 'The Manipur Crisis in Numbers: Four Months of Unending Violence' *The Wire*, (09 September 2023) <https://thewire.in/security/the-manipur-crisis-in-numbers-four-months-of-unending-violence> accessed 05 August 2024.

Churamani case102, came under much condemnation and dismay as it is believed to be one of the many factors that led to the conflagration and eventual unleashing of the ethnic violence on May 03rd 2023.[103] The direction of the Hon'ble HC was not only controversial but also contradicted the directive of the Supreme Court in the case of *State of Maharashtra v. Milind and others*.[104] The Appellate Court in this case held that,

> "…*Courts cannot and should not expand jurisdiction to deal with the question as to whether a particular caste, sub-caste; a group or part of tribe or sub-tribe is included in any one of the Entries mentioned in the Presidential Orders issued under Article 341 and 342 particularly so when in Clause (2) of the said Article, it is expressly stated that said orders cannot be amended or varied except by law made by Parliament.*"[105]

The HAC, Chairperson and BJP MLA Dinganlung Gangmei filed a Special Leave Petition in the Supreme Court, challenging the order of the Manipur HC in the case of *Dinganglung Gangmei* v. *Mutum Churamani Meetei.*[106] It was argued that the Hon'ble HC had erred in

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102 Mutum Churamani (n 93).

103 Padmakshi Sharma, 'Supreme Court Criticises Manipur High Court Directing Sate Government to Consider Meitei Tribe for ST List' *Live Law* (17 May 2023) <www.livelaw.in/top-stories/supreme-court-condemns-manipur-high-court-order-recommending-meiti-tribe-for-st-list-228905> accessed 05 August 2024.

104 (2001) SCC 4 (IND).

105 ibid.

106 *Dinganglung Gangmei v. Mutum Churamani Meetei*, Special Leave Petition (civil) diary no(s). 19206/2023 (IND).

three instances while issuing the order in question.[107] Firstly, it erred in directing the State government to submit any recommendation for inclusion of a community in ST list just because a representation exists.[108] Secondly, it erred in concluding that the issue was pending for 10 years and that the Meiteis were tribals.[109] Thirdly, the Hon'ble HC erred in that even if such directions were to be issued, the HAC ought to have been given notice and heard.[110]

By the time the matter was first listed for hearing on May 8th, 2023 before the three Judges Bench of the Supreme Court, the rapacious ethnic violence had already conflagrated beyond control. Taking note of the humanitarian crises, the Appellate Court expressed its concerns over the loss of human lives and the destruction of homesteads and places of worship.[111] Thus, the Court emphasized that, there was a need to:

a) ensure that due arrangements are made in the relief camps by providing all basic amenities in terms of food and medical care;[112]

b) take all necessary precautions for the rehabilitation of displaced persons;[113]

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107 Abhinay Lakshman, "Appeal filed in Supreme Court against High Court order at the centre of tensions", *The Hindu* (Delhi, 05 May 2023) <www.thehindu.com/news/national/other-states/manipur-violence-appeal-filed-in-supreme-court-against-hc-order-at-the-centre-of-tensions/article66817506.ece> accessed 05August 2024.

108 ibid.

109 ibid.

110 ibid.

111 Dinganglung Gangmei (n 106) para 7.

112 ibid para 7 (i).

113 ibid para 7 (ii).

c) protecting the places of worship.[114]

The matter was again listed for hearing on May 17, 2023. The Appellate Court apart from taking stock of the status report taken up the State to bring about normalcy to the law and order situation in the State, granted an extension of year for the implementation of the impugned High Court order.[115] It also took note that the HC direction was in contradiction to the settled position of law which was expounded in the case of *Milind & Ors* and directed that HC order be stayed for one year.[116] In a review petition, the Manipur HC later deleted para 17 (iii) of the impugned judgement of *Mutum Churamani* on February 21, 2024.[117]

6. FINAL OBSERVATIONS

The Manipur epochal mayhem maybe surmised as the undoing of many administrative failures stemming from partisan politics and, complex lopsided administrative arrangements in the valley and hill districts. It is also argued that lethargic and possibly biased and ill-conceived environmental policies for sustainable and inclusive growth of the State were other contributing factors. Given the air of complex ethnic equations, the State should have for all its developmental policies- projects which were completed, or which are being undertaken or are likely to be undertaken, ensure that due process of law and the rule of law must always be the norm. As well as, there must

114 ibid para 7 (iii).
115 ibid heard on 17/05/ 2023 para 1 and 3.
116 ibid para 4.
117 *Mutum Churamani and others v. the State of Manipur*, 2024 SCC online Mani 38, Decided on: 21/02/2024 (IND).

be adherence to the mandated provision of S.2 of the Forest Conservation Act (FCA) 1980 and FRA, 2006 and the Ministry of Environment and Forest Climate Change policies for forest and environmental clearance. Arbitrary show cause notices and the threat to evict and the actual eviction of villagers by the State in a subterfuge and polarizing way, and the machination of hatred by othering as illegal immigrants or poppy planters in the garb of sustainable governance and protection of environment larks of nothing but administrative deadwood.

The Hill tribes accused the valley community of employing of state machination in an attempt to usurp systematically, and to sinisterly control and decimate their constitutional autonomy, and their age-old connection with their ancestral lands in the Hills. The Meitiei argue that being left out of the ST list was a historical wrong as it had denied them the constitutional protection. Even though they themselves are indigenous tribe or *yelhoumee*, by dint of Article 371 C they are restricted to only 10 per cent of the State's territory when 90 per cent of land are available to the other hill tribes for private ownership, community ownership or ownership under scattered Chieftainships. They allege that the ethnic kinship shared by the Kuki-zomi of Manipur with their kins in Myanmar had spiked illegal influx of migrants in Manipur. They believe that this demographic imbalance had let to unregulated felling of trees, and plantation of poppies in vast acres of land in the hill tracts.

7. CONCLUSION

It is yet to be verified that new villages in Kuki- zomi communities dominated areas have indeed been mushrooming in recent years. Other than the allegation of illegal influx of people from Myanmar, the mushrooming of new villages could also be attributed to the relics of internal displacement of people in the hill areas due to the erstwhile Naga- Kuki war of the early 90s and the Kuki- Paite wars of late 90s. It is also possible that it is due to the innate flaw of hereditary ownership of village land by Kuki Chiefs. According to Kuki customs any ambitious villager who aspired larger influence and control in the village could easily break away from his parent village to establish a new village where he himself could become the Chief.[118] It may also be due to an utter lack of administrative will on the part of the HAC to acknowledge, discuss, and enact rules and regulations to be placed before an appropriate forum to check illegal influx in the village. It is one thing for the HAC to conveniently blame the State for all the ills in the Hill Areas and another for it to take responsibility and initiate administrative reformation to streamline administrative contamination in the Hill Areas. In one newspaper article, similar concerns were echoed by Gangmumei Kamei, a renowned intellectual, wherein he had lamented that,

> "…*The leaders who are supposed to be key players in the HAC are more obsessed with their identity political aspiration and competition to get benefits of the office of the Chief Minister and other Ministers*

118 Manipur Report (n 68) 28.

> *keep their eyes shut on the problems to be discussed in the Committee. They have not succeeded in evolving common ground or consensus on common tribal issues like district autonomy, reservation for Scheduled Tribes in recruitment to Government services and problems of land laws in hill areas.*"[119]

The twin Writ Petition cases of *M.L. Markson and others* v. *State of Manipur and Others*120, and *Namsinrei Panmei and others v. State of Manipur and others*121 pertaining to the question of the constitutionality of the removal of the Chairman and Vice Chairman of ADCs of Senapati and Tegnoupal Districts of Manipur maybe a poignant observation. Anyway, it is for the Government in consultation with the HAC and other stake holders like Village Councils, the District Councils and the Chiefs of the villages, to take harmonious and collective initiation in resolving the pressing matter.

Likewise, holistic attempts must be made to resolve the sensitive issue of the hill people's right to access reserved and protected forest areas, including the issues of presumed or probable nexus of environmental degradation due to the practice of jhuming cultivation in the hills; and the contentious allegation of poppy plantations in vast hill tracts. Informed, and inclusive consultation under the primary participation and active supervision of the State, the HAC and CSOs

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119 Gangmumei Kamei, 'Hill Areas Committee (HAC) of Manipur Legislative Assembly: An Assessment, Part -2' *E- pao* (Imphal, 17 December 2012*)* <https://epao.net/epSubPageExtractor.asp?src=%20news_section.opinions.Politics_and_Governance.Hill_Area_Committee_of_Manipur_Legislative_Assembly_An_assessment_Part_2> accessed 05 August 2024.

120 (2019) 01 MAN CK 0007 (IND).

121 (2018) 09 MAN CK 009 (IND).

along with all the stake holders must be initiated to resolve the sharply contested distribution of land, and the related environmental issues at the micro and macro level.

The vicious trend of virtue signaling by one community against the other community terming them as illegal immigrants, poppy cultivators and squarely blaming the other for environmental degradation is anti-thesis to the tenets of ethical governance, and the very Constitutional spirit of brotherly fraternity. There is the likelihood that these complex completing claims are ignored or overlooked on feeble grounds of terming it as a protracted divisive volatile ethno-tribal issue peculiar to the State. However, in the absence of durable solution to these sharply contested arguments on land and environmental degradation owing to administrative deadwood, the conflagration in Manipur could burn even more intense and furious, and it may, in the future, engulf in its inferno the other indigenous tribes in the region.

ENVIRONMENTAL LAW IN INDIA: TOWARDS BALANCING OF INTERESTS OR A NEOLIBERAL TURN?

*Sujith Koonan & Vishakha Singh**

Abstract

Environmental Law in India is going through substantial changes. The intervention of the neoliberal paradigm, which is a powerful force that prioritises economic growth over people and environmental concerns, is slowly undermining the foundations of the legal framework relating to the environment. The intricate and complex mechanisms through which this transformation is progressing call for an action. This paper begins by covering the historical path of environmental law in India by pinpointing the important achievements that shaped the development. Further, it explores the ways in which neoliberal theory is infused into the fabric of environmental justice. More specifically, this paper examines the role of the judiciary and executive in legitimising ex-post facto environmental clearance and rapid EIA, irrespective of the detrimental effects they are carrying in the garb of development.

Keywords: Neoliberalism, India, Environment, Rapid EIA, Justice.

1. INTRODUCTION

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The trajectory of the development of environmental law in India could be told in different ways. It depends upon our conception of the idea of India and the purpose of the analysis. For instance, one could go back as far as possible to glorify the so-called 'in harmony with nature' life led by wanderers and gatherers. But that would then won't be peculiar to the Indian sub-continent but pretty much to all civilisations. Another way to analyse the development of environmental law in India is to focus on enacted laws and customary practices that evolved at a time when human beings acquired and constantly enhanced the capacity to change the ecosystem dramatically, for instance, since the beginning of industrialisation. This may lead us to measures such as restriction or prohibition of hunting or regulation of human activities to prevent water pollution. This is followed by laws during the colonial period as exemplified by forest legislations of the 18th and 19th centuries and environmental laws adopted after independence.

Independent India, to a great extent, continued with the colonial environmental law. At the same time, a new phase of development is believed to have started with the Wildlife (Protection) Act, 1972 and the Water (Prevention and Control of Pollution) Act, 1974. Within two decades, several other statutes were adopted such as the Air (Prevention and Control of Pollution) Act, 1981; the Environment (Protection) Act, 1986 and the Biological Diversity Act, 2002. This development was partly in response to the emerging environmental crises in India, such as water pollution, and partly in response to the developments at the international level. For instance,

the link between development at the international level and the adoption of environmental statutes has been explicitly mentioned in the cases of the Environment (Protection) Act of 1986 and the Air (Prevention and Control of Pollution) Act of 1981.[1] Since then, environmental law in India has expanded significantly, for instance, through the adoption of specific rules for different kinds of wastes[2], the establishment of the National Green Tribunal[3], among other things. The higher judiciary has also played crucial roles, for instance, by articulating the fundamental right to environment and by declaring different environmental law principles as part of environmental law in India.[4]

The development of environmental law in India has been a subject matter of scholarly work.[5] This paper aims to focus on certain recent trends in the environmental law landscape in India wherein

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1 See Preamble part of the Environment (Protection) Act, 1986 and the Air (Prevention and Control of Pollution) Act, 1981.

2 See eg Solid Waste Management Rules, 2016; Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016

3 See the National Green Tribunal Act, 2010.

4 For the role played the higher judiciary in India in the development of various principles of environmental law, see Shibhani Ghosh (ed), Indian Environmental Law: Key Concepts and Principles (Orient Blackswan, 2019).

5 Eg Philippe Cullet, Lovleen Bhullar and Sujith Koonan (eds), *The Oxford Handbook of Environmental and Natural Resources in India* (Oxford University Press, 2024); Kanchi Kohli and Manju Menon, *Development of Environmental Laws in India* (Cambridge University Press, 2021); Lavanya Rajamani, 'Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability', 19(3) *Journal of Environmental Law* 293-321 (2007); Anuj Bhuwania, 'The Case that Felled a City: Examining the Politics of Indian Public Interest Litigation through One Case', 17 *South Asia Multidisciplinary Academic Journal* (2018), DOI: https://doi.org/10.4000/samaj.4469; Nivedita Menon, 'Environment and the Will to Rule: Supreme Court and the Public Interest Litigation in the 1990s', in Mayur Suresh and Siddharth Narain (eds), *Shifting Scales of Justice: The Supreme Court in Neo-liberal India* (Orient Blackswan, 2014), at p. 59.

changes are being introduced through judicial interpretations and executive interventions. While innovative interventions by the judiciary and the executive are not new and per se not a problem, some of the recent changes raise questions about the political economy of such changes and their propriety from the point of view of protection and conservation of the environment.

The paper examines how environmental law in India is undergoing transformation under a neoliberal paradigm that prioritizes economic growth over environmental protection. The first section of the paper looks at how legal rules and processes are diluted to serve the corporate interests at the expense of the marginalized groups and the environment in the neo-liberal paradigm. The second section of the paper examines how the higher judiciary and the executive legitimised and legalised the ideas of *ex post-facto* environmental clearance and the use of rapid EIAs. The third section discusses social, economic, and political ramifications and dimensions of these fragmented modifications implemented *via* judicial and executive measures circumventing public scrutiny and contributing to the wider "ease of doing business" policy that erodes environmental rule of law and environmental justice. The last part is the conclusion that captures the key arguments and observations in the paper.

2. ENVIRONMENTAL LAW IN THE NEOLIBERAL PARADIGM

According to David Harvey, neoliberalism is 'a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private

property rights, free markets, and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices.'[6] In the neoliberal paradigm, the environment is regulated primarily through markets, and natural resources are increasingly subjected to privatisation and turned into commodities.[7]

The underlying context is the failure of the state-driven command and control approach towards environmental protection. Market-based interventions are promoted as an alternative to the traditional regulations on environmental protection. It is based on the effectiveness of incentives for producers and consumers to change their behaviour to use natural resources more efficiently, instead of forceful enforcement of legal rules by the State.[8] Neoliberal conservationism further promises 'democracy and participation by dismantling restrictive state structures and practices' and promotes 'green business practices'.[9] Overall, it envisages a scenario where the goals of economic prosperity and social justice are realised without compromising environmental sustainability.

However, the process may come at a huge cost to the poor and the marginalised as well as the environment.[10] The neoliberal paradigm

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6 David Harvey, *A Brief History of Neoliberalism* (Oxford University Press, 2005), at p. 2.

7 Eve Anne Bühler, Pierre Gautreau and Valter Lúcio Oliveira, '(Im)Pertinences of a Theoretical Approach: the Neo-liberalization of Nature', 32 *Sociedade & Natureza* 526-539 (2020).

8 See Asian Development Bank, 'Greening Markets: Market-Based Approaches for Environmental Management in Asia' (Asian Development Bank, 2021).

9 Jim Igoe and Dan Brockington, 'Neoliberal Conservation: A Brief Introduction', 5(4) *Conservation & Society* 432-449 (2007).

10 Manisha Rao, 'Reframing the Environment in Neoliberal India: Introduction to the Theme, Sociological Bulletin', 67(3) *Sociological Bulletin* 259-274 (2018).

ignores the fact that the underlying causes of environmental crises are found in the capitalist system and at the same time, it facilitates or strengthens the capitalist mode of the economy that essentially requires unmindful exploitation of people and the environment.[11]

The state in the neoliberal paradigm tends to legitimise and facilitate 'a good business climate' even at the cost of the collective rights of people and the value of protection of the environment.[12] Law is an important tool through which the neo-liberal state plays its roles. This involves reorganising law to legitimise the exploitation of the poor and the marginalised as well as the environment. Environmental law undergoes changes in different ways to protect the interests of economic and business actors or entities. Sanu observes that environmental law in India has witnessed significant changes in the neoliberal era where aggressive free-market policies and "ease of doing business" led to the weakening of environmental standards to promote economic growth and foreign investment.[13] Dharmadhikary observes that '…the influence – or pressure – of "ease of doing business" is increasingly seen more directly on the design and structuring of environmental law and regulation itself'.[14]

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11 Michael M'Gonigle and Louise Takeda, 'The Liberal Limits of Environmental Law: A Green Legal Critique', 30 (3) *Pace Environmental Law Review* 1005 (2013).

12 Harvey (n. 6) at 70.

13 MK Sanu, 'Environmental Law in An Aggressive Neo-Liberal Era: An Account of Environment Law Reform Initiatives in India' (*LiveLaw*, 16 April 2018) < https://www.livelaw.in/environmental-law-aggressive-neo-liberal-era-account-environment-law-reform-initiatives-india/> accessed 25 March 2024.

14 Shripad Dharmadhikary, 'Privatisation of Natural Resource-Based Sectors, Ease of Doing Business, and the Law', 19 (1) *Law, Environment and Development Journal* (2023), <https://lead-journal.org/content/a1911.pdf> accessed 02 April 2024.

The neoliberal paradigm has arguably influenced the judiciary also. Thus, Parikh and Sahu observe that since the 1990s, the higher judiciary in India, particularly the Supreme Court, has taken a more lenient approach to big infrastructural projects and this stance, according to them, is 'motivated by neoliberal principles'.[15] It is also argued that the judiciary has relied on cost-benefit analysis of developmental projects where economic benefits are given priority over environmental benefits.[16] It appears that the neoliberal paradigm is the default prism through which all policies and values are being designed and judged. This does not mean that environmental concerns have always been side-lined. In fact, in many cases where environmental concerns were pitched against the interests of the poor and the marginalised such as, workers and farmers, the judiciary has sided with environmental concerns.[17]

The theoretical framework of neo-liberalism helps us to explain the probable transformation of environmental law (and law in general) to achieve the goal of development and economic growth. It also unravels the pro-active role of the state through its various agencies and institutions in facilitating and protecting the interests of corporate entities and actors. In this context, the following sections of

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15 Sanjay Parikh and Geetanjoy Sahu, 'Has the Judiciary Abandoned Environment for Neoliberalism?, 58 (13) *Economic and Political Weekly* (2023), <https://www.epw.in/engage/article/has-judiciary-abandoned-environment-neoliberalism> accessed 03 April 2024

16 Shiju Mazhuvanchery, 'Neoliberalism, Environmental Protection and Regulation of Land', Varsha Bhagat-Ganguly (eds), *The Land-question in Neoliberal India: Socio-Legal and Judicial Interpretations* (Routledge, 2021), at p. 192.

17 Manoj Mate, 'Globalization, Rights, and Judicial Review in the Supreme Court of India', 25(3) *Washington International Law Journal* 643-671 (2016).

the paper discuss some of the recent trends through which drastic changes are being introduced in environmental law in India.

3. TALES OF DILUTION OF ENVIRONMENTAL LAW

This section of the paper focuses on certain key recent changes to environmental law in India introduced by the judiciary and the executive.

3.1. Ex-post facto Environmental Clearance

In 2011, in *Lafarge* case, the question of *ex-post facto* environmental clearance came up for discussion before the Supreme Court of India.[18] While the Court did not find any problem with the process relating to environmental clearance in this particular case, it commented, or rather cautioned, on the scenario of developmental activities starting their operations without environmental clearance and getting it done subsequently. The Court observed that '…the government is also faced with a *fait accompli* situation which in the ultimate analysis leads to grant of ex facto clearance'.[19] In order to avoid such situations, the Supreme Court suggested the setting up of a robust institutional mechanism for 'appraising projects, enforcing environmental conditions for approvals and to impose penalties on polluters'.[20]

In 2017, in *Common Cause*, the Supreme Court came up with a more categorical observation on the idea of *ex post facto* environmental

18 Lafarge Umiam Mining Pvt. Ltd. v. Union of India (2011) 7 SCC 338.
19 *Id. at* para 32.
20 *Id. at* para 15.

clearance.[21] The Court underlined the importance of obtaining 'prior' environmental clearance as opposed to *ex post facto* environmental clearance. It was held that '…the grant of an *ex post facto* environmental clearance would be detrimental to the environment and could lead to irreparable degradation of the environment'.[22] Further, it was held that 'the concept of *ex post facto* or a retrospective environmental clearance is completely alien to environmental jurisprudence'.[23]

In *Alembic Pharmaceuticals*[24], the Supreme Court echoed the *Common Cause* and held that:

"The concept of an ex post facto EC is in derogation of the fundamental principles of environmental jurisprudence and is an anathema to the EIA notification dated 27 January 1994. It is, as the judgment in Common Cause holds, detrimental to the environment and could lead to irreparable degradation. The reason why a retrospective EC or an ex post facto clearance is alien to environmental jurisprudence is that before the issuance of an EC, the statutory notification warrants a careful application of mind, besides a study into the likely consequences of a proposed activity on the environment. An EC can be issued only after various stages of the decision-making process have been completed. Requirements such as conducting a public hearing, screening, scoping and appraisal are components of the decision-making process which ensure that the likely impacts of the industrial activity or the expansion of an existing industrial activity are

21 Common Cause v. Union of India (2017) 9 SCC 499.
22 *Id. at* para 125.
23 *Id. at* para 19.
24 Alembic Pharmaceuticals Ltd. v. Rohit Prajapati (2020) 17 SCC 157.

considered in the decision-making calculus. Allowing for an ex post facto clearance would essentially condone the operation of industrial activities without the grant of an EC. In the absence of an EC, there would be no conditions that would safeguard the environment. Moreover, if the EC was to be ultimately refused, irreparable harm would have been caused to the environment. In either view of the matter, environment law cannot countenance the notion of an ex post facto clearance. This would be contrary to both the precautionary principle as well as the need for sustainable development."[25]

The Court went on to underline the fact that the industrial units in question were operating in violation of law and without necessary permissions and clearances. Nevertheless, the Court did not agree with the decision of the National Green Tribunal to issue a direction to close the units. The Supreme Court, in fact, relied on what it called a 'balanced approach' and invoked the principle of proportionality to conclude that the remedy of closing the industrial units is disproportionate to the violations they had committed. Thus, the Court directed the industrial units to pay compensation for the purpose of restitution and restoration of the environment. The Court, interestingly, claimed its decision as 'in the interest of justice' and observed that the industrial units had made infrastructural investments and employed significant number of workers.[26] In effect, *Alembic Pharmaceuticals* took an in-principle position against the idea of *ex post facto* environmental clearance, but decided not go to the extent of

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25 *Id. at* para 23.

26 *Id. at* paras 38 & 39.

shutting down the units in this specific case, but asked the defaulters to pay compensation and continue to work. The Court found the measure of shutting down the units a disproportionate one and asking the defaulters to pay compensation as the appropriate remedy in accordance with the principle of proportionality.

Alembic Pharmaceuticals does not seem to be an isolated incident. The approach followed by the Court in *Alembic Pharmaceuticals* was echoed in subsequent decisions. Thus, almost two years later, the Supreme Court followed the same approach in *Electrosteel Steels Limited*.[27] The Supreme Court, like the *Alembic Pharmaceuticals*, underscored the importance of compliance with environmental law rules. It went on to say that 'under no circumstances, can industries which pollute be allowed to operate unchecked and degrade the environment'.[28] However, it decided against the measure of closing down the industrial units that were operating without environmental clearance by highlighting the two aspects which are often relied on by the judiciary in such cases, that is, the contribution of the industrial units in question to the economy and the livelihood of employees.[29] Once again, the Supreme Court invoked the principle of proportionality to decide against the closure of non-compliant industries. In other words, the Court seems to have carved out a space of exception for certain industrial units to go for *ex post facto* environmental clearance primarily to protect the interests of the economy and employees. Thus, the Court said:

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27 Electrosteel Steels Limited v. Union of India (2021) SCC OnLine SC 1247.
28 *Id. at* para 81.
29 *Id. at* paras 82 & 84.

"Ex post facto environmental clearance should not however be granted routinely, but in exceptional circumstances taking into account all relevant environmental factors where the adverse consequences of ex post facto approval outweigh the consequences of regularization of operation of an industry by grant of ex post facto approval and industry or establishment concerned otherwise conforms to the requisite pollution norms, ex post facto approval should be given in accordance with law…"[30]

In *Electrosteel*, the Court recognised the legal validity of *ex post facto* environmental clearance. The Court held that the Environment (Protection) Act, 1986 does not prohibit *ex post facto* environmental clearance.[31] However, according to the Court, 'some relaxations' from compliance with environmental law rules which include *ex post facto* environmental clearance can be given in 'appropriate cases'.[32] The Court further gives an indication of what this 'appropriate cases' means by pointing to the factor of existing or potential compliance of the industrial units in question. Thus, 'relaxations' are legitimate, legal and available to those industrial units that can demonstrate their compliance with environmental law rules otherwise or demonstrate their ability or willingness to do so. In reality, the number of industrial units which cannot come under this category is debatable. It is also not sure how, and who will, ascertain these 'appropriate cases' to determine the eligibility to be considered for *ex post facto* environmental clearance. It is also debatable the propriety and legality of permitting certain

30 *Id. at* para 88.
31 *Id. at* para 84.
32 *Id. at* para 27.

'relaxations' which are not explicitly provided in law.

Pretty much the same vocabulary was followed in *Pahwa Plastics*[33] and *D. Swamy*[34]. It may be interesting to observe that both *Pahwa Plastics* and *D. Swamy* heavily relied on *Electrosteel* and all these three judgements were written by the same judges.

3.2. Rapid EIA

Environmental Impact Assessment (EIA) is part of environmental law in India since 1994.[35] It indicates a process through which potential environmental impacts of a developmental project or a business activity are assessed to adopt preventive measures. It also has a participatory dimension wherein the public in general and the local population in particular get an opportunity to present their questions, objections, and views. It is premised on an understanding that it is always better to take precautionary and preventive measures to protect the environment than remedial measures because many, if not all, of the environmental damages are irreparable in its strict sense. The National Green Tribunal has summarised it the following words:

"The main thrust of the EIA Notification, 1994, is to provide an opportunity to the public at large of participation in the process of decision making, when the Application for EC is under consideration.

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33 Pahwa Plastics Pvt. Ltd. v. Dastak NGO (2022) SCC OnLine SC 362.

34 D. Swamy v. Karnataka State Pollution Control Board (2022) LiveLaw (SC) 791.

35 Manju Menon and Kanchi Kohli, 'Environment Impact Assessment in India: Contestations Over Regulating Development' in Philippe Cullet and Sujith Koonan (eds), *Research Handbook on Law, Environment and the Global South* (Edward Elgar Publishing 2019), at p. 435.

The grant of EC cannot be treated as mere formality. The nature of industrial activity, probable pollution potential of such industrial activity and other aspects ought to be known to the public members..."[36]

There is significant qualitative difference between a comprehensive EIA and a Rapid EIA. While the former covers a wider temporal data, the latter relies on a shorter time-scale as far as the data supplied is concerned. Rapid EIA is for speedier appraisal process. While both types of EIA require inclusion or coverage of all significant environmental impacts and their mitigation, Rapid EIA achieves this through the collection of one season (other than monsoon) data only to reduce the time required. Rapid EIAs are useful in certain cases to decide whether a comprehensive EIA is warranted or not.[37]

Rapid EIA does not seem to be an alternative to EIA. However, the Supreme Court of India adopted the idea of rapid EIA as a replacement of EIA in a few cases where the EIA was found to be improper. In *Bengaluru Development Authority*[38], the Supreme Court of India found the EIA report and the subsequent process as well as the decision taken by the State Expert Appraisal Committee, unacceptable on various grounds. The court found a 'patent contradiction' in disclosing the existence of forest land to be diverted for the project and inadequate disclosure regarding the number of trees to be cut for

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36 *Rohit Prajapati v Union of India*, Application No. 66(THC) of 2015, NGT, Decision of 8 Jan 2016, para 4.

37 <https://moef.gov.in/wp-content/uploads/2018/04/Introducation.pdf> accessed 16 April 2024.

38 Bengaluru Development Authority v. Mr. Sudhakar Hegde (2019) SCC OnLine SC 1818.

the purpose of the project, among other things. Further, the Court observed that the decision of the State Expert Appraisal Committee to recommend the State Environment Impact Assessment Authority to grant the environmental clearance, despite the contradictory stand of the appellant as well as its failure to furnish adequate reasons as suffering from 'a non-application of mind'.[39] It went on to observe that the State Expert Appraisal Committee 'failed in its fundamental duty of ensuring both the application of mind to the materials presented to it as well as the furnishing of reasons which it is mandated to do under the 2006 Notification'.[40] Finally, the Court held that:

> In the present case, as our analysis has indicated, there has been a failure of due process commencing from issuance of the Terms of Reference (ToR) and leading to the grant of the EC for the PRR project. The appellant, as project proponent sought to rely on an expired ToR and proceeded to prepare the final EIA report on the basis of outdated primary data. At the same time, the process leading to the grant of the EC was replete with contradictions on the existence of forest land to be diverted for the project as well as the number of trees required to be felled.[41]

The Court justified rapid EIA on the ground of 'balancing' the concerns of development and environment. In other words, the objective of 'balancing', according to the Court, demands a lenient approach to developmental projects even in cases where there is ample

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39 Id. at para 66.
40 Id. at para 81.
41 Id. at para 80.

evidence of violation of legal rules and procedures.

The way the EIA mechanism operates in India has come under attack for being insensitive and insincere to the letter and spirit of law. Menon and Kohli observe that 'the EIA process now largely operates as a measure of government's propensity to push development by speeding up the paper work on bureaucratic procedures and make the approval system more efficient in terms of the number of the number of projects that receive clearances every year'.[42] The following observation of the National Green Tribunal exemplifies the serious issues in the way EIA is conducted in India:

"This is not a case where there are a few ignorable procedural lapses in conducting the public hearing. This is a case of a mockery of public hearing, which is one of the essential parts of the decision-making process, in the grant of Environmental Clearance. This is a classic example of violation of the rules and the principles of natural justice to its brim. Therefore, we consider it appropriate to declare that the public hearing conducted in this case is nullity in the eye of law and therefore is invalid."[43]

The trend of asking such defaulters to conduct a rapid EIA to remedy the problem seems to be an eyewash at the cost of the environment. One would expect the judiciary and administrative agencies to force the project proponents to do another EIA as required by the statutory framework without any compromise. One would also

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42 Manju and Kanchi (n 35) at 447.

43 Adivasi Majdoor Kisan Ekta Sangthan v MoEF (2012) SCC OnLine NGT 51.

expect actions against the actors in violation of laws and the statutory and administrative agencies responsible for the situation. Rapid EIA, if it is to replace a faulty EIA conducted deliberately or inadvertently by the project proponent, seems like a dangerous short cut with serious adverse implications for the environment.

3.3. Executive actions

The cases of *ex post facto* environmental clearance and rapid EIA indicate an approach of leniency towards developmental projects. Developmental projects and industrial units are apparently protected even in cases where violations of environmental law were evident. The leniency is often justified by highlighting the economic contribution of developmental projects and industrial units and the fact that they provide employment to a large number of people. The principles of proportionality and balancing of interests are regularly deployed by the Court to legitimise the policy of leniency.

The judiciary is not alone in this whole saga. The executive also plays a very crucial role. For instance, the legitimacy of *ex post facto* environmental clearance was established at the first instance through Office Memorandums issued by the Central Government. The purpose of such Office Memorandums was to give a chance to industrial units that were operating without environmental clearance to get a fresh environmental clearance without facing the stringent legal sanction of closing down the units. For instance, in 2017, the Central Government issued a notification that provides for *ex post facto* environmental clearance for projects that had completed and commenced or expanded without a valid environmental clearance. The

option to obtain *ex post facto* environmental clearance was given for a limited time period, that is, six months. However, it was extended at the instance of the Court.[44] According to the notification, such projects will be subjected to scrutiny to examine if they have been 'constructed at a site which under prevailing laws is permissible and expansion has been done which can be run sustainably under compliance of environmental norms with adequate environmental safeguards'.[45] If the finding is negative, the Notification prescribes closure of such units and if the finding is positive, such projects will undergo further assessments leading to remedial and preventive measures.[46]

The Government of India further streamlined the process of *ex post facto* environmental clearance by adopting a Standard Operating Procedure in 2021.[47] It lays down procedures to identify and remedy various instances of violations (for instance, not following the procedure such as public hearing properly) and non-compliance (for instance, violation of one or more of terms and conditions prescribed in a valid environmental clearance). It prescribes fine (1.25 per cent of the project cost) in cases of violations and non-compliance and also provides for *ex post facto* environmental clearance. The Standard Operating Procedure explicitly explains the rationale for adopting it by citing a judgement of the Madras High Court where the Court held that:

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44 Ministry of Environment, Forest and Climate Change, S.O. 804(E), Gazette of India—Extraordinary, No. 723, 14 March 2017.

45 Id. at para 4.

46 Id. at paras 4 and 5.

47 Ministry of Environment, Forest and Climate Change Office Memorandum—Standard Operating Procedure (SoP) for Identification and Handling of Violation Cases Under EIA Notification 2006 in Compliance to Order of Hon'ble National Green Tribunal in O.A. No. 34/2020 WZ, 7 July 2021.

"The question is whether an establishment contributing to the economy of the country and providing livelihood to hundreds of people should be closed down only because of failure to obtain prior environmental clearance, even though the establishment may not otherwise be violating pollution laws or the pollution, if any, can conveniently and effectively be checked. The answer necessarily has to be in the negative".[48]

According to the Court, violation of procedures prescribed under environmental law, such as environmental clearance, is not serious enough until and unless it is accompanied by substantive damage to the environment, such as pollution, which according to the Court, can be 'conveniently and effectively be checked'. The questions of 'convenience' and 'effectiveness' of checking substantive damages to environment is indeed a scientific question. But, in this case, the Court seems to have taken it for granted.

These steps are apparently a part of a series of measures adopted by the government to promote what is called as 'ease of doing business'.[49] For instance, the Coastal Regulation Zone Notification, 2018 allows more developmental and commercial activities when compared to previous versions of it. According to a report, since the first Coastal Regulation Zone Notification was adopted in 1991, it was amended 34 times till 2019 with the objective of opening up more

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48 Puducherry Environment Protection Association v. Union of India (2017) SCC OnLine Mad 7056.

49 Ishan Kukreti, 'Ease of Doing Business Comes at an Environmental Cost' (*Down to Earth*, 2 November 2017) <https://www.downtoearth.org.in/news/governance/the-environmental-cost-of-making-business-easy-59001> accessed 14 April 2024.

coastal areas for developmental and commercial activities.[50]

In a yet another move, the Government has brought changes in environmental law, most importantly decriminalisation of violation of environmental law rules. The Jan Vishwas (Amendment of Provisions) Act, 2023 aims to amend 42 different legislations from various sectors in order to lessen the burden of the courts, encourage ease of doing business, and decriminalize small or minor offenses.[51] Concerns exist, though, regarding the inadequate public consultation that precedes the proposal of amendments, particularly with regard to important laws like environmental laws, where decriminalization might have detrimental effects on the public interest.

The Act goes beyond mere decriminalization and suggests significant modifications such as redefining authorities, changing the grievance redressal process, and designating adjudicating officers (executive officials) in place of judicial bodies.[52] This further raises issues about conflict of interest, erosion of public trust, and lack of adherence to the government's own policies mandating pre-legislative consultation for such far-reaching legal reforms impacting the environment, people and the economy.

The issue of Circulars and Office Memorandums issued by the

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50 Ishan Kukreti, 'Coastal Regulation Zone Notification: What Development are we Clearing our Coasts for', (*Down to Earth*, 4 February 2019) <https://www.downtoearth.org.in/coverage/governance/coastal-regulation-zone-notification-what-development-are-we-clearing-our-coasts-for-63061> accessed on 3 May 2024.

51 The Jan Vishwas (Amendment of Provisions) Act, 2023 < https://egazette.gov.in/WriteReadData/2023/248047.pdf> accessed on 3 April 2024.

52 *Id.* at s 39A.

Central Government (more precisely the Ministry of Environment Forests and Climate Change) to permit *ex post facto* environmental clearance received different responses from the National Green Tribunal and the Supreme Court. When the matter came before the National Green Tribunal in *Rohit Prajapati*, it categorically disapproved the power of the Central Government to permit *ex post facto* environmental clearance. It highlighted the silence of the Circular on the legal basis of the power of Central Government to issue such a document. The National Green Tribunal held that:

"The Circular dated 14.5.2002, issued by the MoEF, extends time limit for obtaining 'ex-post facto' ECs, so that defaulting units could avail such last and final opportunity. The Circular does not show by which provisions, the power is provided in the Environment (Protection) Act, 1986, to allow 'ex-post facto' EC. This Circular itself is void, ab-initio and ought to be struck down. Therefore, we have no hesitation in holding that 'ex-post facto' process of obtaining ECs by the Respondent Nos. 6 to 9, was just a farce, stage managed, wrong and impermissible under the Law and suffered from illegality, which is incurable in any manner."[53]

The Supreme Court, in *Electrosteel and Pahwa Plastics*, took a different position and held that the Environment (Protection) Act, 1986 does not prohibit *ex post facto* environmental clearance.[54] The Supreme Court, however, did not explain how the silence in this regard of the Environment (Protection) Act, 1986 legitimises *ex post facto*

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53 *Rohit Prajapati v Union of India* (2020) SCC OnLine NGT 1387, at para 4.

54 Id. at para 84.

environmental clearance. The Court did not explain how such a conclusion can be arrived at without discussing the relevant laws that make it abundantly clear that responsible industrial units are legally obliged to obtain environmental clearance before the commencement of the Unit by following the process prescribed including EIA and public hearing.

The Supreme Court's understanding or interpretation regarding the legal status of *ex post facto* environmental clearance seems baseless. As environmental lawyer Ritwick Dutta observed that the idea of *ex post facto* environmental clearance '…does not exist either in the Environment (Protection) Act 1986 nor in the Environment Impact Assessment Notification, 2006. It is a term that the executive introduced through a so-called 'office memorandum'…What exists in law is "prior environmental clearance" – i.e. an approval from statutory authorities before the commencement of work'.[55] Given the fact that the existing law clearly envisages environmental clearance and EIA as precautionary and preventive in nature, the Supreme Court's interpretation is diametrically opposite to rules of existing environmental law. In other words, the Supreme Court's interpretation amounts to making the existing rules of environmental law redundant.

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55 Ritwick Dutta, 'Two Recent Judgments Risk Damaging the SC's Enviable Track Record on Environmental Law' (*The Wire*, 8 April 2022) <https://thewire.in/environment/supreme-court-environmental-law-pahwa-plastics> accessed 22 April 2024.

4. ASSESSING THE CHANGING LANDSCAPE OF ENVRIONEMNTAL LAW

It is clear that environmental law is undergoing significant transformation. While one may expect the legislature to take the initiative, the changes discussed above in this paper took a different route. They are noteworthy not only for the substantive significance of the changes, but also the process through which these changes were brought into being. The ideas of *ex post facto* environmental clearance and rapid EIA have been systematically made a part of environmental law in India by the Supreme Court and the National Green Tribunal as well as the executive wing of the Central Government. We argue that such changes come with a lot of serious implications for the environment and the marginalised people.

First, the idea of *ex post facto* environmental clearance and Rapid EIA do not make sense from a substantive point of view. They defeat the purpose for which environmental clearance and EIA were made part of environmental law in India. Environmental clearance and EIA are reflections of an understanding that precaution and prevention are the most preferred approach as far as environmental issues are concerned. Corrective or remedial approaches are ineffective for reasons such as the difficulty to measure environmental damages accurately and to find the responsible person or entity as well as the probability of latent effects, among other things. Further, such a policy sends a kind of an encouraging message to industrial units which may realise that the cost of non-compliance is comparatively less than the cost of compliance. Such a trend is contrary to the principle of

environmental rule of law which the Supreme Court of India invoked more than once recently.[56]

Second, changes in law are meant to be introduced through an amendment or by enacting a new law that repeals the existing law. The process is democratic in nature that the changes are adopted after the democratically elected representatives of the people are given an opportunity to discuss it and oppose it if necessary. The cases of *ex post facto* environmental clearance and Rapid EIA demonstrate a pathway where the law-makers are bypassed and the existing legal rules are modified through judicial interpretations and ad-hoc executive notifications.

Third, the cases of *ex post facto* environmental clearance and rapid EIA exemplify a problematic way of invoking the rationale of 'public interest'. The rationale relied on by the executive and the judiciary is mainly based on two reasons, that is, the significant contribution of the industrial units in question to the economy and the fact that a large number of people are employed in such units. Any stringent action such as an order to shut down the operation against such industrial units, therefore, would lead to adverse implications on economy and loss of employment to many workers. In a way, the rationale of public interest seems genuine. Public interest, according to the official logic, demands the industrial units to continue their operations. The violation of rules of environmental law (with or

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56 Himanshu Ahlawat and Sujith Koonan, 'Environmental Rule of Law in Indian: A Transformative Principle or Old Wine in a New Bottle?', 13(1) *Journal of Indian Law and Society* 133-145 (2022).

without damage to environment) is 'technical' in nature and the larger interests of the national economy and job security of many workers cannot be put at stake on the basis of such technicalities. This is where the Supreme Court used the principle of proportionality to decide against the idea of ordering the non-compliant industrial units to shut down their operations. This means, the Supreme Court weighed more the advantages of letting the non-compliant industrial units to continue against the value of protection of the environment at the cost of shutting down the operations. It arguably found a middle path, that is *ex post facto* environmental clearance and compensation in cases where damage to the environment has already happened. While it is praiseworthy to uphold the public interest and rely on it as a principle in decision making and law-making process, the concerned agencies of the state owe a duty to explain the concept of public interest they used. It appears that the Supreme Court did not engage with this question in detail. The judgements discussed in the previous section of this paper do not explain how the Supreme Court measured the cost and benefits of its probable decisions and in applying the principle of proportionality.

Fourth, in continuation of the previous point, the value of public interest needs to be measured by examining whose interests have been included and whose interests have been, consequently, excluded from the expression 'public interest'. At the outset, the expression 'public interest' appears to refer to the whole economy and the interests of workers. It looks very legitimate indeed. A decision to shut down an industrial unit would make several people jobless. Many

of them may find it difficult to find another job easily. Even when they manage to find a job, they may have to settle for unfavourable terms and conditions due to their precarious condition.[57] This is a serious human rights issue. Therefore, taking care of the rights of the workers is indeed justifiable as 'public interest'. The so-called pro-labour approach of the Court is in contrast with some of its earlier decisions where, while being sympathetic to the plights of workers, the Court went on to stop the developmental activities such as mining by citing implications for the environment.[58] One would hope or expect the government and judiciary to be constantly invoking the 'public interest' doctrine to enhance the conditions of workers in India. However, critiques have highlighted that the judiciary's overall approach in the neoliberal era has been more in favour of private corporations and business entities and led to a weakened recognition of rights of the poor and the marginalised including workers and farmers.[59] Further, the current approach of the Supreme Court is noteworthy for its silence in mentioning a major beneficiary of this policy, that is, the project proponents or the investors. The silence in this regard was probably because the Court considered the project proponents or the investors as mere collateral beneficiaries. However, the scenario could

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57 Prakash Chand, 'Implications of Industrial Relocation on Workers in Delhi', 42(1) *Social Change* 49–68 (2012).

58 Eg Rural Litigation and Entitlement Kendra v. State of U.P. (1985) 2 SCC 431.

59 For a critique of the Supreme Court of India's approach towards the rights of workers and other marginalised people in the neoliberal era, see Mate (n 17). For a different view where the Supreme Court of India has taken a labour-friendly approach in cases of child labour and bonded labour, see Modhurima Dasgupta, 'Public Interest Litigation for Labour: How the Indian Supreme Court Protects the Rights of India's Most Disadvantaged Workers', 16(2) *Contemporary South Asia* 159-170 (2008).

be entirely different if the invocation of the public interest doctrine is a selective policy of the executive and the judiciary when the interests of corporate industrial units are at stake but not when the concerns and interests of the poor and the marginalised including workers are pitched against developments goals.[60] These are indeed tentative and hypothetical observations that require empirical evidence and theoretical substantiation.

Fifth, the changes as discussed in the previous section are being introduced in a piecemeal or incremental manner. All these incremental steps put together may reveal a substantial change. The strategy of incremental steps provides an advantage to the government and the primary beneficiaries of such changes to evade the public scrutiny. For instance, any change by the legislature invites the attention of the elected representatives of the people, the political organisation they represent and broadly the civil society. It may lead to a wider discussion and debate, which may in turn lead to informed public opinion. In certain cases, the wider discussion and the involvement of the civil society and public intellectuals in the debate may form or lead to resistance to legislative reforms and may sometime lead to the shelving of the reforms by the government.[61] Therefore, the people in power may find it attractive and convenient to introduce changes through incremental steps by using different avenues to bring

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60 *See* Prashant Bhushan, 'Misplaced Priorities and Class Bias of the Judiciary', 44(14) *Economic and Political Weekly* 32–37(2009).

61 *See eg* T.K. Rajalakshmi, 'How the Farmers' Protests Forced the Modi Government to Repeal Controversial Farm Laws' (*Frontline*, 28 November 2021) <https://frontline.thehindu.com/farmers-struggle/how-the-battle-was-won/article64764983.ece> accessed on 2 April 2024.

about the desired results. This is partly because such insidious ways of introducing changes may effectively make resistance difficult or impossible. Resistance, political or legal or both, arises when the exploitative face of the system is obvious particularly when such changes are introduced systematically through legal reforms. However, many changes do not give this opportunity because they are being introduced incrementally and in an ad-hoc manner. This makes resistance by the communities very expensive and cumbersome, for instance they need to rely on litigations to challenge each and every changes individually. Another way is to organise a collective resistance which comes at the risk of criminal law actions by the state.[62]

Sixth, the introduction of *ex post facto* environmental clearance and Rapid EIA could also be understood in the larger framework which is popularly known as the framework of 'ease of doing business'.[63] This framework is characterised with measures and policies to facilitate and incentivise investments. It also involves a conducive policy environment to protect the investments and consequently the investors. The role of the state in this regard is to be proactive in ensuring a conducive climate for investment and ease the 'hurdles' presented by the causes of labour rights and protection of the

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62 Larry Lohmann, 'Neoliberalism, Law and Nature' in Philippe Cullet and Sujith Koonan (eds), *Research Handbook on Law, Environment and the Global South* (Edward Elgar Publishing, 2019), at p. 32. For an account of how resistance movements are tackled by the state with the help of its machineries including criminal law, see Minni Vaid, *The Ant in the Ear of the Elephant: the Story of the People's Struggle Against the Koodankulam Nuclear Plant* (Rajpal Publishing, 2016).

63 See Government of India, 'Ease of Doing Business', < https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/nov/doc20221123133801.pdf> accessed on 3 May 2024.

environment, among other things. Law in general and environmental law in particular have been playing crucial roles in setting up a regulatory framework to 'ease' the investors.[64] Environmental law is often seen as a hurdle by the business community. Therefore, it is natural that the dilution of environmental law is part and parcel of the movement towards 'ease of doing business'.[65] The ideas of *ex post facto* environmental clearance and Rapid EIA could be understood from this angle. Both these measures go well with the overall objective of ease of doing business. In fact, the ease of doing business requires a protective and facilitating environmental law, not a punitive and stringent environmental law. Further, it is understandable that investors are more confident about a system that is proactive to protect their interests through different state agencies.

5. CONCLUSION

This paper has argued that environmental laws in India are being transformed dramatically, and not for the better. Recent changes brought about by judicial interpretation and executive interventions have prioritised economic development over environmental protection. This is exemplified by the legitimisation and legalisation of *ex-post facto* environmental clearance and rapid EIAs, both of which weaken the goal of environmental protection. Moreover, these changes are made through undemocratic processes. It is being introduced through judicial interpretations and notifications by the Executive rather than being debated and passed through legislatures. This takes

64 Menon (n 5).
65 Dharmadhikary (n 9).

away the democratic process and robs the civil society and people in general of an opportunity to participate in the rule making process as well as an opportunity to register their resistance if necessary. It is further argued that these factors undermine the precautionary and preventive purposes of legal norms and process related to environmental clearance and EIA. The environmental impact of these changes is worrisome. They weaken environmental law rules and processes and make it easier for companies to prioritise profits over environmental sustainability. The economic benefits of these changes are also questionable, with significant costs to the environment and the well-being of future generations.

ENVIRONMENT AT INTERNATIONAL CRIMINAL COURT: PROBLEMS AND PERSPECTIVES

Santosh K Upadhyay[*]

Abstract

The environment is a living and interconnected space. It reflects the fundamental existential values of humanity and thus shares proximity with the values protected through the conception of core crimes under the ICC Statute. Environmental protection against severe and widespread damage is a well-cherished communitarian value and is a factor nowadays in maintaining international peace and security. Thus, international criminal law concretised in the International Criminal Court statute must protect the environmental concerns. Currently, Article 8(2)(b)(iv) of the ICC Statute makes it a war crime to launch, with requisite intention and knowledge, an excessively disproportionate attack on the natural environment that would result in its widespread, long-term and severe damage. This high threshold makes the materialisation of this crime a distant reality. In 2016, the ICC issued a policy paper on case selection and prioritisation, admitting that while assessing the impact of the crime, the Office of the Prosecutor would consider even the environmental damages inflicted on the affected communities. Thus, the environment becomes a factor that will be considered when determining the occurrence of international crimes under the ICC Statute. This has significantly contributed to the new possibilities to prosecute environmental crimes as crimes against humanity and genocide. In addition, the crime of 'ecocide'

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has also been appearing in academic writings for the last fifty years. Many scholars have tried to define ecocide to make the prosecutions against environmental harms more realistic. However, ecocide is still not part of any legally binding instruments of international criminal law. In this background, the paper analyses the existing and emerging approaches to prosecute environmental crimes at ICC.

Keywords: Environmental protection, International Criminal Court (ICC), War crimes, Ecocide, crimes against humanity, Prosecution.

1. INTRODUCTION

The environment is a living and interconnected space that encapsulates the quality of life and human health of present and future generations.[1] It does not merely include objects that are indispensable for the immediate survival of the population. Still, its expansion covers broad areas, including forests, flora, fauna, and specific characteristics of particular biological and climatic elements.[2] Its reach is wide, and its interconnectedness is so vast that even the areas that do not sustain human habitation are important to keep the earth habitable. Negating this interconnectedness is only at one's own peril.

This interconnectedness, wholesomeness and overarching characteristics of the environment, when harmed directly or indirectly by anthropocentric causes, exhibit unique kinds of challenges in

1 *Legality of the Threat or Use of Nuclear Weapons, 1996*, ICJ Reports 1996, 241, para 29.

2 ICRC Commentary of 1987 on Article 55 of AP I, p. 662, para 2126, available at <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Comment.xsp?action=openDocument&documentId=7B82DFCC11FAE4C5C12563CD00434DBC> accessed on 20 March 2024.

ascertaining the exact causality and scales of damages.[3] The environmental self-remediation and its interconnected processes make the task of measuring the temporal as well as spatial extents of damages very difficult. Uncertain and ever-evolving scientific knowledge about environmental processes and their interrelationships causes hardships in establishing cause-and-effect relationships beyond doubt.

This poses many challenges for criminalising environmental destruction under International Criminal Law (ICL). The Statute of the International Criminal Court (ICC Statute), which currently reflects the concretised and formalistic expressions of ICL, has only one explicit provision prosecuting the environmental damage of a particular scale. Article 8(2)(b)(iv) makes it a war crime to launch any attack, with proper intention and knowledge, that would result into widespread, long-term and severe damage to the natural environment with an accompanying condition that this particular extent of damage must be 'clearly excessive to the overall military advantage anticipated'.[4] The constituent elements of this crime are very vague and unrealistic.[5] In the history of almost twenty-one years of functioning of the International Criminal Court (ICC), no prosecution has been even

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3 Frederic Megret 'The Problem of an International Criminal Law of the Environment' (2011) 36(2) Columbia Journal of Environmental Law 195, 222.

4 Statute of the International Criminal Court, article 8(2)(b)(iv), available at <https://www.icc-cpi.int/sites/default/files/RS-Eng.pdf> (accessed on 20 March 2024).

5 UNEP Report, "Protecting the Environment during Armed Conflict: An Inventory and Analysis of International Law" (2009) p. 4, available at <https://www.unep.org/resources/report/protecting-environment-during-armed-conflict-inventory-and-analysis-international> (accessed on 20 March 2024).

started under this crime.[6] There is no formal jurisprudence; thus, this provision's usefulness to effectively prosecute environmental crimes remains gloomy.

This has prompted many scholars to argue other approaches for prosecuting environmental crimes. The 2016 Policy Paper adopted by the ICC Office of the Prosecutor admits that environmental destruction would be a factor in determining the impact of a particular crime on the communities. This is an excellent impetus for the articulation of thoughts to discuss environmental destruction that may result in the commission of genocide or crimes against humanity. The discussions are now ripe to prosecute environmental damages as crimes against humanity or genocide.[7] In addition to this, the crime of 'ecocide' is also knocking the doors of ICL in the last fifty years, but its frequency and acceptability have increased many times in the near past.[8]

Recently, on 16 February 2024, the ICC Office of the Prosecutor launched a public consultation on a new policy initiative to

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6 For this, case information has been analysed at the ICC website. For details of cases please see, <https://www.icc-cpi.int/cases> last accessed on 20 March 2024.

7 Ammar Bustami and Marie-Christine Hecken 'Perspectives for a New International Crime Against the Environment: International Criminal Responsibility for Environmental Degradation under the Rome Statute' (2021) 11(1) Goettingen Journal of International Law, 145.

8 Richard A. Falk 'Environmental Welfare and Ecocide: Facts, Appraisal and Proposals' (1973) 9(1) Belgian Review of International Law 1. See also Mark Allen Grey 'The International Crime of Ecocide' (1996) 26(2) California International Law Journal 215. See also Anna Jenkin, 'The Case for an International Crime of Ecocide' (2022) 26 New Zealand Journal of Environmental Law 221.

fix accountability for environmental crimes under the ICC Statute.[9] The Office of the Prosecutor aims to develop a separate policy paper to prosecute environmental crimes at the ICC by the end of this year. The ICC Prosecutor accepts that 'damage to the environment poses an existential threat to all life on the planet', and thus, environmental crimes must be addressed in all stages of the ICC, including from primary investigation to prosecution.[10] It also indicates that the ICC's current position regarding environmental crimes is not satisfactory and needs overall systematic reforms to meaningfully include environmental concerns.

In this background, the paper explores the various approaches for prosecuting serious environmental destruction at the ICC. To this end, the paper is divided into five parts apart from the introduction (Part 1). Part 2 of the paper thematically engages with the conceptualisation of international crimes under international law and assesses how the environmental considerations legally fit into this concept. Part 3 of the paper studies the treatment of environmental destruction at ICC as a war crime as well as under the categories of genocide and crimes against humanity. Part 4 of the paper discusses the concept of ecocide. The last part concludes the paper with its suggestions.

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9 ICC News, "The Office of The Prosecutor Launches Public Consultation On A New Policy Initiative To Advance Accountability For Environmental Crimes Under The Rome Statute", Available At <https://www.icc-cpi.int/news?page=3> Accessed On 01 July 2024.

10 ibid.

2. INTERNATIONAL CRIMES AND THE ENVIRONMENT: THEMATIC ENGAGEMENTS

The very concept of international crimes accepts the legal position that individuals have duties towards the international community, and this duty transcends any legal obligations imposed upon them by their national jurisdiction.[11] It envisions the existence of shared international communitarian values that must be protected, and any individual who violates these values must stand criminally liable.[12] These offences are abhorred because they are considered antagonistic to values essential for living together.[13] The formal incorporation of international crimes of genocide, war crimes, crimes against humanity and aggression in the ICC Statute is the concretisation of these international communitarian values in international legal discourse at a particular point. They are also prohibited because the commission of any such offences anywhere in the world would be equivalent to a threat to peace or breach of peace everywhere in the world.[14] The ICC Statute itself terms them as "the most serious crimes of concern to the international community" that "threaten the peace, security and well-being of the world."[15]

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11 Antonio Cassese, *International Criminal Law,* (3rd edn, Oxford University Press 2013) 3.

12 ibid 20. See also Robert Cryer, Hakan Friman, Darryl Robinson and Elizabeth Wilmshurst *An Introduction to International Criminal Law and Procedure* (2nd edn, Cambridge University Press, 2010) 6-7.

13 Mohadmmed Saif-Alden Wattad 'The Rome Statue and Captain Planet: What Lies Between 'Climate Against Humanity' and the 'Natural Environment'?' (2009) 19(2) Fordham Environmental Law Review 265, 271.

14 ibid.

15 ICC Statute (n 4) preambular paragraph.

The ICL proscribes such serious intentional and mindful violations of laws of war or laws of peace that shake the conscience of the international community.[16] It is a branch of Public International Law and it derives its contents primarily from the customs and treaties. International crimes are the violation of international customary as well as treaty rules where any immunity is not available to the concerned perpetrator.[17]

Post second world war, individual-centric human rights movements and the recognition of the idea that international crimes are committed by individuals and not by abstract entities are the primary rallying points for the developments of ICL.[18] The ICL started to take concrete shape after the Second World War in the backdrop of the atrocities committed during that war. It started to take shape after the Nuremberg and Tokyo tribunals and was formally concretised by adopting the Statute of the International Criminal Court (ICC Statute) in 1998. The offences under the ICC Statute (genocide, crimes against humanity, war crimes and aggression) are considered severe and outrageous, and the international community collectively decided to prosecute them irrespective of any considerations of immunity and nationalistic identities of the victims and accused.

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16 Alessandra Mistura 'Is There Space for Environmental Crimes Under International Criminal Law? The Impact of the Office of the Prosecutor Policy Paper on Case Selection and Prioritization on the Current Legal Framework' (2018) 43(1) Columbia Journal of Environmental Law 181, 189.

17 Cassese (n 11) 20.

18 The Charter and Judgement of the Nuremberg Tribunal: History and Analysis, (Memorandum submitted by the Secretary General), 1949, available at <https://legal.un.org/ilc/documentation/english/a_cn4_5.pdf> (accessed on 20 March 2024).

The environment was not on the horizon of legal thinking during the days of the Nuremberg and Tokyo tribunals. It started to impact the laws of war and peace in the 1970s. Adopting the famous Stockholm Declaration on Human and the Environment of 1972 and the subsequent incorporation of environmental concerns through ENMOD 1976 and Additional Protocol I 1977 in the laws of war are essential pointers to this increased recognition of environmental concerns under international law. However, ICL did not take cognisance of the environmental destruction till the adoption of the ICC Statute in 1998, when a particular scale of environmental destruction during international armed conflict was made a war crime.

This adoption of environmental concern in the ICC Statute as a war crime, though with all its compromises, only reflects the 'formal codification of previous existing treaty and customary norms'.[19] It does not fossilise the process of concretising environmental concerns into international crimes once and for all.[20] Serious environmental crimes are not restricted only to the scenario of international armed conflicts. They are committed even during times of peace and non-international armed conflict. The restrictive approach to prosecuting serious and alarming environmental destructions committed only in the context of international armed conflict does not reflect the thematic and interconnected developments that inform the spirit of international environmental and criminal law. The following are the important aspects in this respect.

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19 Wattad (n 13) 279.

20 ibid.

First, environmental concerns cannot be segregated between the duality of war and peace. International Law Commission, in its recent work, highlighted that meaningful protection of the environment concerning armed conflict does not only mean its protection during the conflict but also includes its protection during peacetime and after the conflict.[21] Even the peacetime environmental treaties would not automatically terminate at the beginning of armed conflicts.[22] Thus, any approach that attempts to protect the environment by ensuring prosecution of individuals responsible for its destruction only during international armed conflicts and not during peacetime or non-international armed conflicts would definitely compromise its justiciability. It does not follow logically for the ICC to recognize the particular environmental destruction committed only during international armed conflict and say nothing about the environmental destruction of similar scale during other situations. In reality, many serious environmental damages that have widespread and severe effects occur during the time of peace.[23] Thus, ICC need to take care of the serious environmental destruction without any temporal limitations.

Second, and a corollary to the first point, is that it is well

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21 International Law Commission, Commentary on the Draft Principles on Protection of the Environment in Relation to Armed Conflicts, 2022, Commentary on Principle 1, available at <https://legal.un.org/ilc/texts/8_7.shtml> (accessed on 20 March 2024).

22 International Law Commission, Draft Articles on the Effects of Armed Conflicts on Treaties, with Commentaries, 2011, commentary to article 3, available at <https://legal.un.org/ilc/texts/instruments/english/commentaries/1_10_2011.pdf> (accessed on 20 March 2024).

23 Wattad (n 13) 268.

accepted now that sustainable management of environment and its natural resources are essential for the maintenance of international peace and security.[24] Environment, if not appropriately managed, can trigger and sustain conflict, and thus, it is an essential component in forming long-lasting peace.[25] The role of the sustainable environmental management in maintaining peace is now beyond doubt. Thus, environmental destruction having severe imprints on human beings and are of the potential to endanger the international peace and security must be the part of ICC jurisdiction so that their prosecution should contribute to the maintenance of international peace and security, as the jurisprudential logic in respect of other crimes at ICC.

Third, rights to the environment are now globally recognised as human rights. The Stockholm Declaration of 1972 specifically made a point that human being has right to freedom 'in an environment of a quality that permits a life of dignity and well-being'.[26] There are other conventions that recognize the right to environment as reflecting the fundamental value of human rights.[27] Though this is not the primary focus of this paper, considering the existing literature, it is established

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24 Anais Dresse, Itay Fischhendler, Jonas Ostergaard Nielsen and Dimitrios Zikos 'Environmental Peacebuilding: Towards a Theoretical framework' (2019) 54(1) Cooperation and Conflict 99.

25 ibid.

26 Stockholm Declaration on the Human Environment, 1972, Principle 1, available at https://wedocs.unep.org/bitstream/handle/20.500.11822/29567/ELGP1StockD.pdf (accessed on 20 March 2024).

27 Additional Protocol on the American Convention on Human Rights in the Area of Economic, Social and Cultural Right, 1988, article 11, available at https://legal.un.org/avl/studymaterials/rcil-laac/2016/book1_2.pdf (accessed on 20 March 2024). Also see, African Charter on Human and Peoples Right, article 24, available at <https://au.int/sites/default/files/treaties/36390-treaty-0011_african_charter_on_human_and_peoples_rights_e.pdf >.

that environment and environmental concerns reflect the most fundamental values of human life and thus, in spirit, reflect the essentialities of human rights.[28] Environment is now a cherished communitarian value of the international community that needs to be safeguarded at all costs.

Even in 1996, J Weeramantri, in his dissenting opinion in the matter of Nuclear Weapons Advisory Opinion (sought by the World Health Organisation) has observed that obligations of states in respect of environment 'may range from obligations *erga omnes*, through obligations which are in the nature of *jus cogens*, all the way upto the level of international crime'.[29] He also observed the same in his separate opinion in the matter of Gabsikova-Nagymaros case in 1997.[30] Environmental obligations are increasingly getting the tag of the *erga omnes* obligations.[31] *Erga Omnes* obligations are such obligations that belong to all states and all states have legal interest in their protection.[32] Thus, ICC must remain cognizant to the environmental protection both during the times of peace and the times of war because it reflects the basic spirit of collective co-existence.

Fourth, the concept of international crime is a dynamic and not a static concept.[33] It is a 'living institution' and the history and

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28 Gray (n 8) 254-258.

29 *Legality of the Use by a State of Nuclear Weapons in Armed Conflict, 1996*, ICJ Reports 1996, Dissenting Opinion by J. Weeramantri 142-143.

30 *Gabčikovo-Nagymaros Project (Hungary/Slovakia), 1997,* ICJ Reports 1997, Separate Opinion of J Weeramantri 91-92.

31 Megret (n 3) 245.

32 *Case Concerning the Barcelona Traction, Light and Power Company, Limited (Belgium v. Spain), 1970,* ICJ Reports 1970, 32 para 33-34.

33 Wattad (n 13) 275.

development of the core crimes and their constituent elements as they are now in the ICC Statute is the testimony of its evolving nature.[34] They must reflect the contemporary pressing concerns in the safeguarding of which the whole humanity takes active interest. No one can deny that environment now reflects the truly global and communitarian concerns. Incidents like Bhopal Gas and Chernobyl tragedies, if occurred now as a result of deliberate human activities as a part of a wider systematic plan and intent, would definitely shake the conscience of the international community and would reflect the seriousness and concerns of international community that are essential to turn any crime into an international crime.

Thus, the ICC cannot remain dogmatic and it must evolve feasible and realistic solutions to prosecute such serious and grave environmental crimes that are a concern to the whole international community and that threaten the peace, security and well-being of the planet earth and its inhabitants.

3. PROSECUTING ENVIRONMENTAL CRIMES AT ICC

This part of the paper studies and analyses the current explicit and implicit avenues to prosecute environmental crimes under the ICC Statute.

3.1 War Crime of Environmental Destruction

Currently, Article 8(2)(b)(iv) is the only explicit crime in the ICC Statute that specifically protects the environment. ENMOD

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34 ibid.

Convention 1976 and Articles 35(3) and 55 of the Additional Protocol I 1977 provide a requisite background for the inclusion of this crime into the ICC Statute. Article 8(2)(b)(iv) of the ICC Statute specifically makes it a war crime to launch a particular attack against environment. It states that:

> *Intentionally launching an attack in the knowledge that such attack will cause … widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to concrete and direct overall military advantage anticipated.*[35]

This prohibition seems to be unrealistic and difficult to materialize in any concrete situation. There is no agreeable definition of *widespread*, *long-term* and *severe* damage, and the ICC has not issued any official judicial pronouncements yet.[36] This particular scale of 'widespread, long-term and severe damage' which is itself very much slippery and ambiguous must also be 'clearly excessive' to the overall military advantage anticipated. Critics have doubted that this proportionality requirement of being 'clearly excessive' can outweigh even the most egregious environmental destruction on the pretexts of proportionality.[37] It requires that the perpetrator must have both the intention as well as knowledge to launch such attack. Thus, it does not include in its scope any unintentional or incidental damage to the environment.

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35 ICC Statute (n 4) article 8(2)(b)(iv).

36 Bustami and Hecken (n 7) p. 156.

37 Julian Wyatt 'Law-Making at the Intersection of International Environmental, Humanitarian and Criminal Law: The Issue of Damage to the Environment in International Armed Conflict' (2010) 92(879) International Review of the Red Cross 593, 634-635.

This article can only be invoked in the times of international armed conflicts and it does not prohibit environmental destruction in other situations. The communitarian values that are represented by the environment and its causal relationship with the wider climatic chains throughout the globe does not warrant its compartmentalized protection into the temporal categories of war and peace. It would not serve any purpose for the environment and will be a futile exercise. Thematically, it would also be incoherent that ICL admits environmental values worth to be protected during war time but keep itself silent in other scenarios.[38] It does not mean that ICC should not meaningfully protect environment during armed conflicts but it only means than ICC cannot remain neutral to the peacetime grave environmental destructions and other possible scenarios. These are the prominent reasons that compromise the efficacy of this provision.

3.2 Possibilities within the Current ICC Framework

The ICC Office of the Prosecutor adopted a Policy Paper on the Case Selection and Prioritisation in September 2016.[39] It states that:

> *The impact of the crimes may be assessed in light of, inter alia, the increased vulnerability of victims, the terror subsequently instilled, or the social, economic and environmental damage inflicted on the affected communities. In this context, the Office [of Prosecutor] will give particular consideration to prosecuting Rome Statute crimes that are*

38 Bustami and Hecken (n 7) 164.

39 Policy Paper on Case Selection and Prioritisation, 15 September 2016, Office of the Prosecutor, International Criminal Court available at <https://www.icc-cpi.int/sites/default/files/itemsDocuments/20160915_OTP-Policy_Case-Selection_Eng.pdf> (accessed on 20 March 2024).

> *committed by means of, or that result in, inter alia, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land.*[40]

Thus, the Office of the Prosecutor officially admits that crimes under the ICC Statute may be committed by means of destruction of the environment, illegal exploitation of its natural resources as well as the illegal dispossession of land. It does not admit any temporal dichotomy of war or peace and legitimized the possibilities to think afresh about protection of the environment through ICC under the core crimes of crimes against humanity, genocide and war crimes.

3.2.1. Crimes against Humanity and the Environment

The term 'crimes against humanity' was suggested by the eminent international law scholar Hersch Lauterpacht to Robert Jackson who was the US Delegate at the London Conference and who was subsequently appointed as the Chief US Prosecutor at the Nuremberg.[41] With many additions and developments, the crime found its place in Article 7 of the ICC Statute. Notwithstanding any constraint related to the application of treaties, the crimes against humanity are also prohibited under customary international law.[42] These crimes are prohibited both in times of peace as well as in times of war.

Under the ICC Statute, the crimes against humanity are the commission of any of the enumerated acts under Article 7 that are

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40 Ibid, para 41.
41 Cassese (n 11) 86.
42 ibid, 90.

executed as a part of a widespread or systematic attack directed against any civilian population with the knowledge of the attack. Attack does not mean only kinetic attack but it includes any act that can result into the requisite extent of the mistreatment of the civilian population.[43] The crimes against humanity are not single or sporadic crimes but they are of the nature of large scale and massive crimes. However, a single incident of occurrence of enumerated acts may amount to crimes against humanity, if the perpetrator has knowledge of the widespread and systematic plan of attacks against the civilian populations and has executed the act in question as part of that widespread and systematic plan.

The term 'widespread' and 'systematic' are not defined in the ICC Statute, however, widespread may refer to the cumulative effects of many inhuman acts.[44] Similarly, systematic means something that is properly organized as part of common plan or objective.[45] This widespread and systematic plan may be the part of the policy of the government or its entities or *de facto* political authorities or of an organized political group. This also applies in the cases if these *de facto* or *de jure* bodies have tolerated, condoned or acquiesced in the above mentioned wide and systematic plan of any other organized entity.[46]

The enumerated acts under Article 7 of the ICC Statute that form the objective element for this crime are murder, extermination, enslavement, deportation or forcible transfer of population, imprisonment or other severe deprivation of liberty, torture, rape and

43 Cryer, Friman, Robinson and Wilmshurst (n 12) 237.
44 ibid, at 236.
45 ibid.
46 Cassese (n 11) 91.

other heinous sexual offences, persecution against identifiable groups, enforced disappearance, crime of apartheid and other inhumane acts causing serious injury, etc. It does not mention the environment specifically for the obvious reasons that it protects civilian populations only. But reference can be made to the environment indirectly and if the enumerated acts are committed through means of environmental destruction and such acts were part of the said widespread and systematic plan.

For example, the act of extermination that is defined as an intentional infliction of the conditions of life on a particular civilian population that result into its destruction,[47] can be achieved through deliberate manipulation of large scale environmental chains or through its destruction.[48] Similarly other acts like forcible transfer or deportation of population or persecution against identifiable groups can also be committed through deliberate environmental destructions or disruptions. Here, the most important and the wide category is Article 7(1)(k) that includes any other deliberate inhuman acts of similar character causing 'great suffering, or serious injury to body or to mental or physical health.' This residual clause criminalizes the incidents of inhuman behaviours that do not neatly fall into other existing categories.[49] This is an ever-growing category that needs to be contentiously evolved to reflect even the environmental impacts that may result in serious mental or bodily injury that adversely affects the physical health of population.

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47 ICC Statute (n 4) article 7 (2) (b).
48 Mistura (n 16) 208.
49 Cassese (n 11) 98.

3.2.2. Genocide and the Environment

The term 'genocide' was coined by Polish lawyer R. Lemkin in 1944.[50] It was only in the Nuremberg Tribunal that the term 'genocide' got scant reference in some of the speeches of the Prosecutor and it was not found any mention at all at the Tokyo Tribunal.[51] However, the term got prominence in 1948 when the UN General Assembly adopted the Convention for the Prevention and Punishment of the Crime of Genocide (Genocide Convention).[52]

Article II of the Genocide Convention defines 'genocide' and the same definition is subsequently followed by many legal and academic writings including the ICC Statute. Genocide can be committed either during time of peace or during time of war. As per this definition, the genocide is committed when the five specifically enumerated acts would be committed with specific intent to destroy in whole or in part 'a national, ethnical, racial or religious group'.[53]

The five specifically enumerated acts are: first, killings of the members of the group, second, causing serious bodily or mental harm to the members of a group, third, deliberate infliction on the group such conditions of life directed to result into its physical destruction in whole or in part, fourth, imposition of measures directed to prevent births in the group, and fifth, forcible transfer of children from one

50 ibid 109.
51 ibid.
52 UNGA Resolution, Prevention and Punishment of the Crime of the Genocide, A/Res/3/260 adopted on 9 December 1948.
53 ICC Statute (n 4), article 6.

group to another group.[54]

Though the environment is not directly mentioned in the definition of genocide under the ICC Statute, it may come in prominence when any of the specifically enumerated acts are materialized through the means of the extensive destruction to the environment.[55] For example, Article 6(b) of the ICC statute may be extensively interpreted to include the deliberate conduct of widespread and severe environmental destruction resulting into the requisite level of bodily or mental injury to the members of the particular group. The elements of crimes of the ICC Statute admit this possibility because it provides inclusive definition of the term 'conduct'.[56]

Article 6(c) of the ICC Statute sketches another possibility where environmental destruction may result into the deliberate infliction of the conditions of life on the particular group that result into its physical destruction. The elements of crime elaborates that 'conditions of life' may include the 'deliberate deprivation of resources indispensable for survival', or 'systematic expulsion from homes.'[57] This inclusive definition of the 'conditions of life' when read in light of the 2016 Policy Paper clearly indicates that such conditions of life may be imposed upon the particular group through severe destruction to the specific environmental setup that has been sustaining a particular group in its vicinity for long.

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54 ibid.

55 Mistura (n 16) 204.

56 Elements of Crimes, ICC Statute, article 6(b), available at https://www.icc-cpi.int/sites/default/files/Publications/Elements-of-Crimes.pdf (accessed on 20 March 2024).

57 ibid article 6(c).

Destruction of the particular environments may be the cause of systematic expulsion of the particular groups from their native homelands.[58] Scholars have reminded many incidents in history like dumping of radioactive waste, extensive pollution caused by the extractive industries like uranium mining etc. and their effects on the native communities that might be argued as genocide caused by the environment.[59] The pre-trial chamber I of the ICC while issuing the second arrest warrant to Omar Al Bashir took the notice of deliberate contamination of water pumps with other instances of forcible transfer as facts constituting the offence of genocide in that situation.[60]

To prove genocide has always been a tricky job because of the underlined requirement of subjective element *mens rea* that particular acts are performed with the specific genocidal intent or policy to finish the particular group in whole or in part. This subjective element becomes very difficult to prove, particularly in peacetime when serious environmental degradations are justified on the grounds of economic development.[61] This requirement of specific *mens rea* made an unsurmountable task to establish the commission of genocide merely on the grounds of severe environmental destruction.[62] However, if the genocidal intent is present, it is clear that the deliberate environmental

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58 Mistura (n 16) 205.

59 ibid, at 205-207.

60 *The Prosecutor v. Omar Hassan Ahmad Al Bashir*, Pre Trial Chamber I, Second Decision on the Prosecution's Application for a Warrant of Arrest, para 38-39, ICC-02/05-01/09, Date: 12 July 2010, available at <https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2010_04826.PDF> (accessed on 20 March 2024).

61 Mistura (n16) 207.

62 Bustami and Hecken (n 7) 160.

destruction that results in any of the enumerated acts with specific results would amount to genocide.

3.2.3 War Crime and Destructing the Environment as Civilian Object

Apart from Article 8(2)(b)(iv) of the ICC Statute that explicitly protects the environment, other provisions of Article 8 that protects civilian objects could also be interpreted in light of the 2016 Policy Paper. Article 8(2)(a)(iv) that criminalizes the extensive destruction of property carried out wantonly and not justified by the military necessity can be the one of the possible ways to prosecute serious environmental crimes. Here 'property' can be equated with environment.

Another possibility may be under article 8(2)(b)(ii) of ICC Statute. It criminalizes the intentional launching of the attack against the civilian object if it is not military objective. All the objects that are not military objectives are considered civilian objects. Any object can become military objective if it by its 'nature, location, purpose or use makes effective contribution to the military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage'.[63] Both the above mentioned provisions would protect the environment only when it is not the military objective.

It, prima facie seems that these provisions can be invoked in

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63 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of the Victims of International Armed Conflicts (Protocol I), of 8 June 1977, article 52(2). Available at, <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977> (accessed on 20 March 2024).

very restrictive sense and many a time they remain only on statute book. However, there is a ray of hope. Any attack against military objective must also satisfy the test of proportionality. The principle of proportionality prohibits the launching of such attack whose incidental or collateral effects on civilian population or civilian objects would outweigh the anticipated military advantage.[64] Environmental considerations must be taken into account when assessing the application of proportionality principle in particular instance.[65] ICJ observes "respect for the environment is one of the elements that goes to assessing whether an action is in conformity with the principles of necessity and proportionality".[66]

3.2.4. Existing Framework and its Shortcomings

As discussed above, other possibilities to prosecute serious environmental crimes as crimes against humanity, genocide or war crimes other than under Article 8(2)(b)(iv) under the ICC framework suffer from theoretical and practical limitations. These approaches can only prosecute such environmental crimes that essentially have anthropocentric linkages and they do not be useful to protect environment *per se*. This theoretical restriction seriously compromises their utility.

In addition, it would be very difficult to find the requisite *mens rea* of being part of wider and systematic plan to commit particular offence through environment for crimes against humanity or even the

64 ibid article 51(5)(b).
65 *Legality of the Threat or Use of Nuclear Weapons, 1996* (n 1) 242, para 30.
66 ibid.

genocidal intent to eliminate the particular group in total or in parts for the genocide. The peacetime environmental destructions are mostly committed under the garb of development. Both these crimes (crimes against humanity and genocide) need specific requisite intention that is mostly hard to decipher in peacetime environmental destructions that occur on the pretext of development. In most cases, peacetime serious environmental destruction is committed by recklessness and with the accompanying condition of non-compliance with the principle of due diligence, precautionary principle, principle of sustainable development and serious and technically sound environmental impact assessments. Thus, the current approaches of crimes against humanity and genocide are highly restricted and narrow to prosecute serious environmental crimes. There is a need that non-compliance with basic environmental principles must also be accepted as a contributing element to decipher the requisite *mens rea* for these crimes.

The war crime approach also meets with the same end. With respect to war crimes, protection of the environment as a civilian object is always subjected to the demands of military necessity. Though the doctrine of proportionality is there, the gravest environmental harms can be justified in the name of proportional military advantages. Although Article 8(2)(b)(iv) protects environment, its constituent elements and a higher degree of the requirement of proportionality make it difficult to establish the crime. These may be the particular reasons that the ICC is still struggling to prosecute serious environmental crimes.[67] Even after the much-hyped 2016 Policy Paper,

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67 ICC News (n 9).

there are no instances of prosecuting environmental crimes.

4. ECOCIDE: A PROMISING FUTURE

The term ecocide is being used in nuanced ways to reflect the phenomenon of wider damage and destruction to the environment both during times of peace and conflict. The term was first used by Prof. W. Galston, an American biologist, who criticizes the extensive use of chemical agents by the US Government in Vietnam that resulted in the large-scale environmental catastrophe in the region.[68] The famous Stockholm Conference of June 1972 was probably the first international gathering of that level where the term 'ecocide' was used. The then Prime Minister of Sweden, in his opening speech, called the environmental destruction brought by the US forces in Vietnam an act of ecocide.[69] A parallel unofficial group formed during this conference drafted the definition of ecocide and submitted it to the United Nations in 1973.[70] Subsequently, Professor Richard Falk, a member of this unofficial group published this proposal with his own extensive insights.[71]

Richard Falk defined ecocide as acts committed with the intent to destroy, in whole or in part, a human ecosystem both during war and peace.[72] He exemplifies the instances of ecocide like using weapons of mass destruction; using herbicides to defoliate the natural forests or

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68 Anastacia Greene 'The Campaign to Make Ecocide an International Crime: Quixotic Quest or Moral Imperative' (2019) 30(3) Fordham Environmental Law Review 1, 8.

69 ibid 10.

70 ibid 11.

71 ibid. See also Richard Falk (n 8) 80-96.

72 Falk (n 8) 93.

destroying large tracts of forests for military purposes; extensive use of artillery to impair the quality of soil and increasing the prospects of disease; using environment as a weapon of war; and, forcible removal of human or animals from the places of their natural habitats for military or industrial purposes.[73] After 1973, the discussion about ecocide has continued to appear in international legal literature.[74] In 1990, Vietnam incorporated the offence of ecocide into its domestic laws and thus became the first country in the world to do that.[75] This was followed subsequently by the Russian Federation and some of the erstwhile USSR republics.[76]

Mark Allen Grey writes a very lucid article in 1996 wherein he argues that there is already an existing and ongoing developments of international environmental delict called ecocide that is a breach of an *erga omnes* obligations of care imposed upon the states, individuals and organisations. He prophetically observes that 'criminalisation of ecocide will occur because it must'.[77] However he did not delve too much into the definitional aspects of ecocide. The next significant contribution is done by Poly Higgins when she proposes the incorporation of ecocide in the ICC Statute as fifth crime.[78] She defined ecocide as:

Ecocide is the extensive damage to, destruction of or loss of

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73 ibid.
74 Greene (n 68) 13-19.
75 ibid 19.
76 ibid 20.
77 Gray (n 8) 270.
78 Polly Higgins, Damien Short and Nigel South 'Protecting the Planet: A Proposal for a Law of Ecocide' (2013) 59(3) Crime, Law and Social Change, 251, 257.

> *ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished.*[79]

Here, ecocide can be caused by human agents or by any natural causes.[80] She conceptualizes ecocide not as a crime of particular cause but as a crime of particular consequence, and thus, imposes strict liability against any violation of earth's integral values.[81] This was quite an innovative approach because it puts the questions of requisite intention and knowledge in the backside and the scales of environmental destruction in the forefront. This approach may look good for civil liability but it has serious repercussions for criminal liability, which mostly relies on specific intentions and knowledge of the culprit. Apart from this, the definition also suffers from definitional uncertainties of many terms and use of very broad phrases like 'extensive damage', 'human agency or by other causes' and 'peaceful enjoyment by the inhabitants of that territory'. These are very subjective and wide terms and do not fit into the criminal law that demands precision and higher objectivity.

In 2021, the Stop Ecocide Foundation, a forum of independent experts came with another definition of the term ecocide. According to this definition, ecocide "means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment

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79 ibid.
80 Jenkin (n 8) 230.
81 ibid.

being caused by those acts".[82] It rejects the dichotomy of conflict and peace. The definition is also unique on some other counts.

It does not take into account the intention of the perpetrator and even if the act in question is committed with knowledge of substantial likelihood, of the requisite result, the crime is materialised.[83] It seems that the phrase 'ordinary course of events' as in Article 30 of ICC Statute is tweaked by the drafters as 'substantial likelihood'. However, the draft does not propose any amendment to Article 30 of the ICC Statute.[84] The drafters are rightly of the view that the phrase 'ordinary course of events' is much narrow and admits only those causes that almost certainly result in particular effects, and thus, it would not reflect the cause and effect relations existing in most of the environmental damages.[85] The element of recklessness should be the central theme in prosecuting environmental crimes and thus the addition of 'substantial likelihood' is definitely a welcome step.

To materialise this crime, the destruction is either through unlawful or wanton acts committed with requisite knowledge. The question of whether unlawfulness of a particular conduct should be determined under international environmental law or domestic law remains tricky. Though international environmental law that develops

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82 Independent Expert Panel for the Legal Definition of Ecocide Commentary and Core Text, June 2021, Stop Ecocide Foundation, available at <https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/60d7479cf8e7e5461534dd07/1624721314430/SE+Foundation+Commentary+and+core+text+revised+%281%29.pdf> (accessed on 20 March 2024).

83 ibid.

84 ibid.

85 ibid.

through customary and conventional laws imposes some specific obligations upon states, these obligations are mostly like principles and absolute prohibitions are very few. Thus, the drafters admit that the unlawfulness is to be determined under national laws but it is also true that if the conduct is flagrantly unlawful under international law, its legal status under domestic law must not be accepted as a defense.[86] This duality of 'unlawful' acts needs further clarity and precision for the effectiveness of this definition.

Wanton is defined as all the reckless environmental destruction that are clearly excessive to the 'social and economic benefits anticipated'.[87] The term 'clearly excessive' definitely brings into picture the scientific expert knowledge in determining the environmental damage. It appears to compromise the precautionary principle in international environmental law that states that scientific uncertainty should not be used to commit environmental destruction. The calculation of anticipated social and economic benefits brings the anthropocentric concerns back on the table and it is alleged by some scholars that this definition is not completely eco-centric.[88]

The use of the phrase 'severe and either widespread or long term' is also a promising addition and a departure from the current phraseology of 'widespread, long-term and severe' in the ICC Statute under article 8(2)(b)(iv). The definition of the environment that includes 'earth, its biosphere, cryosphere, lithosphere, hydrosphere and

86 ibid.
87 ibid.
88 Jenkin (n 8) 233.

atmosphere, as well as outer space' is also very promising for future developments of law. However, the definition of the terms like 'severe,'[89] 'long-term'[90] and 'widespread'[91] do not offer any concrete understanding of the exact extent of criminal act. The draft only defines the crime and provide commentary on respective proposed amendments in the ICC Statute but it does not elaborate upon the elements of crime.[92]

Even with all its compromises, the definition seems promising and encapsulates a better approach to prosecuting serious environmental destruction at ICC. However, its ultimate adoption in the ICC Statute would depend upon the attitude of state parties, and definitely, there is less probability that this crime would be incorporated into the ICC Statute in the near future. But definitely, it is a substantial conceptual addition in existing debates and approaches to prosecute the serious environmental crimes at the ICC.

5. CONCLUSION

The environment shares many basic characteristics with the existing core crimes at the ICC, and thus, the ICC must prosecute

89 Independent Expert Panel for the Legal Definition of Ecocide Commentary and Core Text (n 82). Severe is defined as "damage which involves very serious adverse changes, disruption or harm to any element of the environment, including grave impacts on human life or natural, cultural or economic resources".

90 ibid. Long-term is defined as "damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time".

91 ibid. Wide Spread is defined as "damage which extends beyond a limited geographic area, crosses state boundaries, or is suffered by an entire ecosystem or species or a large number of human beings".

92 Independent Expert Panel for the Legal Definition of Ecocide Commentary and Core Text (n 82).

serious and outrageous environmental damages. Environment and the current core crimes reflect the much cherished communitarian values everyone must protect and are related to the maintenance of international peace and security. They reflect the *erga omnes* obligations which are the obligations against the whole international community and reflect in their spirit the essential values for collective co-existence.

The current explicit reference to environmental destruction as a war crime under Article 8(2)(b)(iv) of the ICC Statute is not promising because of its ambiguous thresholds and its wide scope of permissible environmental damages under proportionality. It protects the environment only during times of international armed conflict. It does not prosecute the environmental crimes during the times of peace or during non-international armed conflicts. Considering the widespread and interconnected aspects of the environment, it is theoretically not sound to protect environment in the temporal compartments. Many a times, damages to the environment during peace is more severe and long-lasting than its damages during times of armed conflicts. In addition, the other war crime approaches to protect environment as civilian object is also not enough and can be compromised on the grounds of military necessity. Thus, there is also a need to develop feasible ways to protect environment from becoming military objective as such.

The definition of ecocide is still evolving and it is not in the sight of near future that State would agree to amend the ICC Statute to incorporate a new crime. Since such probable inclusion in the future can never be retrospective, the current environmental crimes severely

threatening the individuals and collective lives on scales of widespread and long-term must not remain unprosecuted. Thus, international legal scholarship must work to develop a jurisprudence of other core crimes in relation to environmental destruction. This is aligned with the objectives of the 2016 Policy Paper.

Since the environment is all-encompassing, there is a need to green the current and existing international crimes. It means that if the resultant elements of the existing international crimes, be it genocide or crimes against humanity, appear in a given situation and that situation is caused by the deliberate and unlawful interference into the natural environmental processes without complying the principles of precaution, sustainable development and due diligence, then such acts and the guilty minds should be taken into cognizance while deciding international criminality.

In lieu of only looking at the requisite *mens rea* specific to the crimes against humanity and genocide, there is a need that the question of compliance or non-compliance of the environmental law principles, such as precautionary principle, principle of sustainable development and principle of due diligence, while undertaking any activities potentially endangering the environment should be taken into cognizance while determining the criminal liability under these crimes.

ICJ has already observed in its Advisory Opinion in the matter of Nuclear Weapons that states must take environment into consideration while deciding the necessity and proportionality of their

legitimate military targets.[93] This statement though was in the context of armed conflicts but there is no reason to restrict this understanding only to the situations of armed conflicts and in relation to states. This understanding needs to be expanded to cover the acts and guilty minds of the individuals holding decisive positions even during the times of peace. Thus, the state entities or big corporates should not undertake or conduct activities deliberately or recklessly without properly complying with the norms and principles of the international environmental law. And if they do so and it resulted into the serious environmental destruction materializing in the commission of one of the objective acts of particular crimes, then such recklessness should be accepted as a proof in determining the criminality of the persons at the helm.

This is the possibility to develop a green jurisprudence at the ICC under the existing framework till the crime of ecocide is incorporated into its Statute. There is a need to exploit this possibility for the betterment of the whole world. The study admits that this is not the ultimate solution to protect the environment *per se* through prosecuting serious environmental crimes but given the existing realities, it seems the most feasible approach to serve the purpose to prosecute serious environmental crimes at ICC.

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93 *Legality of the Threat or Use of Nuclear Weapons, 1996* (n 1) 242, para 30.

NAVIGATING GLOBAL CLIMATE LAW: EXAMINING THE SCOPE, EXTENT, AND LEGAL IMPLICATIONS OF THE UPCOMING ICJ'S ADVISORY OPINION ON STATES' OBLIGATIONS TOWARDS CLIMATE CHANGE

C. Anunanda Unni[*]

Abstract

The global climate change problem is a twisted problem in its very nature and poses a significant challenge to the whole international law regime and international policymaking. Addressing this issue necessitates taking action at the individual level, given the alarming rate at which the problem is intensifying. It need not be explicitly mentioned that the role played by the judicial system is unprecedented. Since the advent of the climate change issue, negotiation has been predominantly used as a dispute settlement mechanism, which is encouraged by the UN climate change instruments as well. As far as adjudication is concerned, domestic courts of various countries have mainly played a vital role, though they are limited as they are not wholly capable of dealing with the global nature of the problem. Currently, the ICJ has an opportunity to contribute to the climate change regime as the General Assembly has passed a resolution unanimously requesting the ICJ to render an advisory opinion on the obligations of the state towards climate change. It is important to note that ICJ's advisory opinions do not carry any legally binding consequences. Also, international environmental law, especially the climate change law, is woven on a fine canvas accommodating the

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capacity of all states to contribute to reducing carbon emissions, creating a unique blend of rigid and flexible state obligations. Anything disturbing this fine canvas would be dangerous and likely meet the fate of the Kyoto Protocol.

This paper attempts to analyse the scope of this upcoming advisory opinion on the present climate change regime, including how it will be received by various stakeholders. It will examine the extent and legal implications of the same by breaking down and studying the specific components, keeping in mind the non-binding nature of the advisory opinion and the complicated nature of the climate change issue. The paper will concentrate on the specific role the ICJ can play in the global climate law.

Keywords: Jurisdiction, Nationally Determined Contributions, Kyoto Protocol, Cycle of Contribution, No Harm Principle.

1. INTRODUCTION

"In our world, amidst the warming of the atmosphere, and the melting of the ice, and the rising of the seas, the international courts shall not be silent."[1]

Climate change, by its very nature as a diffused problem, stands as the ultimate test for policymaking. The topic goes beyond the conventional framework of an international law system which traditionally delineates the world into regions with well-defined

1 Philippe Sands, 'Climate Change and the Rule of Law: Adjudicating the Future in International Law' (2016) 28 Journal of Environmental Law 19.

borders under the sovereignty of individual states. The initiative to engage the ICJ in matters related to the climate change regime has recently progressed to a stage where the United Nations General Assembly (UNGA) adopted a resolution on March 29, 2023, unanimously requesting the ICJ to offer an advisory opinion on the obligations of states regarding climate change. Two requests for advisory opinions on climate change at the Inter-American Court of Human Rights and the International Tribunal for the Law of the Sea (ITLOS) have been supplemented by the ICJ request, which is still under consideration. The General Assembly solicited legal opinions mainly on two questions: First, what are the obligations of States under international law to ensure the protection of the climate system? Secondly, what are the legal consequences under these obligations for states? At this juncture, it is pertinent to analyze the scope of the advisory opinion in light of the jurisprudence of ICJ's advisory opinion and the complicated nature of the climate change issue.

The notion of pursuing legal action related to climate change gained new momentum when Palau, a pacific island country, proposed that the UNGA should seek an advisory opinion from the ICJ on the obligations of nations to prevent their greenhouse gas emissions from causing damage to other countries but the endeavour remained unsuccessful. Later, a resolution passed at the 2016 World Conservation Congress of the International Union for Conservation of Nature (IUCN) in Hawaii revived the notion of inviting the ICJ for an advisory opinion on climate change.

The role that the ICJ can play in this regard is unprecedented; as

the "primary judicial organ of the United Nations," the I.C.J. holds a unique position—basically, that of first among equals—and has the broadest subject matter jurisdiction of any international tribunal, allowing it to address climate change with greater precision than other forums. Since ICJ's jurisdiction involves both adjudicatory and advisory, it is essential to understand which jurisdiction would be more helpful concerning climate change. Consequently, the world court, also known as the ICJ, is the only court with universal jurisdiction in the international domain. It is the closest institution we have to a global high court in terms of stature and public image. The ICJ can actively contribute to the evolution of legal frameworks and influence shifts in public opinion. In a cascading effect, these advancements can inspire new and necessary actions by states, international organizations, the private sector, non-governmental organizations (NGOs), and individuals.

The UN climate change regime adopts a state-centric approach wherein the sovereign states can determine their climate commitments. The global climate change framework comprises the UNFCCC and subsequent accords like the Kyoto Protocol and the 2015 Paris Agreement. The primary aim of the UNFCCC is to maintain greenhouse gas levels in the atmosphere at a point that avoids harmful human-induced climate disruptions. The Kyoto Protocol established binding emission reduction targets worldwide for developed nations to control greenhouse gas emissions in line with this goal. Unlike Kyoto, the Paris Agreement 2015 accommodates all states by framing provisions so that it gives enough flexibility and freedom for the parties

concerning their obligations under the treaty, thereby strengthening the principle of state sovereignty. The characteristic feature of the UN climate change regime is that the Paris Agreement stresses on a 'bottom-up' approach, giving ample discretion to states to determine their Nationally Determined Contributions (NDCs). Further, the regime is only lightly legalised and has predominantly embraced a managerial strategy to ensure compliance, prioritizing oversight and guidance above strict enforcement measures. Also, there is no widely agreed-upon understanding in the international system regarding the legal validity of declarations and how treaties interact with other sources of international law; there are various conceptual frameworks for integrating these legal instruments into a comprehensive theory pertaining to climate change.

Having said that, the whole international community, starting from an individual to a judicial organ, is duty-bound to save this planet. There exists no other challenge comparable to climate change in terms of its multitude of sources, as indicated by the findings of the IPCC[2]. The issue encompasses a vast and diverse array of factors, necessitating comprehensive interventions that encompass virtually every facet of human undertaking and behaviour. Climate change is a predicament in which every individual plays a role as both a contributor and a recipient of its consequences. Although domestic courts continue to be the world's pre-eminent formal conflict resolution institutions, they are not entirely appropriate to handle the global scope of the climate

2 IPCC, 'Climate Change 2014 Synthesis Report: Summary for Policymakers' (2014) 2–20.

change issue[3], therefore adjudicatory and prescriptive action on a global scale is required.

This paper will assume that the ICJ would be advising in favour of climate change adaptation and mitigation by fixing the liability of states and by commenting on the consequences of non-compliance with the obligations confer positive entitlement for the affected state. Further, this paper will assume that international environmental principles, along with the perspectives of international judges, generally exhibit a broad inclination toward supporting these policy aims. Consequently, international adjudication would probably result in a favourable stance toward climate-related matters.

2. ICJ'S ADVISORY OPINION: THE SCOPE, EXTENT AND LEGAL SIGNIFICANCE

The recognition of the need for an advisory opinion on climate change from the ICJ was previously highlighted in 2015 by Philippe Sands, a British attorney and researcher[4]. Today, this necessity has been acknowledged by the UNGA, and it has requested the ICJ for an advisory opinion in March 2023 titled "Request for an Advisory Opinion of the ICJ on the Obligations of States in respect of Climate Change". The General Assembly has unanimously adopted a resolution for an opinion on the obligations of states concerning climate change. Many speakers have praised this action as a significant

3 Hari M. Osofsky, Is Climate Change "International": Litigation's Diagonal Regulatory Role, 49 VA. J. INT'L L. 585 (2009).

4 Sands (n 1). Pg 30.

achievement in their prolonged endeavour for climate justice[5]. In the request, the first question pertains to the "obligations of states under international law to ensure the protection of the climate system," whereas the second question is with respect to "legal consequences under these obligations for states where they, by their acts and omissions, have caused significant harm to the climate system." It is noteworthy here that the questions exactly resemble Sands' suggestions[6]. The question appears to be specific and precise, pointing at the significant role the ICJ can play here in the history of the climate change regime.

According to Sands[7], if an advisory opinion is to be established, its primary objective is undoubtedly to serve the collective interests of the international community by adopting a forward-looking approach. The focus should be on future actions and considerations rather than solely on past actions, while it is acknowledged that there exists a relationship between the two components. The most effective approach involves the identification of two essential elements: firstly, the relevant legal framework that pertains to the subject matter, and secondly, the manner in which these applicable laws, in a broad sense, are fitting to the numerous concerns that are likely to emerge as climate change and its implications unfold.

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5 'General Assembly Adopts Resolution Requesting International Court of Justice Provide Advisory Opinion on States' Obligations Concerning Climate Change | UN Press' <https://press.un.org/en/2023/ga12497.doc.htm> accessed 29 October 2023.

6 Supra note 1.

7 ibid.

2.1 The Courtroom of Possibilities

Prima facie, the international courts have a prominent presence within the expansive realm where global public consciousness is shaped. The opinion rendered by the ICJ has the potential to fulfil an expressive role, contributing to the transformation of societal norms and values[8]. The international courtroom has the potential to serve as a platform for the establishment of international legitimacy[9]. Upon receipt of the request, the ICJ will have to undertake the responsibility of examining international law to elucidate the obligations that the states bear towards future generations with respect to climate change within the framework of international law. According to Gromilova,[10] this implies that the world court, even when providing an advisory opinion, will need to address topics like scientific uncertainty, intergenerational climate justice, and attribution, which fall beyond the court's jurisdiction and carry political risks.

Daniel Bodansky[11] had the view that an advisory opinion would be more favoured to a judgment in a contentious case before the ICJ. He argued that advisory opinions possess wider ramifications in comparison to judgments rendered in contentious matters, as the latter is legally binding solely for the parties directly involved. The

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8 Cass Sunstein, On the Expressive Function of Law, 144 U. PA. L. REV. 2021 (1996).

9 Supra note 1.

10 Mariya Gromilova, Rescuing the People of Tuvalu: Towards an I.C.J. Advisory Opinion on the Int'l Legal Obligations to Protect the Environment and Human Rights of Populations Affected by Climate Change, 10 IC HR. L. REV 233, 250 (2015).

11 Daniel Bodansky, 'The Role of the International Court of Justice in Addressing Climate Change: Some Preliminary Reflections' (2017) 49 AS LJ 689.

mechanism permits all states to express their concerns, in contrast to disputed proceedings that are restricted to the disputing parties and interveners. Advisory opinions have the capacity to tackle issues in a more abstract and overarching manner, thereby deferring the resolution of precise details to subsequent negotiation processes. The aforementioned viewpoint concerning the fundamental principles of international law pertaining to climate change obviates the necessity for the Court to render precise judgments regarding standing or causation, resolving the concern of leakage. But what he suggested was that the World Meteorological Organization might be a preferable option compared to the UNGA due to the fact that the former platform is more oriented towards technical matters and is less influenced by political biases, making it potentially easier to mitigate the inclusion of unproductive aspects in the request. According to him, the efficacy of an advisory opinion rendered by the ICJ would be contingent upon the precise matters it is assigned to examine. Hence, the endeavour to seek an advisory opinion should be handled by a globally recognized institution with the capacity to formulate questions that can elicit significant insights from the ICJ.

Mayer[12] identifies three possible outcomes that the ICJ could bring about. Firstly, the court can identify an existing relevant norm called an identificatory opinion. Even though this outcome can disappoint the advocates of advisory opinion as the court only restates the poorly defined norms, it can still influence the political discussion

12 Benoit Mayer, 'International Advisory Proceedings on Climate Change' (2023) 44 Mich J Int'l L 57.

among the powerful nations to break their self-centred perspective towards the issue. If the opinion is applicatory, it would deal with the applicability of these norms to the states. This could lay down what the states ought to do and what they should refrain from doing to fulfil their obligations, which can also involve setting up a compensation regime to hold the large emitters liable. However, the possibility of these standards influencing the nations is highly doubtful, and it can erode the reputation of the Court for stepping into the shoes of national negotiators by becoming an international legislator. Somewhere in the grey area lies the interpretative opinion, which would point to the implications of the existing norms, thus clarifying the already existing ill-defined norms. Bodansky's opinion that the key is to bring about a helpful, based on conventional norms of International law, which, at the same time, aligns with the judicial function. The key is to find that sweet spot where the advice is legally sound and helps move things forward.

The ICJ possesses the necessary jurisdiction to address the issue due to its control over international treaties. This is because climate change raises inquiries regarding the obligations of states towards future generations and the international community[13]. The advisory opinion has the potential to provide additional elucidation on the substantive responsibilities of states in accordance with international treaties such as the UNFCCC, the Kyoto Protocol, and the Paris Agreement. It can also shed light on norms of international

[13] Cinnamon Piflon Carlarne & J.D. Colavecchio, Balancing Equity and Effectiveness: The Paris Agreement & The Future of International Climate Change Law, 27 N.Y.U ENvTL. L. J. 107 (2019).

environmental law, like the prohibition of transboundary harm with respect to the environment, the entitlement to a healthy environment, the concept of good neighbourliness and the obligation to cooperate, as well as the duty to evaluate environmental impacts. But, the ICJ should refrain from engaging in contentious matters, such as the interpretation of the principle of common but differentiated responsibilities (CBDR) or laying standards to determine CBDR. This issue, characterized by its high political significance and controversial nature, has been a longstanding source of division among the political parties, which is outside the judicial purview[14]. The inclusion of the court in highly politicized discussions would undoubtedly have the adverse effect of compromising the court's standing and intensifying interstate tensions during the negotiation process. The court's opinion possesses an autonomous existence that is not contingent upon the desires of the involved parties and is not susceptible to perpetual renegotiation. Thus, the advisory opinion can address the shared concerns of the global community as a whole[15].

Mainly, looking at the Paris Agreement's goal requires persuading nations to progressively enhance their commitments to reducing emissions, which can be achieved through a mechanism called the "Cycle of Contributions". However, this current technique remains untested and is accompanied by numerous challenges. In this

14 Daniel Bodansky, 'The Role of the International Court of Justice in Addressing Climate Change: Some Preliminary Reflections' (2017) 49 Ariz St LJ 689.

15 Jochen Frowein & Karin Oellers-Frahm, Part Three Statute of the International Court of Justice, Ch.IV Advisory Opinions, Article 65, in *The Statute Of The International Court Of Justice: A Commentary* 1, 6 (2d ed. 2012).

context, the ICJ's opinion can act as a catalyst for negotiations and shaping expectations among stakeholders while acknowledging that it's not a complete solution to the issue of climate change. The identification of specific criteria for determining NDCs under the Paris Agreement would likely function as a central point of reference, thereby elevating the status of the selected criteria. This would present a more significant challenge for the involved parties to disregard compared to the current body of I.C.J. rulings concerning global environmental matters. The reason for this is that it would centre its attention on climate change and possess a clear and direct relevance to the issue at hand. The effectiveness of the carbon reduction pledges outlined in the Paris Agreement falls short of the efficiency levels indicated by most economic evaluations[16]. A liability rule that is administered by the judiciary, if adhered to, has the potential to generate a superior conclusion, at least in principle[17].

The Advisory opinion can also contribute to these negotiation processes by "setting the terms of the debate, providing evaluative standards … and establishing a framework of principles within which negotiations may take place to develop more specific norms."[18] It can shift the responsibility of making arguments or justifying positions, both in the context of future legal disputes and in the arena of

16 Daniel Bodansky, The Legal Character of the Paris Agreement, 25 REV. EUR. COMMUNITY & INT'L ENVTL. L. 142, 146 47 (2016).

17 Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 HLR 1089, 1106 10 (1972).

18 Supra Note 11.

international diplomacy[19]. A judicial ruling pertaining to the obligations of states in mitigating the adverse effects of their greenhouse gas emissions on other nations holds the capacity to bolster climate negotiations. The affirmation of the obligation to avert significant harm that transcends national boundaries[20] as a component of customary international law has been established by the ICJ. The commentary provided by the International Law Commission regarding the draft articles pertaining to mitigating the occurrence of harm resulting from actions that pose dangerous risks elucidates the concept of this obligation as that of "due diligence[21]." This entails that the amount of precautionary measures taken should correspond to the potential risk of harm extending beyond national borders in a particular instance. Nevertheless, the existing norm lacks clarity. The establishment of a more detailed set of due diligence rules by the ICJ may prove advantageous in incentivizing countries to submit more ambitious NDCs in subsequent periods.

Further, this decision can influence domestic courts in their litigation on climate change-related matters by drawing inspiration and filling the voids in domestic legislatures. It is also true that national and international climate policies can be uncertain and subject to change, ICJ's opinion can help set a moral or normative standard for how

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19 Armin von Bogdandy & Ingo Venzke, The Spell of Precedents: Lawmaking by International Courts and Tribunals, in *The Oxford Handbook*, supra note 5, at 503, 507.

20 Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Rep. 226, 242, 29 (July 8).

21 Int'l Law Comm'n, Rep. on the Work of Its Fifty-Third Session, at 394, U.N. Doc.A/56/10(2001), <http://www.un.org/documents/ga/docs/56/a5610.pdf>.

society, including governments and businesses, should approach climate change, even if it doesn't have direct legal authority over state actions. However, in Wall's opinion[22], the Israeli Supreme Court valued the ICJ's interpretation of international law; it didn't accept the ICJ's findings on specific facts as conclusive[23]. This highlights a potential limitation of advisory opinions on national courts. If an advisory opinion on climate change goes beyond general principles and dives into specific factual situations, national courts might still debate those facts in their own cases. This could limit the opinion's effectiveness in guiding general legal principles applied to climate change issues in national courts.

The author had earlier shed some light on the twistedness of the climate change issue. The advisory opinion can clarify to some extent the currently uncertain areas, such as determining who has the *locus standi* to initiate a proceeding, specifying the level of evidence needed to prove causation, and outlining how responsibility should be assigned to states. Additionally, a judicial opinion can have a lasting impact on the conduct of nations and other entities, influencing their actions and policies over time by setting a precedent based on the principles and legal standards it establishes. Hence, it has the potential to significantly influence the prevailing expectations for prospective

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22 Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory (Advisory Opinion) [2004] ICJ Rep. 136 (145–48).

23 Mara'abe v. The Prime Minister of Israel (Judgment of 15 September 2005) Supreme Court of Israel 45 (2006) 202.

international litigation.[24]

With increasing scholarly endorsement for courts to play a substantial role in encouraging climate action by government bodies, there is growing backing upon which the ICJ can draw for its decision. Although the ICJ can't establish laws, it can examine judicial rulings that reinforce the presence of international law in its advisory opinion[25]. Since the climate change treaties mostly lack a legally binding nature, the state parties often have escaped from their obligations, and several multilateral, as well as bilateral agreements relating to climate change lack an enforcement mechanism as such to enforce state compliance; it is here the ICJ's can make an improvement through its opinion. Researchers argue that despite advancements in defining and enhancing international environmental principles, there exists a deficiency in supranational institutions responsible for identifying instances where nations violate their international obligations and implementing appropriate punitive measures[26]. They contend that it is imperative to establish a connection between procedural environmental rights and substantive rights to environmental quality in order to maximise their efficacy[27].

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24 Jose Alvarez, What Are International Judges For? The Main Functions of International Adjudication, in THE OXFORD HANDBOOK, supra note 5, at 158, 176.

25 Anxhela Mile, 'Emerging Legal Doctrines in Climate Change Law - Seeking an Advisory Opinion from the International Court of Justice' (2021) 56 Texas International Law Journal 59.

26 Amedeo Postiglione, Global Environmental Governance: The Need for an International Environmental Agency and an International Court of the Environment 1, 13 (2010).

27 Trevor Daya-Winterbottom, The Legitimate Role of Rights-based Approaches to Environmental Conflict Resolution, in *Courts And The Environment* 59, 63 (Christina Voigt, Zen Makuch eds., 2018).

Therefore, this advisory opinion rendered by the ICJ has the potential to exert influence on nations, compelling them to adhere to their legal commitments. Moreover, such a finding can contribute to the elucidation of the comprehensive scope of these duties.

2.2 The tightrope walk

The request for involving Courts is justified when we look from the eyes of small islands like Vanuatu, which proposed the ICJ's advisory opinion, as well as Antigua and Barbuda and Tuvalu. These small island nations are in peril due to the impacts of climate change. These states have been vocal about the need for more robust measures to curb emissions and compensate victims of climate change from the very beginning. These nations have valid concerns that the consensus-based decision-making process under the Paris Agreement, which permits a minority of states to impede progress, may fail to provide adequate measures to shield them from the impacts of climate change or address their resultant losses. The unequal bargaining power in negotiations is a different issue. Hence, they see the ICJ as their last ray of hope. The evolution of negotiated norms over the years has indeed been slow due to the need to gather global consensus, but at the same time, it cannot be denied that this process has played a crucial role in establishing the legitimacy and widespread acceptance of the UN climate change regime among states. Having said that, many scholars fear the result of involving a third-party decision-maker in the

hard-earned global consensus[28]. Thus, the question that requires an answer is, would a climate change advisory opinion work in tandem with or against the climate change negotiations taking place under the United Nations?

Establishing a universal responsibility for climate change mitigation would affirm that nations are not granted unrestricted autonomy in tackling the issue of climate change[29]. The proponents of the advisory opinion do not want the court to confirm that an obligation exists. Instead, they expect the court to formulate a standard of conduct for every state concerning their duty to mitigate. However, the court would still have the challenge of interpreting the implications of this global objective for specific states, even if it could transform the temperature targets into a worldwide strategy for reducing emissions. Unlike the Dutch court that determined the reduction percentage in the Urgenda case,[30] there is no universally applicable "principle" that dictates the uniform reduction of emissions across all industrialized states. The reality is that states do not consistently follow emissions targets and act accordingly; therefore, the advisory opinion would likely adopt an ascending reasoning approach (laying norms based on state practice) [31] so that its potential to provide excessively

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28 Bodansky, D. (2023). Advisory opinions on climate change: Some preliminary questions. Review of European, Comparative and International Environmental Law, 32(2), 185-192.

29 Margaretha Wewerinke-Singh, Remarks at the Conference of the British Institute of International and Comparative Law (Mar. 11, 2021), in Rising Sea Levels: Promoting Climate Justice Through International Law, 14.

30 RB-Den Haag [Hague Dist. Ct.] 24juni 2015, ECLI:NL:RBDHA:2015:7196 (Stichting Urgenda/Nederlanden) [Urgenda Found. v. Netherlands] (Neth.).

31 Martti Koskenniemi, From Apology to Utopia: The Structure of International Legal Argument 59 (2007).

theoretical results that lack connection to social reality or even contradict one another. Instead of attempting to evaluate the minimum levels of mitigation action required by states, a court might endeavour to determine the essential measures that a state should undertake in order to adhere to its overall mitigation commitments. According to Mayer,[32] the ICJ can draw inspiration from the case of *Friends of the Irish Environment v. Ireland*[33], in which the Irish Supreme Court determined that the national government was obligated to establish a clear and specific long-term mitigation target.

The primary objective of courts is to interpret laws and not to lay down norms; further, the international courts identify so. Therefore, the climate change issue puts the court in a dilemma as most of the norms relating to this issue are unclear and not precise. If the courts in any way step into bringing clarity to the existing norms, it would be transgressing into the written laws. Therefore, just like the court's advisory opinion in the *Nuclear Weapons Case*, it would be unable to give a definite answer since the law is unclear. The ICJ did not reach the conclusion that the use of nuclear weapons is universally prohibited, contrary to the expectations of the States that advocated for the advisory opinion.

ICJ, particularly in the context of nuclear weapons, does not consistently align with the prevailing perspective of nations. Likewise, opinion on climate change could disagree with popular, but shaky, legal

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32 Benoit Mayer, 'International Advisory Proceedings on Climate Change' (2023) 44 Mich J Int'l L 63.

33 Friends of the Irish Env't v. Ireland [2020] IESC 49, [2020] 2 ILRM 233 (Ir.).

ideas about how countries should reduce emissions like the nations are obligated to undertake measures that ensure the restriction of global warming to either 1.5 or 2 degrees Celsius. Conversely, if the court determines that the matter of climate commitments lacks legal significance, it may undermine other legal proceedings pertaining to the same subject, even within domestic courts.

If the courts confirm the limited discretion of the states in climate mitigation related actions, it would be restatement as the states have already accepted their obligations and are working towards it. The area in which the international community needs clarity is where the states don't agree on the fair share in the obligation matrix. But this would throw the court into never-ending political debates and tarnish its image. The court may have challenges in providing persuasive answers due to the severity of political conflicts and the absence of a clear legal or moral foundation to address them.

It is sceptical over the court's capacity to establish compelling standards, particularly in the light of the ongoing negotiations that have yet to provide consensus on key matters. It is also possible that if the courts bring out a "burden sharing formula" or something like a reparation scheme, it may prove counterproductive. There is concern that it may divert attention or impede political negotiations. Some contend that the court may only support the perspectives of some nations, therefore reinforcing pre-existing conflicts and exacerbating the difficulty of reaching consensus. Moreover, it is probable that the impact on the States that are most in need of behavioural change would be minimal.

If the courts deal with stricter obligations or stresses on liability, it would obviously be unacceptable to many countries, especially the historic emitters. If a large number of states simply disregard the court's advice, it would point to the court's credibility and its ability to influence international cooperation. It would eventually weaken people's trust in international law as a whole.

There is a high chance that the advisory opinion would also be as the developed countries looked up the efforts of the International Law Commission to consolidate the relevant legal norms relating to climate change[34]. There was an apprehension that an autonomous interpretation of climate law would disrupt the equilibrium established through climate negotiations. This scenario suggests that the advisory processes have the potential to result in the rephrasing of widely recognised legal concepts that are too abstract, rather than providing practical assistance for international discussions pertaining to climate change. It is very difficult to expect state cooperation to the advisory conclusions that contradict their entrenched interests. This is further exacerbated by the recent trend of growing antagonism of developed nations towards International Judicial systems, more and more human rights tribunals and courts are looked upon as institutions consolidating decision making power replacing traditional bipartite or multipartite agreements with broader rulings. This antagonism to international forums have reached up to the extent of freezing appointments to the appellate authority of the World Trade

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34 International Law Association [ILA], Rep. of the 76th Conference, Washington D.C., United States, 2014, Resolution 2/2014: Declaration of Legal Principles Relating to Climate Change 2 (2014).

Organization (WTO) effectively deadlocking dispute resolution. The threat to rule based international cooperation has to be viewed with much apprehension and the ICJ has to balance its interests while delivering advisory opinions in an already hostile political environment.

The peculiar aspect of the UN climate change regime is that the state parties clearly did not want division of power nor third party intervention; they deliberately kept the power to themselves and the norms that govern them. This is the main factor that keeps them together and keeps them moving. They have crafted the regime purposefully vague with carefully added "constructive ambiguities" so that they don't get stuck in disagreements and could move forward with whatever they have and whatever they can contribute according to their national capabilities. Anything disturbing this fine canvas would be viewed with contempt. If the court deviates from treaty specifications which have been carefully crafted with deliberate vagueness, it risks entering a political tightrope walk, leading to a highly contentious and likely disregarded judgement by opposing states.

Supporters believe that this advisory opinion can complement the existing negotiations by filling gaps and adding details to the existing laws and drawing the pathway for negotiations. But it would be like undermining the very rationale behind those carefully constructing ambiguities and would result in judges knocking at a carefully built bungalow of cards, complicating the things that the

states are trying hard to find solutions. According to Bondansky,[35] the Paris Agreement is at a crucial juncture and is moving to reap its fruits even though at a slow pace. Seeking an advisory opinion would distract the states from what is to be done at this very important point, divert them from focusing on future negotiations, and fuel them in making excuses to fulfil their obligations by stating this decision of the ICJ. There is also a possibility that the court would interpret a norm contrary to what was intended by the state parties and if the court's decision harms a State Parties interest, they would lose all incentives to work together in future.

3. CONCLUSIONS AND SUGGESTIONS

Climate change is widely considered to be one of the most formidable global challenges, including various dimensions such as environmental, political, social, economic, and ethical aspects. It is unlikely that the U.N. climate negotiations will effectively tackle matters related to climate justice. In theory, states possess a motivation to consent to reductions in emissions if they are reciprocated with comparable reductions from other parties. Nevertheless, the individuals or entities accountable for greenhouse gas emissions typically lack the incentive to offer reparation to nations that have borne the adverse effects. Addressing this issue necessitates collaboration among numerous stakeholders. Requesting an advisory opinion from the ICJ represents but one plausible course of action among other alternatives that can help alleviate the adverse

35 Trevor Daya-Winterbottom, The Legitimate Role of Rights-based Approaches to Environmental Conflict Resolution, in *Courts and The Environment* 59, 63 (Christina Voigt, Zen Makuch eds., 2018).

consequences of climate change. This approach aims to provide clarity regarding the obligations of states towards future generations in the context of climate change. The advisory opinion has garnered widespread approval and serves as an indicator of potential possibilities.

According to Nicholas Robinson, the effective resolution of environmental concerns typically necessitates adopting a comprehensive and enduring outlook, as well as implementing a succession of incremental and deliberative measures. In the present situation, it is imperative for courts to cultivate a coherent capacity to effectively address the intricate legal aspects pertaining to sustainable development and the ramifications arising from climate change. This necessitates not only rapid steps, but also an ongoing and adaptable ability to address these urgent legal issues over a period of time.

The enhancement of the legal framework pertaining to climate change indicates a recognizable obligation for the ICJ to tackle climate change and provide an advisory opinion that encourages more assertive measures. The advisory opinion necessitates a comprehensive examination of not only the prevention of subsequent negative consequences but also the amelioration of these consequences. Additionally, it underscores the significance of burden sharing in addressing this matter. One limitation of the advisory approach lies in its ability to create relatively less public attention or interest when compared to contentious instances, including clearly recognizable applications and responses. Conversely, the advisory approach is lauded for its inherent simplicity. This approach offers a direct means of articulating legal principles without the intricacies and disputes commonly observed in contested legal matters. The advantage of

simplicity becomes apparent when the primary objective is to provide legal counsel or clarification, rather than to generate public interest.

There is no doubt that the advisory opinion has unprecedented scope in the climate regime. But there are certain areas that the ICJ needs to be very careful. Setting a definite standard would be contrary to the silver thread underlining the Paris Agreement, and the states need not welcome such an approach, therefore the ICJ should thus be encouraged to articulate its opinion in a manner that unequivocally upholds the authority of states ascertain their own NDCs) and to assess the NDCs of other states. When considering such an opinion, there's no inherent obstacle preventing the court from, in accordance with its procedural guidelines, expanding the process to involve not just states and international organizations but also other stakeholders like businesses and non-governmental organizations (NGOs) through suitable mechanisms. The Court's rules don't inherently prohibit such inclusion.

As the ICJ hasn't dealt with considerable cases that concern the environment, it is hard to predict the stance of the ICJ in the present matter. Even if the ICJ lays down specific rules and obligations, keeping in mind the non-binding nature of the experts advice, it would not have the authority to definitively decide the provisions of international law and the states are free to decide on their own. States may claim that they are adhering to the advisory opinion if it were of a broad character and did not have any particular consequences for state behaviour. Furthermore, if it were more precise, States would have the prerogative to reject its decision. Practically, advisory opinions cannot attract state compliance provided that the contentious judgments are themselves failing in the first place. Typically, international courts like

the ICJ are tasked with determining the law rather than creating it. The foundation of their legality is on their proficiency in the identification, interpretation, and application of legal principles.

No doubt that the least contributors to greenhouse gas emissions are worst hit by the adverse effects of climate change, such as Kiribati. Several years ago, the nation of Tuvalu, a small island country in the pacific, contemplated the possibility of initiating legal proceedings against the United States in front of the ICJ. Even though the Warsaw conference held in 2013 achieved the establishment of an international framework aimed at addressing loss and damages, the present treaties pertaining to Climate Change more or less define the liability for compensation vaguely rather than without any legal consequences. The ICJ can address this but it would perhaps be a risky affair. Bodansky opined that "this legal clarity can cost as well as a benefit".

Further, the ICJ, in the process of formulating the obligations and consequences of these obligations, can base its opinion on international customary law like the "No harm Principle", the necessity to undergo EIA etc. It can also explore the "General Principles of Law," like the precautionary principle, the right to a clean and safe environment, etc. this would actually land ICJ on a safer side. The author concludes by stressing that the need for the hour is every tiny action ranging from an individual to the world court in order to prevent a human-induced disaster.

RETHINKING INDIA'S NUCLEAR ENERGY LAW IN LIGHT OF EVOLVING NEEDS

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Abstract

In the 18th edition of the G20 Summit, member nations ratified the New Delhi Leaders' Declaration recognising the potential for civil nuclear energy which signifies the renewed interest of policymakers both in India and abroad regarding the importance of nuclear energy on the path to achieve Net-Zero Carbon emissions. The advent of Small Modular Reactors (SMR's) and nuclear fusion research has attracted the attention of entrepreneurs and investors, large companies like Microsoft have partnered with fusion energy startups like Helion to explore and invest in the promise of nuclear energy. NITI Aayog in its report titled "The Role of Small Modular Reactors in The Energy Transition", advocated for increased private participation, these trends indicate the government's willingness to liberalise the nuclear industry. However, the government is posed with certain challenges if it chooses to tread this path, as there persist several lacunae in the Atomic Energy Act (1962), Civil Liability for Nuclear Damage Act (2010) and other laws governing nuclear energy, like Section 21 of the Atomic Energy Act which grants the Central Government over-encompassing powers to prescribe procedure for

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arbitration as well the immunity of such proceedings from existing law in place. Such limitations tend to disincentivize private entities from investing and conducting research in the nuclear energy sector. The paper intends to analyse such limitations and provide suitable measures to ensure that private sector participation is promoted in the fullest sense.

Keywords: Energy Law, Nuclear Energy, Net-Zero Carbon Emissions, Energy Transition

1. BACKGROUND

The global resource problem has nudged policymakers across the world to explore alternate sources of energy that are not only economically viable but also ecologically sustainable in the long run. The word "nuclear" can evoke fear in the minds of people in the background of nuclear weapons and nuclear leakages but recognising the potential that nuclear energy (especially nuclear fusion) has to offer supplemented by the lack of resources, nuclear energy has started to regain interest from all corners of the world. Over the past few months, even the Indian Government has expressed a renewed sense of interest in Nuclear Energy, with several project approvals, and inaugurations taking place in the recent past[1] as well as the G20 New Delhi Leader's Declaration recognising potential of Civil Nuclear

1 A Ksheerasagar, 'As India Expands Its Nuclear Power Capacity, These Four Companies Are at Forefront' (*Mint*, 26 February 2024) <https://www.livemint.com/market/stock-market-news/as-india-expands-its-nuclear-power-capacity-reliance-tata-power-adani-power-vedanta-are-at-the-forefront-11708915562167.html> Accessed 14 March 2024.

energy[2] and NITI Aayog's advocacy for increased participation of the private sector in the 'Small Modular Reactors in energy transition' report.[3]

The renewed interest in nuclear energy has been shared between the Government and the private sector which is seeking to invest in nuclear energy infrastructure. The government of India is reportedly expected to pursue investments worth 26 billion Dollars from private companies[4] to build 11,000 MW of new nuclear power generation capacity by 2040. While these investments do not require an amendment to the existing Atomic Energy Act,[5] and follow a 'Hybrid Model of nuclear development', the pace at which the industry has seen rapid strides in growth and development along with a commensurate interest in infrastructure investment and public spending, a discussion on the hurdles and potential issues that plague India's Nuclear Energy sector ability to attract talent, investments is needed.

To incentivise research and entrepreneurship of all types within the industry, it must be seen whether the Atomic Energy Act, Civil Liability for Nuclear Damage ought to be revised to ensure flexibility in operations and regulation. Nuclear fusion if done right has

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2 'G20 New Delhi Leaders' Declaration' (*Ministry of External Affairs*, 9 September 2023) <https://www.mea.gov.in/Images/CPV/G20-New-Delhi-Leaders-Declaration.pdf> Accessed 13 March 2024.

3 NITI Aayog, *The Role of Small Modular Reactors in The Energy Transition* (2023).

4 SC Singh, 'Exclusive: India Seeks $26 Billion of Private Nuclear Power...' (*Reuters*, 21 February 2024) <https://www.reuters.com/business/energy/india-seeks-26-bln-private-nuclear-power-investments-sources-say-2024-02-20/> Accessed 13 March 2024.

5 Ibid.

the potential to lower down and end the conventional fuel sources forever by essentially bringing down the cost of electricity to zero[6]. Investments in the area have already been made by giants like Microsoft[7] which makes it pertinent to draft a nuclear energy law that is not only conducive for private participation and research but also ensures adequate regulatory scrutiny to prevent untoward ecological disasters. With private investments at an all-time high and the government's renewed efforts in revitalising the nuclear energy industry, there ought to be more clarity in the areas of regulation, dispute resolution and more importantly, share of private players in such projects.

We are today on the verge of developing this sector into something grand and if accomplished, it would be a significant milestone in the country's goal of achieving 500 GW of renewable energy capacity by 2030. However, it must be noted that, to achieve this our strict compensation laws must be revised as it has been a prominent reason as to why deals with foreign nuclear power plant manufacturers like General Electric and Westinghouse have fallen apart in the past.[8] Other issues with respect to patent laws, arbitration

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6 N Davis, 'Breakthrough in nuclear fusion could mean "near-limitless energy"' (*The Guardian*, 12 December 2022) <https://www.theguardian.com/environment/2022/dec/12/breakthrough-in-nuclear-fusion-could-mean-near-limitless-energy> Accessed 10 December 2023.

7 T Gardner, 'Microsoft Signs Power Purchase Deal with Nuclear Fusion Company Helion' (*Reuters*, 11 May 2023) https://www.reuters.com/technology/microsoft-buy-power-nuclear-fusion-company-helion-2023-05-10/> Accessed 10 December 2023.

8 H Siddiqui, 'Liability clause holds up the Westinghouse & NPCIL nuclear

and litigation claims also need to be looked into as they could act as a roadblock that could prevent India from fully tapping into the potential that the nuclear energy sector has to offer. This paper aims to explore these challenges, how can the acts be amended to address these concerns.

2. CURRENT LEGAL POSITION

2.1 The Atomic Energy Act, 1962

The Atomic Energy Act enacted in 1962 seeks to develop and regulate the use of atomic energy from India, after the establishment of the Atomic Commission of India, legislators and policymakers evinced the need of a comprehensive and broad-based enactment that can enable the Central Government to efficiently channelise nuclear energy for peaceful purposes. Through the Act, the government aimed for the development, use and control of atomic energy for the welfare of the people of India and other peaceful purposes. The legislation aims to be in line with the principles of International Nuclear Law which provides for the utilisation of nuclear power for peaceful purposes. The Act provides the Central Government overarching powers as to the regulation of nuclear energy from conducting research to imposing restrictions on information made available for public use pertaining to nuclear energy. In addition to this, the Central Government also possesses powers to prohibit sale, exchange,

reactors' (*Financial Express*, 23 September 2021) <https://www.financialexpress.com/business/defence-liability-clause-holds-up-the-westinghouse-npcil-nuclear-reactors-2336246/> Accessed 10 December 2023.

production, export, acquisition etc. of prescribed substances or minerals from which prescribed substances can be made. The Act in its current form allows private companies to only take part in the industry as a minority partner[9] while operational responsibilities stay with the Nuclear Power Corporation of India Limited (NPCIL). Initially the sector was wholly managed and operated by the government and even now, the law restricts the role of a private company to that of a supplier. The supplier however is not free from liability in the Indian context.

2.2 The Civil Liability for Nuclear Damage Act, 2010

The Civil Liability for Nuclear Damage Act passed in 2010 has been fraught with controversies, criticisms and its supplier liability clause has been a hindrance which has prevented foreign suppliers in the past as a supplier can be held liable in India. Contrary to the *Convention on Supplementary Compensation* which rests exclusive liability on the operator unless it has expressly been agreed upon by the parties to contract or results from an act or omission to cause the damage,[10] operators have an additional right to recourse against suppliers in a situation where supply of equipment or material or services was substandard in nature[11] and allows for introduction of other forms of civil suits like remedy of tort against the operator as well as supplier.[12] The same has been a major roadblock for major private partnerships

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9 'GOVERNMENT OF INDIA ATOMIC ENERGY LOK SABHA.Pdf' (*Parliament of India Digital Library*, 08 July 2009) <https://eparlib.nic.in/bitstream/123456789/614004/1/75266.pdf> Accessed 14 March 2024.

10 Convention on Supplementary Compensation, S. 10.

11 Civil Liability for Nuclear Damage Act 2010, S. 17(b).

12 Civil Liability for Nuclear Damage Act 2010, S. 46.

in the past and ought to be a concern that should be looked into.

3. CHALLENGES IN INDIAN NUCLEAR LAWS

For the Government to incentivize private participation, the law must be flexible to accommodate a dynamic business environment. Secondly, while being flexible, it must ensure adequate regulatory scrutiny to protect the interests and rights of people at large. Lastly, it must provide a fair and effective dispute resolution system that is not only fair but just for both the government as well as the corporates. Keeping this in mind, we shall now identify legislative gaps and oversights that may possibly disrupt private sector participation in the industry.

3.1 Overarching Powers of the Central Government

Every law strives to seek a balance between regulation and liberty. Regulation ensures security and liberty ensures steady investments and innovation. However, India's nuclear laws seem to sorely lack this fine balance of regulation and liberty. The Atomic Energy Act, 1962, for instance, enables the Central Government to exercise vast powers over atomic energy production in the country. While these powers may seem sensible for national security, they may pose problems in attracting private sector players into the nuclear sector.

3.1.1 Restriction on Patents

A patent provides an inventor the exclusive right to sell, distribute or produce a unique invention. The Atomic Energy Act empowers the Government to prohibit patents to be granted for any

invention if it relates to atomic energy or is useful in the opinion of the government.[13] Further, the government can at any time inspect patent applications and instruct the controller of patents to reject applications important for atomic energy.[14] The Act has also laid down a duty that an individual must inform the Central Government of any patent being filed by him that relates to atomic energy.[15] Irrespective of whether the application is made within the country or abroad. Lastly, where an invention which concerns atomic energy is made under any contract, sub-contract, or establishments with the Central Government, it shall be deemed to be made or conceived by the Central Government.[16]

The restriction on patents can mainly be attributed to the sensitive nature of such inventions and concerns of security if a degree of exclusivity is granted to the individual behind the invention. While one can argue that this might result in a conflict with the Central Government's actions and the Indian Patents and Design Act of 1911 it should be said that Section 20(8) of the Atomic Energy Act states that the decision of the Government in such matters is final irrespective of what is provided in the Patents and Design Act of 1911.[17]

The problem with a blanket restriction on patent applications for any industry is that it stifles innovation. For companies to work around costs and output efficiency, patents not only provide an

13 Atomic Energy Act 1962, S. 20(1).
14 Atomic Energy Act 1962, S. 20(3).
15 Atomic Energy Act 1962, S. 20(4).
16 Atomic Energy Act, 1962, S.20(7).
17 Atomic Energy Act 1962, S. 20(8).

incentive for them to undertake such projects but also provide information essential for scientific research and development. In a system where any invention created shall be accorded to the Government instead of the creator, there is neither an incentive to innovate, nor a reason for technological change. It should be noted that the restriction is not a problem, rather it is the scope of restriction that acts as a roadblock to technological innovation. Section 20(1) provides the scope of restriction on patent application for an invention concerning nuclear energy.

> *"S.20(1): As from the commencement of this Act, no patents shall be granted for inventions which in the opinion of the Central Government are useful for or relate to the production, control, use or disposal of atomic energy or the prospecting, mining, extraction, production, physical and chemical treatment, fabrication, enrichment, canning or use of any prescribed substance or radioactive substance or the ensuring of safety in atomic energy operations."*

A bare reading of the section would show that restrictions imposed under the Act cover the whole gamut of atomic energy production. This expansive category poses serious problems if India wishes to compete with the global market.

If the Central Government aims to attract private sector participation and investment, it must limit the scope of regulatory power provided under the Atomic Energy Act. For instance, rather than restricting patents pertaining to atomic energy as a whole, the Central Government may restrict patents that may only lead to the weaponisation of atomic energy. This not only protects the incentive

to innovate but also effectively addresses the concerns of national security and nuclear proliferation.

3.1.2 Restriction on disclosure of information

Section 18 of the Atomic Energy Act[18] enables the Government to restrict disclosure of information pertaining to any nuclear plant, process, or method of procedure in the form of drawing, photograph, plan, model, document etc. In addition to this, individuals are also duty bound to not disclose any information pertaining to performance of official duties or functions under the Act. Thus, the Central Government has been accorded the power to control information that may or may not be supplied to its citizens. This information doesn't necessarily relate to atomic energy production. The government has time and again refused to disclose information relating to nuclear safeguards, research and technological work pertaining to materials and processes for functioning of nuclear reactors.

The Supreme Court in the case of *People's Union for Civil Liberties v Union of India*[19] rightly held that Section 18 of the Atomic Energy Act[20] cannot be deemed as *ultra vires* solely because it accorded the Government complete control over disclosure of information. The Court observed that such a restriction is necessary to prevent information being possessed by individuals who may pose a threat to the security and integrity of the nation. However, with increasing

18 Atomic Energy Act 1962, S. 18.
19 AIR 2004 SC 1442.
20 Atomic Energy Act 1962, S. 18.

private participation, the problem posed by Section 18 is not as to the restriction imposed rather it relates to the ability of the government to prevent disclosure of such information by private operators engaged in the work of atomic energy production. The absence of clear rules and regulations as to flow and disclosure of information may lead to private operators selling such information to the highest bidder. Thus, the government must lay down rules and procedures for periodic review of information being transmitted by private operators and ensure such information is not being disclosed to third parties unlawfully. However, the duty of information security does not end here. While rules and regulations might ensure private operators to undertake due-diligence measures as to information security, it is also pertinent for the government to strengthen existing cybersecurity safeguards. The necessity of enhancing digital infrastructure of India's nuclear sector was underscored in 2019 with the occurrence of a data breach at the Kundankulam Nuclear Power Plant (KKNP) being confirmed by the Nuclear Power Corporation of India Ltd.[21] It was revealed that a significant amount of data from KKNP's administrative network was compromised and stolen by hackers whose origins remain unknown to authorities. Thus, if the Government wishes to inspire confidence among citizens as to the role of the private sector in the nuclear industry, it must ensure that there exists a comprehensive regulatory landscape that is not only capable in restricting disclosure

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21 D Das, 'An Indian nuclear power plant suffered a cyberattack. Here's what you need to know (The *Washington Post*, 22 November 2023) <https://www.washingtonpost.com/politics/2019/11/04/an-indian-nuclear-power-plant-suffered-cyberattack-heres-what-you-need-know/> Accessed 12 March 2024.

of any or all information pertaining to production, processing and control of atomic energy but also penalize private operators who act to the contrary of such restrictions. It is pertinent for the government to balance its role as a facilitator of growth and regulator of industry to ensure that the nuclear energy sector develops in an efficient manner.

3.2 Dispute Resolution in Atomic energy laws

One of the primary issues when it comes to laws relating to atomic energy has been one of how dispute resolution is skewed against private stakeholders, such apprehensions regarding the rule of law in the sector are likely to puncture investor confidence, and dissuade innovation from taking place, whether it be powers of the government to decide commission, rules of procedure for arbitration or lack of appeal mechanism, the acts are unlikely to inspire confidence in a private stakeholder.

3.2.1 Rules of Arbitration

Arbitration forms the base for settlement of any compensation under the Atomic Energy Act, 1962. Section 21 of the Act lays down the principles for payment of compensation. Where compensation is payable under any settlement, it is paid according to agreement if there exists one for this purpose.[22] In the absence of any agreement for settlement of compensation, the Central Government shall appoint an arbitrator with the knowledge as to the rights of parties affected and

22 Arbitration and Conciliation Act 1996, S. 21(1)(a).

determine the amount payable as compensation.[23] Further, the Central Government is empowered to formulate rules as to the procedure to be followed in arbitration and principles for distribution of costs of proceedings before arbitrator and on appeal.[24]

The rules of arbitration prescribed by the Act seem to disproportionately favour the Government. Conventionally, the arbitrator is appointed on a consensus between both parties and the same is followed for rules to be followed during arbitration. However, in the case of the Act, we not only see a unilateral appointment of the arbitrator but also a unilateral move to prescribe its procedural rules. If we take into context the Arbitration and Conciliation Act of 1996**,** such an arbitration proceeding is void-ab-initio as it provides that parties are free to agree on a procedure for appointing arbitrators.[25] However, it should be noted that the Atomic Energy expressly states that no law relating to arbitration shall be applicable to arbitrations made under the Act.[26]

The characteristic feature of the private sector is its aversion to liability. Liability is often viewed as a "cost" which may eat into the company's profits. Thus, the objective for any company would be to keep its liability limited. This emphasis on "limited liability" has influenced the redressal systems in various areas. For example, "Safe Harbour" principle provides Internet-Service-Provider(s) legal protection from regulatory liability if certain conditions are met. Such

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23 Arbitration and Conciliation Act 1996, S. 21(1)(b).
24 Arbitration and Conciliation Act 1996, S. 21(4).
25 Atomic Energy Act 1962, S.11(2).
26 Arbitration and Conciliation Act 1996, S. 21(5).

protection from unlimited liability not only incentivises private sector industries to increase their presence in the market but also generates regulatory confidence as to harm and damage caused by third party actions.

3.2.2 Government's power to decide composition of Claims Commission in CLNDA

The Central Government has overarching powers in relation to deciding the course of how a claim for nuclear damage will be proceeded with, as they can decide whether a commission should be appointed or a commissioner[27] in a given case. Considering that state is likely to be a party to such cases, this could lead to a situation of government appointing a body that maybe more favourable to its position under the guise of urgency and since the award announced is final (as will be scrutinised in the subsequent section), government will be able to minimise its own liability by mere appointment of a favourable board.

To bolster faith, more safeguards ought to be laid down regarding the criteria for appointment of a commission over a commissioner under Section 19,[28] akin to how jurisdiction of forum is decided according to value of goods or services in consumer cases, deciding between appointment of a commission or a commissioner can be decided upon the basis of claim amount.

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27 The Civil Liability for Nuclear Damages Act 2010, S. 19.

28 The Civil Liability for Nuclear Damages Act 2010, S. 19.

3.2.3 Lack of Appeal Mechanism

Section 16(5) of CLNDA states that any award made under Section 16(1) by the Claims Commissioner is final in nature,[29] while the intention of such a measure is visible as they would like to compensate the victims at the earliest, reduce the burden of seeking justice on the ones impacted. The issue with not giving any appeal mechanism at all is that it may hamper investor, private stakeholder's interest in the market, knowing that they may be a bad, unfavourable decision away from their investment being winded up and a potential option to explore direct appeal to the Supreme Court can be considered to balance interest of delivering justice whilst maintaining investor confidence.

3.3 Liability in Energy Laws – Broad and Ambiguous?

The Civil Liability for Nuclear Damage Act (CLNDA) aims to provide victims of nuclear accidents a speedy redressal mechanism, due to which it lays down a strict-no fault liability framework for operators[30] of nuclear plants. This absolute liability approach for operators is in line with the international legal framework which provides for the exclusive liability of nuclear plant operators but due to supplier liability and liability going beyond CLNDA, companies like Electricite de France have refrained from entering into deals until a solution is brought to mitigate issues posed by India's nuclear liability

29 The Civil Liability for Nuclear Damage Act 2010, S. 16(5).
30 Civil Liability for Nuclear Damages Act 2010, S. 4(4).

law.[31] This section aims to examine the same.

The concept of supplier liability forms a distinct characteristic of India's nuclear liability laws. CLNDA provides operators the right to recourse against the supplier after payment of compensation if the nuclear accident has arisen by negligence or fault of the supplier. This negligence can be either in the form of defective material or equipment, or substandard services. However, a discourse on supplier liability would be incomplete without referring to the Convention of Supplementary Compensation (CSC) which essentially lays down a transnational nuclear liability framework and provides a minimum national compensation amount to victims of nuclear accidents. The CSC as such provides only two grounds for an operator to exercise the right to recourse. Firstly, such right is available if it has been expressly stated in a written contract. Secondly, such a right is available if an accident so caused has resulted from any act or omission with the intent to cause damage.

Thus, the right to recourse as laid down in CLNDA is incompatible with the principles of the CSC as nowhere does the CSC provide an operator the right to recourse on grounds of supplier negligence. It should be noted this incongruity can be attributed to the very fact that the CLNDA was passed in 2010 while the Indian government formally ratified the CSC in 2016. Further, the

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31 D Munjal, 'Explained: What Are the Ambiguities in India's Nuclear Liability Law?' (*The Hindu*, 27 April 2023) <https://www.thehindu.com/news/national/explained-what-are-the-ambiguities-in-indias-nuclear-liability-law/article66782725.ece> Accessed 12 March 2024.

Government is of the view that the right to recourse against the supplier is a contractual element and its operation would be contingent on the conditions between the operator and supplier. While a possible reason behind CLNDA providing for supplier liability can be due to the fact that the defective parts were a chief reason as to why the Bhopal Gas Tragedy took place. Thus, taking into consideration the context as to the inclusion of such a clause, it is pertinent for the government to revisit the provisions providing for supplier liability and at least ensure that such suppliers do not incur excessive liability as to a nuclear accident due to equipment or materials supplied to such nuclear power plants.

Suppliers can also be held liable under Section 17,[32] by the operator on the grounds that their service was "substandard" in nature, like other provisions in the act, it has potential to deter stakeholder interest due to the ambiguity it poses and leaves a lot for the commission's interpretation.

3.3.1. Broad Scope of Liability

Section 46 of CLNDA allows petitioners to institute a claim against the operator under any other law as well,[33] which opens a can of worms in the form of the possibility of being subjected to Criminal or liability under tort or relevant civil law. Unlike the CLNDA, which imposes a cap on the liability, a suit seeking civil or tortious remedy runs a risk of being held liable for an amount way greater than the cap

32 The Civil Liability for Nuclear Damages Act 2010, S. 17.
33 The Civil Liability for Nuclear Damage Act 2010, S. 46.

placed in the act. Which would decrease investor confidence. Further, the possibility of being held criminally liable is a major demerit that would deter innovators from taking a risk in this field just because there may be a fraction of a chance that if an experiment does not work in their favour, it could lead them to serve a prison sentence, acting as a major deterrent for innovation in the sector, in turn impacting investments.

Alternatively, an increased upper limit under CLNDA should be imposed and regulation ought to clarify as to the extent of liability that can be brought before the court in a civil case. Further, the possibility of criminal liability ought to be struck down in its entirety or only be limited to an element of "gross negligence" being proved.

4. SUGGESTIONS

To attract greater number of investors and talent to the nuclear energy sector of India, the laws ought to be relooked into with a lens that promotes research and investments in Nuclear Energy while being within the realms of the existing legislative framework.

4.1 Research and Development

The Atomic Energy Act, while comprehensively covering regulation of atomic energy, production and distribution, suffers from certain problems from the perspective of liability and innovation. To ensure robust private participation, the government must revisit restrictions imposed on patents concerning atomic energy. As mentioned earlier, emphasis on the weaponisation of atomic energy may prove to be viable if patent restrictions are concerned. India still

has a long way to go to become a hub for nuclear production and research. Currently, the Global North leads in terms of nuclear research[34], however much of this can be attributed to the synergy shown among such nations as to the communication and transfer of scientific research and development. This synergy is particularly lacking in the Global South. Multilateral agreements such as the RCA can provide a viable platform for countries in the Global South, particularly South Asia to promote shared and cooperative research for the welfare of people. India's position as an emerging nuclear power supplemented by the presence of a dynamic research system can prove wonders in developing synergy as to nuclear research and development and effectively provide the global south means to tap into a very lucrative form of energy. This would prove to be a game-changer in ensuring energy security and independence among such countries, thereby mitigating problems posed by an impending resource and energy crisis.

4.2 Liability and Accountability Framework

It is pertinent for the Government to revisit the dispute settlement mechanism as laid down in the Atomic Energy Act. While arbitration may prove to be highly effective and efficient in addressing problems arising between the Government and the other party in the contract, it fails to provide a fair adjudication process. The Government cannot expect the private sector to toe the line and

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34 H Kim, I Hong, and W Jung, 'Measuring national capability over big science's multidisciplinarity: A case study of nuclear fusion research' (PLOS ONE, 8 February 2019) <https://doi.org/10.1371/journal.pone.0211963> Accessed 10 December 2023.

comply with rules prescribed by the Government with respect to dispute resolution as it is manifestly unjust. The Government's powers as to appointment of arbitrator and prescription of rules for settlement of the claim amounts to a gross violation of the principles of natural justice. The Government by exercising such powers effectively becomes a judge in its own case. Such arbitrariness in the settlement of the claim has the effect of casting a sense of apprehension among private operators as to the veracity of the award declared by the arbitrator. Alternatively, the Government and the other party in the contract may separately appoint an arbitrator for themselves. It would be the responsibility of the appointed arbitrators to select a chief arbitrator to adjudicate over the issue. The powers as to prescription of rules for arbitration and settlement of claim would lie with the chief arbitrator so selected in consultation with the arbitrators appointed by either party. Such a system would not only prove to be fair and just for the private operator but also ensure that the government has a say in how arbitration is commenced.

Moving to the restriction imposed by the Act on disclosure of information pertaining to nuclear product, management, processing etc. The Government must walk the tightrope of information security and information asymmetry. While the existence of such a restriction is necessary to safeguard the very foundation of the country's nuclear industry, it must not be limited to the observation of due-diligence measures taken by operators of nuclear plants. There must be an increased emphasis as to data protection and security pertaining to

nuclear research and development. The data protection policy[35] adopted by Great British Nuclear (GBN), a wholly government owned energy company, provides an effective blueprint as to how a nation can utilise existing data protection laws to ensure information security in the nuclear industry. An interesting point to note about the data protection policy is that it has termed GBN as a data controller/processor, effectively bringing it within the ambit of the Data Protection Act of 2018. Thus, the Indian Government may look at avenues to coordinate the Atomic Energy Act on lines of the Digital Personal Data Protection Act, 2023 to reinforce information security in the nuclear sector. By making NPCIL a body appointed by central government as the sole data fiduciary[36] in the sector, it can provide clarity and solve for the lack of adequate data protection, cyber security mechanisms in nuclear plants across the country.

4.3. Supplier Liability and Dispute Resolution

The Civil Liability for Nuclear Damage Act, if amended to resolve the concerns that investors, private stakeholders have regarding supplier liability, possibility of liabilities extending beyond the legislation, government's overarching powers over the process and lack of appeal mechanisms can help bolster supplier confidence, promote research in the sector.

There needs to be clarity as to when a commission or

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35 'Great British Nuclear Data Protection Policy' (*GOV.UK*, 13 March 2024) <https://www.gov.uk/government/publications/great-british-nuclear-gbn-data-protection-policy/great-british-nuclear-data-protection-policy#policy-details> Accessed 14 March 2024.

36 Digital Personal Data Protection Act 2023, S. 2(i).

commissioner should be appointed, and it must not be left to the central government to take a call on the same on an arbitrary basis, a queue as discussed in the prior section based on the claim amount. Clearer due-diligence provisions or standards should be laid down for suppliers as to what is the standard they ought to meet to prevent themselves from being unnecessarily dragged into litigation.

5. CONCLUSION

While the move to invite private, foreign investment in the nuclear energy sector is a timely one, the regulatory landscape requires major reworking if it seeks to develop and sustain the interest of investors and innovators in India's Nuclear Energy sector. The areas of dispute-settlement pertaining to Arbitration and Litigation, require major reforms in the form of providing a clearer liability criterion. Thus, boosting investor confidence in the sector.

Reforms also need to be considered with respect to patents, privacy, and liability to help maintain a balance between promotion of innovation, efficiency, and public interest. The emphasis on reformation must not be limited to legislation but should include areas pertaining to policymaking. Recommendations provided as to the application of new data protection laws and the laying down of due diligence standards to be followed by the supplier may prove to be beneficial to investors and government alike. If done right, these changes hold the potential to transform India's Nuclear Energy Industry and position itself as a world leader in the nuclear energy sector.

COMPLICITY FOR WRONGFUL GREENHOUSE GAS EMISSIONS AS A FORM OF EXTRATERRITORIAL STATE RESPONSIBILITY FOR CLIMATE CHANGE

Shun Ming Yau[*]

Abstract

As the climate clock is ticking, the emerging legal duty to mitigate greenhouse gas emissions by States is timely, if not singlehandedly, the most effective antidote to remedying climate change. Such a duty, however, is primarily territorial. Under the current climate legal regime, States are responsible for mitigating their national emissions aggregated by source. It is not surprising to see States increasingly 'outsource' emissions-intensive activities and thereby 'transfer' their mitigation duty to other States, or otherwise provide political and economic assistance to the operation of extraterritorial emissions activities. Such conduct defeats the core principles of equity, precaution, and sustainability. This article critiques the complacency in responsibility allocation for climate change and asks the question of what extent a State may be responsible for its complicity in the wrongful emissions of another State by engaging in, facilitating, or otherwise participating in certain of the latter's emissions activities. It argues that while the legal basis for establishing such complicit responsibility is splintered and still in its conceptual infancy, it nonetheless constitutes a forward-looking, indispensable facet of the extraterritorial responsibility of States for climate change.

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Keywords: Extraterritorial Responsibility, Climate Change, Transfer, Mitigation, Sustainable

1. INTRODUCTION

Imagine a scenario where State A provides decisive diplomatic assistance for one of its corporate nationals to secure an exploration permit under the hydrocarbon law of State B. The corporation soon acquires an exploitation concession to carry out onshore and offshore drilling, on an unprecedented scale, with the operation subsidized by State A. Most of the petroleum products are traded, marketed, and sold back in State A, while more than half of the population of State B has no access to electricity. Each year, the corporation pays billions to State A in taxes and State B in royalties and production entitlements. At the same time, State A provides millions for another corporate national to set up a gas-fed plastic production facility in State B. Home to the world's largest landfills, State B imports solid waste annually under a bilateral agreement with State A, including plastics.

According to the International Energy Agency, oil and gas operations account for around 15% of total energy-related greenhouse gas (GHG) emissions globally, whereas the use of oil and gas results in another 40%.[1] On the other hand, plastics have less but not insignificant carbon footprint throughout their lifecycle (inclusive of

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1 International Energy Agency, 'Emissions from Oil and Gas Operations in Net Zero Transitions: A World Energy Outlook Special Report on the Oil and Gas Industry and COP28' (2023) 4 <https://iea.blob.core.windows.net/assets/2f65984e-73ee-40ba-a4d5-bb2e2c94cecb/EmissionsfromOilandGasOperationinNetZeroTransitions.pdf> accessed 13 March 2024.

production and disposal), accounting for 3.4% of global emissions.[2]

Against this geopolitical reality, the current climate responsibility structure is problematic for three reasons, which, in turn, will be elaborated in this article. First, the duty to reduce anthropogenic GHG emissions, the main cause of climate change, does not appropriately reflect the patterns of global economic activities. Despite various treaties giving rise, directly or indirectly, to such a substantive duty to reduce GHG emissions, such a duty is territorial, i.e. it is either restricted expressly by a jurisdictional clause or implicitly by the treaty text entrenching the principle of territoriality.

Second, climate treaty obligations with extraterritorial effects are rare and mainly concerned with international cooperation in funding and technology transfer. Even then, some of these obligations are transferred to be collectively borne and operationalized by international organizations. This is not to mention that the majority of climate obligations, whether substantive or procedural, are non-justiciable given the consensual election for a compliance mechanism and voluntary mitigation targets in the absence of a dispute settlement clause and actionable causes of treaty non-compliance.

Third, as extraterritorial climate obligations are either peripheral or symbolic, States continue to meet their own climate targets by moving or 'outsourcing' emissions-intensive activities to

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2 United Nations Environment Programme, Preparation of an international legally binding instrument on plastic pollution, including in the marine environment (UNEP/PP/INC.1/7), 13 September 2022, para 4.

third States, aggravating global environmental injustice.[3] Patterns of global economic activities are jarring: as the global North extravagantly consumes resources of the commons,[4] the global South takes upon the tasks of resource exploitation and waste management.[5] Lamentably, there is much appetite for the injustice to the occasion, given the aggressive expansion of transnational corporations as vehicles to sustain global resource trade given the exclusivity of their extraction technologies, the political and economic support by their home States, and the desire of local governments to concede its sovereign ownership over resources for revenue.

Complacency to fulfil climate obligations by outsourcing emissions activities is combined result of a lack of legal consequences and legitimization by the rules of trade and foreign investment law. Meanwhile, such behavior defeats the purpose of climate and environmental treaties, in light of the overarching customary principles

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3 It has been observed that 'production-based estimates of CO2 do not consider the harm that countries do beyond their borders: their emissions can be reduced simply by moving emissions-intensive activities (e.g. factories) abroad. See UNICEF Office of Research, 'Places and Spaces: Environments and children's well-being, Innocenti Report Card 17' (2022) UNICEF Office of Research – Innocenti, Florence.

4 Ibid. Findings of the UNICEF indicate that '[t]he level of consumption in most rich countries would require at least three planet earths if replicated in all countries'. See also A.S. Wijaya, Climate Change, Global Warming and Global Inequity in Developed and Developing Countries (Analytical Perspective, Issue, Problem and Solution) (2014) 19 IOP Conf. Series: Earth and Environmental Science 4.

5 David Naguib Pellow, 'The Global Waste Trade and Environmental Justice Struggles' in Kevin P. Gallagher (ed.), *Handbook on Trade and the Environment* (Edward Elgar Publishing, 2008); Jason Hickel, 'Global Inequality' in James Carrier, *A Handbook of Economic Anthropology* (Edward Elgar Publishing, 2022) 316-330; Jennifer E. Givens et al., 'Ecologically unequal exchange: A theory of global environmental injustice' (2019) 13(5) Sociology Compass 160.

of equity and sustainability. It also raises eyebrows questioning moral fairness.

The article aims to address the nuances and difficulties in responsibility allocation for climate change, particularly with respect to the legal duty to reduce GHG emissions.[6] In the main, it challenges the veracity of the claim that such duty is exclusively territorial. It argues that there is space in the current global legal order, albeit incremental, to assert the complicit responsibility of foreign States in the breach of the duty by territorial States, on the basis of the former's participation in extraterritorial emissions activities. Complicity referred to hereinafter is not intended to be a term of art; it is only to indicate the concurrency of wrongfulness by way of the foreign State's participation or involvement.[7] On this view, existing scholarship has not attended to complicit responsibility for climate change in any

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6 This article investigates the share responsibility of foreign States for the breach of the relevant obligations by the territorial States, insofar as the breach arises from the emissions activities participated by foreign States, to the exclusion of breach as a result of inadequate adaptation measures adopted by the territorial States to address climate change impacts.

7 There is no lack of scholarly study on the concept of complicity in international law. While the present study does not intend to draw on the detailed philosophical or systemic views, it will nonetheless refer to existing scholarship insofar as it is relevant to the legal assessment of complicity in the context relevant for our purpose. On complicity in international law generally, see Miles Jackson, *Complicity in International Law* (Oxford University Press, 2015); Vladyslav Lanovoy, *Complicity and its Limits in the Law of International Responsibility* (Hart Publishing, 2016); Helmut Philipp Aust, Complicity and the Law of State Responsibility (Cambridge University Press, 2011); Marina Aksenova, *Complicity in International Criminal Law* (Hart Publishing, 2016); Beth Van Schaack, 'The Many Faces of Complicity in International Law' (2015) 109 *Proceedings of the annual meeting - American Society of International Law* 184–188.

substantive way.[8] The legal question is whether or not the responsibility of a foreign State may be incurred for the emissions activities in the territorial State in which it participates, and if so to what extent.

The central proposition is that such foreign States ought to share the responsibility for the extraterritorial emissions activities it engages in, enables, or otherwise facilitates. The article first reviews the territorial basis upon which the duty to reduce GHG emissions arises from various treaties under climate change law, law of the sea, and human rights law (Part 2). It then conceptualizes the complicity of foreign States for wrongful emissions abroad, by reference to the primary and secondary responsibility under international law (Part 3). For ease of legal assessment, certain less controversial scientific nexus, such as between global GHG emissions, climate change, and climate change impacts, will be presumed for our perusal and will not be established in detail.[9]

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8 Scholarly work touching upon the issue of complicity in climate change is rare. Some guidance may be had from David McDermott Hughes, *Energy without Conscience: Oil, Climate Change, and Complicity* (Duke University Press, 2017).

9 That anthropogenic emissions activities constitute a significant cause for climate change and climate change impacts will be referenced as a presumption for analysis under various international treaties in demonstrating the existence of a positive duty to cut GHG emissions by States. For a detailed elaboration on the science, see Written Statement Submitted to the International Tribunal for the Law of the Sea by the United Nations Environment Programme (16 December 2022), Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law (Case No. 31), paras 26-29, 23, 26, 29, 41-42, 46(a)-(d), and 47-49.

2. TERRITORIALITY IN THE STRUCTURE OF CLIMATE LEGAL ORDER

The notion of territoriality is central to the architecture of modern international law. It is often considered the 'cornerstone' of international relations.[10] Questions of appropriateness aside, the significance of the notion transpires in the structure of the climate obligations of States. It has become clear that the core of climate obligations, comprising the duties of States to mitigate and adapt, are embraced one way or another by various corpuses of international law.[11] These include primarily, as pleaded and adjudicated in international and domestic climate proceedings, climate change law, law of the sea, and human rights law.[12] Each of them is concerned with

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10 Cedric Ryngaert, *Jurisdiction in International Law* (Oxford University Press, 2008) 42; Marcelo G Kohen, Mamadou Hébié, 'Territory, Acquisition' *Max Planck Encyclopedias of International Law* (November 2021) ('Respect for territorial integrity is a cornerstone principle of the contemporary international legal system.') See also *Corfu Channel, United Kingdom v Albania*, Merits, ICJ GL No 1, [1949] ICJ Rep 4, ICGJ 199 (ICJ 1949), 9th April 1949 ('[b]etween independent States, respect for territorial sovereignty is an essential foundation of international relations'); *Accordance with International Law of the Unilateral Declaration of Independence in Respect of Kosovo*, Advisory Opinion (Kosovo Opinion), 2010 I.C.J. 141, para 80.

11 Generally see, D. Bodansky, J. Brunnée, and L. Rajamani, *International Climate Change Law* (Oxford University Press, 2017) 138; I. Alogna, C. Bakker and J-P. Gauci (eds), Climate Change Litigation: Global Perspectives (*Brill*, 2021) 433-6.

12 Under the umbrella of international environmental law, treaties have proliferated to regulate specific areas of environmental concern contributing to and impacted by climate change. These include wetland management, biodiversity conservation, marine pollution, and hazardous waste disposal. In principle, climate change does not come under the direct purview of the treaty obligations in these agreements. As such, efforts have been concentrated on incorporating the environmental concerns arising from these treaties into the substantive implementation of the climate change treaties. See for example

a distinct subject of interest for protection, and enumerates accordingly a distinctive duty to reduce GHG emissions.

2.1. Climate Change Law

Three international instruments form the backbone of climate change law, namely the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement. The UNFCCC, as the first multilateral treaty to elucidate a broad 'framework'[13]in relation to the limitation of carbon emissions, introduced several concepts to compartmentalize emissions by a territorial divide. Fundamentally, the Convention established the concept of '*national* inventories of anthropogenic emissions *by sources*', and defined 'source' as 'any process or activity which releases a greenhouse gas […] into the atmosphere'.[14] In so defining, the Convention regime characterizes emissions as 'national' and divides global emissions nationally by territorial boundaries, which

Secretariat of the Convention on Biological Diversity, 'Interlinkages Between Biological Diversity and Climate Change: Advice on the Integration of Biodiversity Considerations into the Implementation of the United Nations Framework Convention on Climate Change and its Kyoto Protocol' (October 2003).

13 The UNFCCC was intended to serve as a framework for elaborating specific pledges in future agreements, including the Kyoto Protocol. As such, it only included vague commitments and had a dispute resolution mechanism which is consent-based and non-binding. On this view, opinions are divided on the legally-binding nature of the UNFCCC. See Jonathan Kuyper, Heike Schroeder, and Björn-Ola Linnér, 'The Evolution of the UNFCCC' (2018) 43 *Annual Review of Environment and Resources* 343-368.

14 UNFCCC, Article 1, paragraph 9. It defines 'source' in full as 'any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.'

reciprocates the nature of the obligation to mitigate emissions.[15]As a result, the treaty obligations underpinning the Convention are on the basis of 'national inventories' which States Parties ought to formulate 'national measures' to address.[16]

Such compartmentalization of emissions by national territory is recurrent in the text of the Convention, in respect of the substantive calculation method[17] as well as the procedural obligations[18] prescribed thereunder. Even as the Convention is celebrated for giving effect to the principle of common but differentiated responsibilities, the Annex I States Parties are called to 'adopt *national* policies and take corresponding measures on the mitigation of climate change' and to optionally assist non-Annex I States Parties in cutting emissions.[19]

The Kyoto Protocol, adopted six years later, was considered as to have created legally-binding obligations relating to emissions reduction for the first time, followed the definitional footsteps of the

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15 See the concept of national inventories and national measures under UNFCCC, Article 4, paragraph 1.

16 UNFCCC, Article 4, paragraph 1(a) and (b).

17 UNFCCC, Article 2(c) ('Calculations of emissions *by sources* and removals by sinks of greenhouse gases for the purposes of subparagraph (b) above should take into account the best available scientific knowledge').

18 For instance, Article 2(b) of the UNFCCC obliges Annex I States Parties to 'communicate […] detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources'.

19 UNFCCC, Article 4, paragraph2(a). This is notwithstanding the optional cooperation between Annex I States Parties and non-Annex I States Parties as formulated under the provision: '[t]hese Parties may implement such policies and measures *jointly* with other Parties and may assist other Parties in contributing to the achievement of the objective of the Convention'. Such cooperation, however, is intended to be a form of assistance rather than developing foreign policies to address emissions activities in non-Annex I States Parties in which Annex I States Parties may be implicated.

Convention, and reinforced the notional division of national emissions by source.[20]The approach was further legitimized by the adoption of the accounting methodology at the birth of the Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount ('Manual'). The Manual was a direct implementation of Article 5(2) of the Kyoto Protocol on the '[m]ethodologies for estimating anthropogenic emissions by sources'.[21]Relevantly, the Manual reaffirms that for the purpose of accounting of national emissions inventories, '[b]both the Convention and its Kyoto Protocol require Parties to estimate emissions by sources'.[22]It is only natural that the language adopted in the Paris Agreement is reminiscent of its predecessors.[23]

At this juncture, there are three points to register. First, it is worth noting that the three instruments under examination, albeit with varying degrees of abstraction and normative force, all enunciate a duty

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20 See, for instance, Kyoto Protocol, Article 2 ('Each Party included in Annex I, in achieving its quantified emission limitation and reduction commitments […] shall: (a) implement and/or further elaborate policies and measures in accordance with its national circumstances'). See also Articles 3(1), (3) and (4), 5(1), (2) and (3), 7, 10(a) ('local emission factors' and 'national inventories of anthropogenic emissions by sources').

21 Foo Kim Boon, 'The Third Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change-Kyoto', Japan 1-10 December (1998) 97(2) *Sing. J. Int'l & Comp. L.* 191; Brendan P. McGivern, 'Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol' (1998) 37(1) *International Legal Materials* 22-43.

22 Manual, 50. For the travaux préparatoires of the accounting methodology, see Conference of the Parties, Decisions 18/CP.8, 14/CP.11, 6/CMP.3, para 2. See also Manual, 21 ('Each Annex I Party is required to establish and maintain a national system for the estimation of anthropogenic emissions by sources and removals by sinks').

23 See, for instance, Paris Agreement, Articles 4 ('anthropogenic emissions by sources') and 13(7)(a) (States Parties to regularly provide '[a] national inventory report of anthropogenic emissions by sources').

to reduce GHG emissions. Such a duty is nonetheless territory-based. In other words, States Parties are obliged to reduce emissions to the extent that the emissions activities take place in their own territory. The use of language - including 'national inventories', 'national measures', or 'by source' defined by reference to territorial emissions activities - marks an insignificant departure from the traditional adoption of a jurisdictional clause expressly confining the obligations of a State Party only to those activities within its 'jurisdiction or control'.[24]

Second, there is a general lack of meaningful enforceability and justiciability in these instruments. The Kyoto Protocol, while adding much specificity to the legal framework under the UNFCCC thus operationalizing emission-related obligations, it adopts a compliance mechanism in the absence of a dispute settlement clause. The degree of enforceability further declines with the treaty design of the Paris Agreement, which conceded to a 'bottom-up' approach to permit voluntary nationally determined contributions (NDCs). In this vein, the latter engenders merely an obligation of conduct, rather than of result, 'with a view to achieving' the treaty objective. No breach of obligations, therefore, may arise *stricto sensu* on the basis of the text of the Paris Agreement alone. At any rate, even if a State Party does not

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24 A historical climate treaty restricting State obligations to territorial activities was the Vienna Convention for the Protection of the Ozone Layer. See, in particular, preamble ('recalling […] the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction') and Article 2(b) ('Adopt appropriate legislative or administrative measures and co-operate in harmonizing appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction or control').

submit an NDC in accordance with the procedure set out in the Agreement, or it does not meet the emissions target under its concurrent membership to the Kyoto Protocol, there is no State responsibility incurred without any cause of action prescribed under the agreements. In substitution, both agreements adopt a compliance mechanism intended to be 'facilitative'.[25]

Finally, provisions of an extraterritorial character in these instruments are peripheral to emissions mitigation. They come under the purview of international cooperation between States Parties *inter se*, for instance, to share experience and exchange information, provide financial resources, and facilitate the transfer of technology.[26]

2.2. Law of the Sea

The United Nations Convention on the Law of the Sea (UNCLOS), considered the 'constitutional law of the sea', imposes certain duties on States Parties the fulfilment of which may entail the reduction of GHG emissions. As confirmed in the recently rendered advisory opinion by the International Tribunal for the Law of the Sea (ITLOS), various provisions under the UNCLOS indicate the many

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25 Meinhard Doelle, 'Compliance in Transition: Facilitative Compliance Finding its Place in the Paris Climate Regime' (2018) 12(3) *Carbon & Climate Law Review* 229-239, 232; Sebastian Oberthür and Eliza Northrop, 'Towards an Effective Mechanism to Facilitate Implementation and Promote Compliance Under the Paris Agreement' (2018) 8(1) *Climate Law* 39-69, 52.

26 See, for instance, Kyoto Protocol, Article 2(1)(b) (requiring Annex I States Parties to 'take steps to share their experience an exchange information'); and Paris Agreement, Articles 6(8); 10(6) ('[s]upport, including financial support, shall be provided to developing countries Parties').

facets to a legal duty to reduce and control GHG emissions.[27] These include, for instance, Articles 194(1) which imposes a broad obligation for States Parties to:

> '*take, individually or jointly as appropriate, all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavor to harmonize their policies in this connection.*'

Article 194(2), on the other hand, is concerned with transboundary pollution. The provision requires States Parties to 'take all measures necessary to ensure that activities under their or control are so conducted as not to cause damage by pollution to other States and their environment'. This is a reflection of the customary prohibition on transboundary harm as reaffirmed by the International Court of Justice on multiple occasions.[28]

Furthermore, other provisions under the UNCLOS which may oblige States Parties to control and reduce GHG emissions in specific contexts. One such is Article 207, under which 'States shall adopt laws and regulations to prevent, reduce and control pollution of the marine

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27 ITLOS, Advisory Opinion of 21 May 2024, para 441(3)(j) (affirming the collective effect of the UNCLOS regime 'to prevent, reduce and control marine pollution from anthropogenic GHG emissions.')

28 *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1996 ICJ REP. 226 (8 July), para 29 ("The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment."

environment from land-based sources'[29] and 'shall take other measures as may be necessary to prevent, reduce and control such pollution'.[30] In addition, Article 212 imposes positive obligations upon States Parties in relation to 'pollution from or through the atmosphere'.

The ITLOS has recently confirmed that all of the foregoing provisions categorically cover anthropogenic GHG emissions.[31] In so confirming, the Tribunal has built upon the connection between GHG emissions, in particular CO2 emissions, and the health of the marine environment. Such connection is established by the harmful impact of climate change upon the marine environment through, among others, ocean acidification, increased ocean temperatures, deoxygenation, and sea level rise.[32] These phenomena are said to lead to the destruction of marine ecosystems and unprecedented harm to marine biodiversity.[33]

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29 UNCLOS, Article 207(1).

30 UNCLOS, Article 207(2).

31 ITLOS, Advisory Opinion of 21 May 2024, para 441(3)(d) and (f).

32 ITLOS, Advisory Opinion of 21 May 2024, para 441(4)(b) and (c). See also D. Bialek, J. Ariel, "Ocean Acidification – International Legal Avenues under the UN Convention on the Law of the Sea", in M. Gerrard, G. Wannier, *Threatened Island Nations: Legal Implications of Rising Seas and a Changing Climate* (Cambridge University Press, 2013), 474 ('Although global warming is the most commonly referenced result of increased atmospheric concentration of GHGs, ocean acidification is often referred to as the other half of the CO2 problem. … This increases the acidity of the oceans, producing potentially devastating effects for the oceans, marine life, and its human uses, including food security'. […] 'However, at higher levels of ocean acidification, the absorptive capacity of the ocean is reduced, making it more difficult to balance CO2 levels in the atmosphere and hydrosphere'). See also Biliana Cicin-Sai, et al., 'Towards a Strategic Roadmap on Oceans and Climate: 2016 to 2021' (Washington DC: Global Ocean Forum 2016).

33 ITLOS, Advisory Opinion of 21 May 2024, para 435 (referring to the WGII 2022 Report). See also IPCC 2019, Changing Ocean, Marine Ecosystems, and Dependent Communities*, Special Report on the Ocean and Cryosphere in a Changing*

What is less clear, however, is the interaction between the UNCLOS and general international law. A common view opposing to the direct enunciation of a duty to reduce GHG emissions under the provisions of the UNCLOS is that the duty is independently and exclusively governed by the climate change legal regime as the *lex specialis*.[34] That being said, certain opposing States have conceded that the relevant provisions of the UNCLOS may be fulfilled concurrently by implementing the measures required under the climate change treaties.[35] Separately, scholars have tended to endorse the existence of

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Climate, 451; IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, D.C. Roberts, E.S. Poloczanska, K. Mintenbeck, M. Tignor, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem (eds.)]. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, paras B.1.1-B.1.3.

34 On submissions in support of the duty to reduce GHG emissions, see Written Statement of African Union, para 337 ('in respect of climate change mitigation specifically, to adopt effective measures to reduce GHG emissions'); Written Statement of the European Union, para 86 ('the EU fully complies with the obligation, in Article 207(4) and 212(3) of UNCLOS, to endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control pollution of the marine environment in the form of GHG emissions with a view of limiting the deleterious effects that result or are likely to result from climate change.'); Written Statement of Australia, para 46 ('The result, so far as the questions referred to the Tribunal are concerned, is that States can comply with their obligations under Article 194, and Sections 5 and 6 of Part XII, by implementing the measures required by the UNFCCC and the Paris Agreement'). See, on the other hand, submissions which exceptionally argued for a lack of mitigation duty under the UNCLOS, including Written Statement of Japan, 3 ('On the other hand, there is no provision in UNCLOS that stipulates specific obligations explicitly addressing the issue of climate change. Specific obligations of States to address climate change, such as by reducing greenhouse gas emissions, have been negotiated in the context of climate-related conventions including the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.')

35 Written Statement of Australia, para 46 ('Care must therefore be taken in

a legal duty to mitigate GHG emissions independently under the UNCLOS, in light of the discrepancy in the scope of obligations.[36] This is not to mention the voluntary and non-actionable nature of the emissions-related duties under the UNFCCC and Paris Agreement.[37] That said, the ITLOS has dealt with this point head on in its recent advisory opinion, rejecting the climate treaties as *lex specialis* over the UNCLOS:

'The Tribunal also does not consider that the Paris Agreement modifies or limits the obligation under the Convention. In the Tribunal's view, the Paris Agreement is not lex *specialis* of the Convention and thus, in the present context, *lex specialis derogat legi generali* has no place in the interpretation of the Convention. Furthermore, as stated above, the protection and preservation of the marine environment is one of the goals to be achieved by the Convention. Even if the Paris Agreement had an element of *lex specialis* to the Convention, it nonetheless should be applied in such a way as

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transposing principles intended to apply to circumstances of environmental harm as they were understood at the time of drafting to the more complex situation of GHG emissions. [...] That is particularly true in light of the UNFCCC and the Paris Agreement having set out the internationally agreed standards concerning GHG emissions.' […] The result, so far as the questions referred to the Tribunal are concerned, is that *States can comply with their obligations under Article 194, and Sections 5 and 6 of Part XII, by implementing the measures required by the UNFCCC and the Paris Agreement*.') (emphasis added).

36 For instance, it has been argued that States are capable of fulfilling their obligations under the Paris Agreement in relation to GHG emissions, while falling short of necessary measures to address CO2 emissions which is the main cause for ocean acidification. In this regard, compliance under both regimes may not be absolutely concurrent. See K.N. Scott, 'Ocean Acidification' in (eds) E. Johansen, S.V. Busch and I.U. Jakobsen, *The Law of the Sea and Climate Change* (Cambridge University Press, 2021) 122.

37 See *supra* note 25.

not to frustrate the very goal of the Convention.'[38]

At this juncture, the question remains whether or not the UCLOS provisions under the examinations have extraterritorial effect. Most notably, Article 194(2) binds States Parties to regulate activities under their 'jurisdiction or control'.[39] This position has been confirmed by the ITLOS in the context of GHG emissions.[40] As such, only those activities falling under a State Party's jurisdiction or control in a legal sense are the subject of its obligation. As determined in *South China Sea Arbitration (Philippines v. China*), the extraterritorial effect of Article 194(2) may be dictated by the existence of harm produced upon the marine environment by activities originating in a State's territory, regardless of whether or not the harm materialized in the same.[41]Article 192(2) thus expands on the classic approach to the harm prevention principle under international environmental law, which prohibits States from causing pollution to other States and their environments.[42]

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38 ITLOS, Advisory Opinion of 21 May 2024, para 224.

39 UNCLOS, Article 194(2).

40 See ITLOS, Advisory Opinion of 21 May 2024, para 441(3)(d) (concluding that States Parties have obligations under Article 194(2) to ensure that 'anthropogenic GHG emissions under their jurisdiction or control do not cause damage by pollution to other States and their environment').

41 *South China Sea Arbitration (Philippines v China)*, Award of 12 July 2016, PCA Case No 2013-19, ICGJ 495 (PCA 2016), para 940: 'the Tribunal notes that the obligations in Part XII apply to all States with respect to the marine environment in all maritime areas, both inside the national jurisdiction of States and beyond it'. See also *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan)*, Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999, p. 280, List of cases No. 3 and 4, para 60.

42 In this respect, Article 194(2) draws on Principle 21 of the Stockholm Declaration; A. Proelss (ed.), *United Nations Convention on the Law of the Sea*, op.cit, para 194.20. On the harm prevention principle, *Trail smelter case (United States, Canada)*, Award of 16 April 1938 and 11 March 1941, 3 U.N.R.I.A.A.

It should be noted that such obligation to prevent transboundary GHG pollution is of an 'open-ended nature' and therefore can be invoked in response to any form of harm to the marine environment.[43]

On the other hand, Article 194(1) is akin to Article 207, in that they both enunciate a broader due diligence obligation.[44] Such obligation may be properly interpreted in accordance with the trite rule of treaty interpretation under Article 31(1) of the Vienna Convention on the Law of Treaties.[45] In essence, the ordinary meaning of the text in Article 194(1), construed against its counterpart in Article 194(2), leads to the following positions. First, the absence of an express jurisdictional limit, or any wording to imply the same, suggests that any duty arising from Article 194(1) is *prima facie* not bound by jurisdiction.[46] Furthermore, this interpretation is confirmed in the use of language indicating an extraterritorial due diligence obligation. The recent advisory opinion rendered by the ITLOS pointed to the same

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1905; *Corfu Channel (United Kingdom v. Albania)*, Judgment of 9 April 1949, I.C.J. Reports 1949, p 4, 22; *Pulp Mills on the River Uruguay (Argentina v Uruguay)*, Judgment, I.C.J. Reports 2010, p 14, para 101; ICJ, *Legality of the Threat or the Use of Nuclear Weapons, Advisory Opinion of 8 July 1996*, paras 29 and 101; M.H. Nordquist (ed.), 'United Nations Convention on the Law of the Sea, op.cit.', para 194.10(e), (Annex-11); *Nuclear Tests (Australia v. France)*, Judgment, I.C.J. Reports 1974, 253.

43 ITLOS, Advisory Opinion of 21 May 2024, para 388.

44 See ITLOS, Advisory Opinion of 21 May 2024, para 441(3)(c) and (d) (confirming that Article 194(1) is a due diligence obligation).

45 Article 31(1) states: 'A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.'

46 The ITLOS has distinctively pointed to the jurisdictional limit of Article 194(2) and, by contrast, did not discuss Article 194(1) in any jurisdictional terms. See the Tribunal's conclusions on both sub-paragraphs in comparison: ITLOS, Advisory Opinion of 21 May 2024, para 441(3)(b) and (c) on Article 194(1), and (d) on Article 194(2).

direction, holding that whether a measure is necessary is guided by the principle of due diligence and the parameters contained in the text of Article 194(1), namely the use of 'best practicable means at [the State Party's] disposal', and its 'capabilities'.[47] The Tribunal further noted that the treaty language inherently provides some room for reading in the principle of common but differentiated responsibilities and respective capabilities between developed States and developing States.[48]

2.3. Human Rights Law

International human rights instruments are being increasingly applied in tandem with climate change instruments in legal proceedings. It is now well-settled that certain of fundamental human rights are violated by the occurrence of climate change and its impacts. For instance, in *Daniel Billy et al. v Australia* ('*Torres Strait Islanders*'), the UN Human Rights Committee found that Australia's failure to adequately protect indigenous Torres Islanders against adverse impacts of climate change, by *inter alia* the insufficient action to mitigate GHG emissions, violated their rights to enjoy their culture and be free from

47 See UNCLOS, Article 194(1). ITLOS, Advisory Opinion of 21 May 2024, para 207. As such, the notion of due diligence in the context of the UNCLOS has been described as a 'variable concept'. See *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area* (Request for Advisory Opinion submitted to the Seabed Disputes Chamber), 1 February 2011, ITLOS Reports 2011, para 207.

48 ITLOS, Advisory Opinion of 21 May 2024, para 229. See also African Union, Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal), para 190.

arbitrary interferences with their private life, family and home.[49] On a more general level, the advisory opinion issued by the Inter-American Court of Human Rights in 2017 established unequivocally the legal connection between climate change and the right to a healthy environment. Similarly, this connection has recently been upheld in *Verein Klimaseniorinnen Schweiz and Others v Switzerland*, in relation to Articles 2 (right to life) and 8 (right to respect for private and family life) of the European Convention on Human Rights.[50] To this end, few of the national courts of the Contracting Parties have made similar determinations holding the governments responsible for protecting against climate change by reducing GHG emissions under the Convention regime.[51]

For present purposes, a separate question is whether or not such State duty to mitigate GHG emissions applies extraterritorially, insofar as a State is associated with emissions activities abroad.

It is trite that international and regional human rights

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49 Human Rights Committee, *Daniel Billy et al. v Australia*, Communication No. 3624/2019, 21 July 2022, paras 8.6 and 8.7. See also Joint Opinion by Committee Members Arif Bulkan, Marcia V. J. Kran and Vasilka Sancin (partially dissenting), Annex III at paras 1-2 (finding that the right to life under Article 6 of the Covenant was also violated and criticising the majority's interpretation of the 'real and foreseeable risk' standard as being too restrictive).

50 ECtHR, Application No. 53600/20, Judgment of 9 April 2024, para 537.

51 See Supreme Court of the Netherlands, *Urgenda Foundation v. State of the Netherlands*, 20 December 2019; and German Constitutional Court, *Neubauer, et al. v. Germany*, Judgment, 24 March 2021. As regards non-ECHR jurisdictions, see for example Opinion of the National Human Rights Commission of South Korea addressed to the President and South Korean Government (1 January 2023); and Supreme Court of Cassation of Italy, I.L. v. Italian Ministry of the Interior and Attorney General, Ordinance N. 5022/2021 of the Italian Corte Suprema di Cassazione (Sez. II Civile), 24 February 2021.

instruments often have their scope of application limited by the jurisdictional clause. Article 2(1) of the International Covenant on Civil and Political Rights states: 'Each State Party to the present Covenant undertakes to respect and to ensure to all individuals *within its territory and subject to its jurisdiction* the rights recognized in the present Covenant'. Regional human rights instruments tend to contain a similar clause restricting the obligations of the States Parties to persons under their territory and/or jurisdiction.[52] In particular, Article 1 of the European Convention on Human Rights (ECHR) reads: 'The High Contracting Parties shall secure to everyone within their jurisdiction the rights and freedoms defined in Section I of this Convention.'[53] Such jurisdictional clause is, however, absent in the International Covenant on Economic, Social and Cultural Rights (ICESCR).

Even in regard to the treaties with a jurisdictional clause, each must be construed in accordance with the rules of treaty law; furthermore, each adjudicative body bestowed with the power to review complaints submitted under the treaty regime has respectively developed its own jurisprudence with respect to the construction of the term 'jurisdiction', despite the substantial cross-influence over the years. In sum, three broad situations in recognition of extraterritorial

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52 Article 1(1) of the American Convention on Human Rights reads: 'The States Parties to this Convention undertake to respect the rights and freedoms recognized herein and to ensure to all persons subject to their jurisdiction the free and full exercise of those rights and freedoms'. Such clause is, however, absent in the African Charter on Human and Peoples' Rights.

53 As succinctly put by the European Court of Human Rights, 'the concept of "jurisdiction" for the purposes of Article 1 of the Convention had to be considered to reflect the term's meaning in public international law, according to which a State's jurisdictional competence was primarily territorial.' (ECtHR, *Issa and Others v. Turkey*, application no. 31821/96, 16 November 2004, para 6).

application of human rights treaties may be discerned from the international jurisprudence.

The first situation concerns the classic case of foreign military presence or the employment of security forces, where a State is considered to exercise its authority and/or effective control over an area outside its national territory.[54] In *Al-Skeini and Others v. the United Kingdom*, the Grand Chamber found, in the context of the British occupation of Southern Iraq in 2003, that the UK 'through its soldiers engaged in security operations in Basra during the period in question, exercised authority and control over individuals killed in the course of such security operations, so as to establish a jurisdictional link between the deceased and the United Kingdom for the purposes of Article 1 of the Convention.'[55] Territorial control, however, is not required. As the Court explained in *Jaloud v. the Netherlands*, despite the UK's operational control in Iraq, the responsibility of the Netherlands was nonetheless engaged as it retained full command over its military personnel.[56]The

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54 See IACtHR, Advisory Opinion of 2007, para 86 (recalling that '[o]ne of such exceptional events is that in which the agents of a State exercise, outside its territory, authority and control over individuals located in another State.'). See also ECtHR, *Loizidou v. Turkey*, 23 March 1995, Application no. 15318/89, ('the responsibility of a Contracting Party may also arise when as a consequence of military action - whether lawful or unlawful - it exercises effective control of an area outside its national territory'); *Manitaras and Others v Turkey*, Application no. 54591/00, 3 June 2008, paras 27-29 ('At the outset the Court notes that the area in which the alleged acts complained of took place belonged to the territory of the "TRNC". Therefore, Ioannis Manitaras came under the authority and/or effective control, and therefore within the jurisdiction, of the respondent State through its agents').

55 ECtHR, *Al-Skeini and Others v. the United Kingdom*, Application no. 55721/07, 7 July 2011, para 149.

56 ECtHR, *Jaloud v. the Netherlands*, Application no. 47708/08, 20 November 2014, para 151.

complainant was properly under the Netherland's jurisdiction *rationae personae*. The latter's responsibility would have been excluded only if the Dutch troops were to be 'under the exclusive direction or control' of another foreign State.[57]

The Human Rights Committee appears to have adopted the 'effective control' test, as it stated in General Comment No. 31 that under Article 2(1) of the ICCPR 'a State party must respect and ensure the rights laid down in the Covenant to anyone within the power or effective control of that State Party, even if not situated within the territory of the State Party.'[58] The International Court of Justice in *Wall* Advisory Opinion offered a similar view: '[W]hile the jurisdiction of States is primarily territorial, it may sometimes be exercised outside the national territory.'[59]

In the second situation, a State may be responsible for acts performed within its territory which produce effects by the State of its jurisdiction. Despite having explicitly recognised the extraterritorial application of the Convention in such a situation, the European Court of Human Rights has nonetheless rarely characterised a positive finding as such.[60] In rendering a recent climate judgment, the Court rejected the applicants' argument on jurisdictional ground, in that the

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57 Ibid, para 149.

58 Human Rights Committee, General Comment No. 31 (The Nature of the General Legal Obligation Imposed on States Parties to the Covenant), CCPR/C/21/Rev.1/Add.13, 26 May 2004, para 10.

59 I.C.J., Legal consequences of the construction of a wall in the Occupied Palestinian Territory, Advisory Opinion of July 9, 2004, para 109.

60 *Mohammed Ben El Mahi and Others v. Denmark*, Application no. 5853/06, 11 December 2006.

extraterritorial jurisdiction of the 33 respondent States over the applicants was not sufficiently established.[61] The Inter-American Court of Human Rights, on the other hand, has robustly applied the notion to the context of climate change. In its 2007 Advisory Opinion, the Court noted that when transboundary damage occurs which affects treaty-based rights, the persons whose rights have been violated are under the jurisdiction of the State of origin, provided that there is a causal link between the harmful act and the infringement of the human rights.[62] Citing the Advisory Opinion in support, the Committee on the Rights of the Child concurred in *Chiara Sacchi et al. v. Argentina*, adding that 'through its ability to regulate activities that are the source of these emissions and to enforce such regulations, the State party has effective control over the emissions.'[63]

This positive position may be reconciled with the European Court's rejection on jurisdiction in *Duarte Agostinho and Others v Portugal and 32 Others*. While the claim advanced in the complaint before the Committee specifically pinpointed the casual connection between the injurious emissions and their transboundary effects, the European

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61 ECtHR, Duarte Agostinho and Others v Portugal and 32 Others, Application No. 39371/20, Judgment of 9 April 2024.

62 Inter-American Court of Human Rights Advisory Opinion OC-23/17 on the Environment and Human Rights (state obligations in relation to the environment in the context of the protection and guarantee of the rights to life and to personal integrity: interpretation and scope of articles 4(1) and 5(1) in relation to articles 1(1) and 2 of the American Convention on Human Rights), 15 November 2017, paras 101-102.

63 Committee on the Rights of the Child, *Chiara Sacchi et al. v. Argentina*, CRC/C/88/D/104/2019, 8 October 2021, para 10.9. See also para 10.6 ('Failure to take measures to prevent foreseeable human rights harm caused by climate change, or to regulate activities contributing to such harm, could constitute a violation of States' human rights obligations.')

Court virtually received no arguments to the effect of establishing extraterritorial responsibility of the 32 respondent States. To the contrary, the applicants sought to anchor such extraterritoriality on the sole basis of the positive obligations under the Convention. The European Court made this point plain:

'The Court does not find it possible to consider that the proposed positive obligations of States in the field of climate change could be a sufficient ground for holding that the State has jurisdiction over individuals outside its territory or otherwise outside its authority and control. […]. It is also important to note that in the present case there is no particular link or connection between the applicants and any of the respondent States (other than Portugal) that could form a basis for allowing the Court to consider that any positive obligations to which States might be subject had to be exercised with due regard to the applicants' particular situation. In this connection, it is reiterated that jurisdiction cannot be established merely on the basis of the argument that the State is capable of taking a decision or action impacting the applicant's situation abroad.'[64]

Lastly, the extraterritorial responsibility of a State may be incurred for asserting decisive influence on the injurious act taking place outside its territory. In the context of the Transdniestrian armed conflict in 1991-1992, the European Court of Human Rights delivered a series of judgments in relation to Russia's support to the 'Moldovan Republic of Transdnistria' ('MRT'). Significantly, the Court found that

64 ECtHR, Duarte Agostinho and Others v Portugal and 32 Others, Application No. 39371/20, Judgment of 9 April 2024, paras 198-199.

the regime 'remain under the effective authority, *or at the very least under the decisive influence*, of Russia, and in any event that it survived by virtue of the military, economic, financial and political support that Russia gave it.'[65]In *Ilascus and Others v. Moldova and Russia*, the Court went on to state, for the first time, that a State's responsibility 'may also be engaged on account of acts which *have sufficiently proximate repercussions on rights guaranteed by the Convention, even if those repercussions occur outside its jurisdiction*.'[66]On a general level, however, the *stare decisis* effect of the case remains to be seen.[67]

3. THE CONTOURS OF CLIMATE COMPLICITY FOR WRONGFUL EMISSIONS

It seems to be a given that a State's duty to mitigate GHG emissions is primarily territorial. It begs the question: do territorial obligations only allow for territorial breach? For two reasons, the law of State responsibility provides, as a starting point, an appropriate framework to analyse any shared responsibility incurred by a foreign State for the same duty. First and foremost, the law contains a set of

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65 *Ivantoc and others v. Moldova & Russia*, Application no. 23687/05, 15 November 2011; *Catan and Others v. the Republic of Moldova and Russia*, Applications nos. 43370/04, 8252/05 and 18454/06, 19 October 2012, para 150 ('By virtue of its continued military, economic and political support for the "MRT", which could not otherwise survive, Russia incurs responsibility under the Convention for the violation of the applicants' rights to education.')

66 *Ilascu and Others v. Moldova & Russia*, Application no. 48787/99, 8 July 2004, para 20.

67 Olivier De Schutter, 'Globalization and Jurisdiction: Lessons from the European Convention on Human Rights' (2006) 6 *Baltic Yearbook of International Law* 183-245, 243 ('However, the highly specific character of the case and in particular the closeness of the links between the Federation of Russia and the separatist regime set up in the self-proclaimed "Moldavian Republic of Transdniestria" makes it difficult to generalize from this isolated holding.')

secondary rules governing the assertion of State responsibility premised upon two constitutive elements: a State commits an internationally wrongful act if it commits an act or omission which (i) is attributable to it and (ii) constitutes a breach of its international obligation ('primary responsibility'). Such responsibility is commonly characterized as primary for the reason that the wrongful act is attributable to the State in breach. As such, the primary responsibility arises directly from the breach of primary rules of international law.

In a situation of complicit assistance, the primary commission of a wrongful act may not be attributable to a foreign assisting State, i.e. the conduct of the foreign State does not in itself implicate a breach of the primary rules, but has nonetheless played a part in the breach. To this end, the law of State responsibility sets out the legal basis for establishing responsibility on the sole premise of the secondary rules, to capture residual conduct which are wrongful owing to its 'connection with the act of another State' ('secondary responsibility').[68] Such connection may include aid, assistance, direction and control, and coercion.[69] We will examine each in turn below.

3.1. Conceptualizing Primary Responsibility for Climate

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68 Such form of responsibility is common characterised as 'secondary' not because the culpability or the wrongfulness of the conduct is secondary to primary responsibility. In this regard, see Draft Articles on State Responsibility for Internationally Wrongful Acts, Article 19 ('This chapter is without prejudice to the international responsibility, under other provisions of these articles, of the State which commits the act in question, or of any other State.')

69 These are currently codified under the Draft Articles on State Responsibility for Internationally Wrongful Acts, Articles 16-18. The modes of connection were codified at the time of the Rapporteur's drafting and are in no way exhaustive given the nature of customary law formation.

Complicity

As a cardinal rule, any act complained as wrongful ought to be properly attributed to the State against which the primary responsibility is alleged.[70] Where the primary obligation is restricted by a jurisdictional clause, such as under the climate change treaties, the emissions activities are not imputable to foreign States as any breach of emissions targets is a consequence of exceeding 'national inventories of anthropogenic emissions by source'. Such breach is not act-dependent but rather territory-dependent by the definitions under the treaty regime. The territory-based methodology upon which to find incompliance is entrenched in the UNFCCC regime subsequently followed by the Kyoto Protocol and the Paris Agreement. In other words, the territorial basis of legal obligations under these instruments is absolute and determinative to any breach arising therefrom.

By contrast, to the extent that the UNCLOS creates a legal duty to mitigate GHG emissions, such a duty may be construed in two distinct extraterritorial contexts. First, Article 194(1) allow extraterritorial acts or omissions of States Parties to be captured by imposing a due diligence obligation without prescribing for any jurisdictional limitation. Rather, the intensity of the obligation varies in light of three objective considerations: necessity, best practicable means, and capabilities.[71] In the absence of any language suggesting a

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70 Draft Articles on State Responsibility for Internationally Wrongful Acts, Article 2(a).

71 As the Seabed Disputes Chamber said, '[t]he standard of due diligence has to be more severe for the riskier activities'. See *Responsibilities and obligations of States*

requisite correlation to a State Party's territorial jurisdiction, the terms adopted under Article 194(1) are sufficiently broad in cognizance of the potential obligations of the States Parties beyond own national jurisdiction.[72]

In the context of climate change, such legal basis allows for the scope and extent of the obligation to be individualized to each State Party's circumstances. For instance, a State Party who periodically finances its corporate nationals to carry out offshore drilling in another State, if leading to large-scale GHG emissions and a significant risk of contamination of the surrounding marine environment, may be obliged under the provision to adopt a wide array of necessary measures to mitigate emissions 'in accordance with [its] capabilities'.

In other instances, the application of a treaty provision may be restricted in jurisdictional scope, such as under Article 192(2) of the UNCLOS and the majority of human rights instruments. Even then,

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sponsoring persons and entities with respect to activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber), 1 February 2011, ITLOS Reports 2011, para 117.

72 Similar treaty language to oblige States to take individual and joint action to the fullest extent and within their capabilities, without jurisdictional limit, is also found in other environmental treaties. See for example Article 3 of the Convention for the Protection of the Marine Environment of the North-East Atlantic ('The Contracting Parties shall take, individually and jointly, all possible steps to prevent and eliminate pollution from land-based sources'). See also Article 4(1) of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean ('The Contracting Parties shall individually or jointly take all appropriate measures in accordance with the provisions of this Convention and those Protocols in force to which they are party to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment in that Area so as to contribute towards its sustainable development.')

one ought not to treat the restriction as a straight-jacket. Unlike Article 192(2) which allocates obligations by reference to a State Party's jurisdiction in which the harmful activity occurs, the jurisdictional clause under human rights treaties is referred to the jurisdiction in which an injured individual is located (*rationae personae*). As affirmed by human rights adjudicative bodies, the term 'jurisdiction' has been similarly interpreted beyond the meaning of 'authority' and 'effective control', to adapt to the transboundary nature of environmental harm.[73] A more progressive interpretation may be found in the determination by the European Court of Human Rights in the context of State interference in the acts of extraterritorial non-State groups. On multiple occasions, the jurisdictional clause has been interpreted less restrictively to give proper weight to the determining effect of a foreign State's conduct upon injuries to individuals abroad. On this view, the human rights violations committed by a non-State group in the territorial State would not have occurred had it not been for the 'decisive influence' from the financial and political support provided by the foreign State.[74]

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73 Committee on the Rights of the Child, *Chiara Sacchi et al. v. Argentina*, CRC/C/88/D/104/2019, 8 October 2021, para 10.9, c.f. ECtHR, *Cyprus v. Turkey* 10 May 2001; *Manitaras and Others v. Turkey* 3 June 2008.

74 *Ilascu and Others v. Moldova & Russia*, Application no. 48787/99, 8 July 2004, para 25 ('[the MRT] remain under the effective authority, or at the very least under the decisive influence, of Russia, and in any event that it survived by virtue of the military, economic, financial and political support that Russia gave it.'). See also *Ivantoc and others v. Moldova & Russia*, Application no. 23687/05, 15 November 2011; *Catan and Others v. the Republic of Moldova and Russia*, Applications nos. 43370/04, 8252/05 and 18454/06, 19 October 2012, para 150 ('By virtue of its continued military, economic and political support for the "MRT", which could not otherwise survive, Russia incurs responsibility under the Convention for the violation of the applicants' rights to education.')

By way of a remark, the sufficiency of a foreign State's control or influence over the harmful act abroad will determine whether or not the injured individual is deemed to fall under the jurisdiction of such foreign State, for the purpose of establishing primary responsibility for its breach under the relevant treaties. In addition to the construction of the scope of application of specific obligations, the extraterritorial responsibility of a foreign State may be established, alternatively, by virtue of applying the secondary rules of international law on attribution. Relevant rules as enunciated under the Draft Articles on State Responsibility may include: conduct of organs of a State (Article 4), conduct of entities exercising elements of governmental authority (Article 5), and conduct directed or controlled by a State (Article 8).[75] Under all three situations, the international obligation at hand is considered to be breached by the State to which the wrongful act or omission is attributable. To a certain extent, some commentators have observed the substantial overlaps between the judicial uses of 'jurisdiction' and 'attribution'.[76]

3.2. Conceptualizing Secondary Responsibility for Climate Complicity

While a duty to reduce GHG emissions exists under various

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75 Draft Articles on State Responsibility for Internationally Wrongful Acts, Articles 4, 5, and 8.

76 The underlying theory is that a State to which an extraterritorial act is attributable is considered to be exercising its jurisdiction abroad. In this sense, the application of the rules of attribution and jurisdiction informs the other in scope and content. See ECtHR, *Jaloud v. Netherlands*, Application no. 47708/08, 20 November 2014. For a methodological critique of the approach, see J.M. Rooney, 'The Relationship between Jurisdiction and Attribution after Jaloud v. Netherlands' (2015) 62 *Netherlands International Law Review* 407-428.

branches of international law, such a duty as has been demonstrated is primarily territorial, i.e. it is primarily to be breached by the territorial State. This is implicit in the accounting methodology under the climate change legal regime and most expressly set out in the form of a jurisdictional clause found in human rights instruments. In these instances, excessive GHG emissions by the territorial State may incur its primary responsibility for breach of a duty to mitigate emissions, because of the operation of international law. As demonstrated in the judgment delivered by the Hague Court of Appeal in the landmark case of *Urgenda*, upheld by the Supreme Court of the Netherlands, a State may be held responsible for breach of human rights obligations by its failure to reduce GHG emissions in a sufficiently ambitious manner, in particular with regard to the concrete legal obligations it assumes under climate change treaties.[77]

What, then, of secondary responsibility of foreign States? Over the years, customary international law has emerged to prohibit the complicit assistance of a State provided to another with a view to the latter's commission of an internationally wrongful act. This rule has been codified under Article 16 of the Draft Articles on State Responsibility for Internationally Wrongful Acts. It reads:

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77 In particular, the Supreme Court affirmed that 'pursuant to Articles 2 and 8 ECHR the State is obliged towards the residents of the Netherlands […] to take adequate measures to reduce greenhouse gas emissions from Dutch territory.' (para 6.1) With regard to the obligations under climate change treaties, the Court found that '[a]ccording to this [Kyoto] Protocol, the then-Member States of the EU were obliged to achieve a reduction target of 8% compared to 1990' while under the Paris Agreement '[t]he parties must prepare ambitious national climate plans and of which the level of ambition must increase with each new plan.' (para 2.1)

'A State which aids or assists another State in the commission of an internationally wrongful act by the latter is internally responsible for doing so if:

(a) that State does so with knowledge of the circumstances of the internationally wrongful act; and

(b) the act would be internationally wrongful if committed by that State.'

Since the emissions data are collected under the auspices of the UNFCCC and shared among States, and the duty to sufficiently reduce GHG emissions is owed jointly and individually by all States given the customary nature of the applicable human rights, both limbs under Article 16 do not appear burdensome.[78]

What may be burdensome is measuring the conduct of the foreign State against the standards articulated in the legal notion of 'aid or assistance'. As the assisting State ought to voluntarily and knowingly act in assistance, such knowledge refers both to its awareness of the circumstances rendering the conduct of the territorial State wrongful and to assist 'with a view to facilitating the commission of that act'.[79] The theory behind is that a foreign State, who renders a provision capable of assisting the commission with the awareness of the

78 On the customary character of and universal obligation of States to protect the right to life, see generally Stuart Casey-Maslen, *The Right to Life Under International Law* (Cambridge University Press, 2021) 735; William A. Schabas, *The Customary International Law of Human Rights* (Oxford University Press, 2021) 107.

79 James Crawford, Commentary to Draft Articles on State Responsibility for Internationally Wrongful Acts, 66, para 3.

circumstances constituting the commission, thereby 'assumes the risk'.[80]The assistance is wrongful *ex post facto*, i.e. it ought to have completed and actually assisted the commission.[81]

While there are no specified forms of the assistance, the conduct complained of in question ought to *de minimis* have produced the effect of facilitating the occurrence of the primary commission. As observed by James Crawford in his commentary to the Draft Articles, '[t]here is no requirement that the aid or assistance should have been essential to the performance of the internationally wrongful act; it is sufficient if it contributed significantly to that act.'[82] Established modes of aid or assistance include 'knowingly providing an essential facility' for or 'financing the activity' constituting the primary commission.[83] A conduct commonly recognized as capable of amounting to wrongful assistance is the supply of arms and other military assistance to countries found to be committing serious human rights violations.[84]

3.3. The Structuring of Climate Complicity for Wrongful Emissions

The central question of whether a foreign State may be responsible for the primary breach of a duty to mitigate GHG emissions depends on the construction and application of the

80 Ibid, para 4.
81 Ibid, para 3.
82 Ibid, para 5.
83 Ibid, para 1.
84 In this regard, the General Assembly has called on Member States in a number of cases to refrain from the supply. See Report of the Economic and Social Council, Report of the Third Committee of the General Assembly, draft resolution XVII (A/37/745) 50.

provision as the source of the legal duty at hand. The entrenchment of the principle of territoriality in climate change treaties reserves is almost exclusively the primary responsibility for the duty to the territorial States by establishing the legal concept of national inventories of GHG emissions by source. Such conceptualization renders any non-compliance under the climate change treaties exclusively dependent on the excessiveness in the aggregate of national emissions as a whole, which is indivisible and non-transferable. One conceivable scenario to the contrary is belligerent occupation, in which the occupying State assumes the entire duty to mitigate emissions on behalf of the territorial State.[85] In any event, no State responsibility may be incurred *stricto sensu* under the climate change treaties, given the consensual adoption of the compliance mechanism under the UNFCCC.[86]

At the other end of the spectrum, Article 194(1) of the UNCLOS appears to impose an extraterritorial due diligence obligation to all States Parties to act to the fullest extent possible, so

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85 On this issue, see for example International Law Commission, *Draft Principles on the Protection of the Environment in Relation to Armed Conflicts*, Draft Principle 19, which states: '[a]n Occupying Power shall respect the law and institutions of the occupied territory concerning the protection of the environment and may only introduce changes within the limits provided by the law of armed conflict'. Furthermore, an occupying power may assume certain human rights obligations which have extraterritorial application in a context of foreign occupation. See I.C.J., *The Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 2004 I.C.J. Rep. 136, para 108.

86 In other words, where there is a lack of dispute settlement clause, it is the intention of the parties that no State responsibility may be incurred. In such a circumstance, the law of State responsibility in relation to establishing breach and legal consequences thereof is rendered inapplicable and substituted by the alternative enforcement mechanism.

long as the measure is 'necessary' and within 'their capabilities' and 'the best practicable means at their disposal'.[87] As the case may be, this may include defunding the operation and adopting appropriate regulatory duties upon corporate nationals abroad. Furthermore, what is considered 'necessary' or 'capable' for one State may not be for another. For instance, a measure to defund and regulate the activities of corporate nationals abroad is necessary for capable developed States, if those activities pose immense threat to the marine environment for the purpose of fulfilling the obligations under Article 194(1); such measure, however, would not apply to States whose corporate nationals have no such presence abroad.

Read more restrictively is the duty to mitigate emissions arising under human rights treaties, as it is preconditioned on the jurisdictional element, a requirement found under Article 194(2) *mutatis mutandis*. Over the years, human rights jurisprudence has progressed beyond the orthodox construction of jurisdiction by a State's exercise of authority and effective control. Notably, a State is responsible for harmful acts originating in its territory with extraterritorial effect, commensurate with the principle of transboundary harm and the judicial determination on Article 194(2) UNCLOS. Ordinary forms of participation by a foreign State in extraterritorial emissions activities, such as providing political and financial assistance to a multinational corporation abroad to exploit resources or exporting waste under a bilateral agreement, may not suffice to implicate the primary responsibility of the foreign State, since the emissions activity (either

87 UNCLOS, Article 194(1).

resource exploitation or waste management) will not be directed and/or controlled by it.

Certain jurisprudence before the European Court of Human Rights, however, indicates an acceptable interpretation that admits the attribution of a foreign State based on its 'decisive influence'. The test appears to be whether or not the assistance of the foreign State has a decisive influence on the commission by the entity abroad, in the sense that the commission would not be possible without the foreign assistance. For instance, a multinational corporation may not have been capable of commencing its drilling operations abroad had it not been for the continuous diplomatic and financial support of its home State.

Notionally, however, the duty to mitigate emissions may be breached by a State for its failure to sufficiently reduce emissions (or preemptively in view of an insufficiently ambiguous national plan). As such, a breach of the mitigation duty by the territorial State is dependent on the totality of the wrongful omission. It follows that no breach may arise based on one or a few emissions activities which are sought to be attributed to a foreign State. In other words, even assuming certain emissions activities are attributable to a foreign State, such a State would not violate a mitigation duty *per se*; instead, the foreign State may be responsible for violation of other obligations which are demonstrable independently by the attributable acts alone.[88]

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88 An example would be the violation of the right to a private and family as a consequence of an onshore oil drilling operation. Unlike a mitigation duty, such act may independently amount to violation of the right.

Depending on the significance of the contribution by a foreign State to the emissions of the territorial State, residual responsibility may be asserted by applying the secondary rules of international law. Commonly characterized as secondary responsibility, it captures wrongful aids or assistance by the conduct of the foreign State provided with a view to facilitating the primary commission by the territorial State.

4. CONCLUSION

For good or for bad, the consent of sovereign States remains the pillar to modern international law's architecture. It ought to be made clear that, except in very rare instances, politics determines the law.[89] The majority of the issues concerning human security and the future generations, even if determining the survival of human civilization, are no exception.

The retention of control over the scope and extent of international legal obligations is particularly critical to all States. For States marginalized in the climate change context, such as the Small Island Developing States, stakes are higher than ever for a universal duty to mitigate emissions to emerge in positive law to fully address all sources. For some developed States, on the other hand, there is an untamed desire to limit the breadth and depth of their climate

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89 One of such rare instances is the peremptory norms of general international law which, due to their superior hierarchy and objectives of the norms, operate to bind all States in a universal manner regardless of consent. See Dire Tladi, *Peremptory Norms of General International Law (Jus Cogens): Disquisitions and Dispositions* (Brill, 2021); Ulf Linderfalk, *Understanding Jus Cogens in International Law and International Legal Discourse* (Edward Elgar Publishing, 2020) 93.

obligations as much as possible. This is ensured in the treaty-making process by negotiating for voluntary emissions targets rather than mandatory emissions reduction, a facilitative compliance mechanism rather than a conventional dispute settlement clause, and national inventories by territorial emissions rather than consumption-based accounting, and international cooperation rather than extraterritorial obligations.

But even then, recent years have seen certain States continue to grant permits and pour considerable financial and political support for large-scale emissions-intensive activities located domestically and outside their border. Such pursuit of 'regional utilitarianism'[90] begs the question of whether it frustrates the objective of the climate change legal regime. For all intents and purposes, the phenomenon of transferring climate obligations by outsourcing emissions to third States also sits uneasily with the fundamental principles of precaution, equity, and sustainable development.

The question is, therefore, to what extent international law, as it is, is able to address this legal lacuna. As this paper has shown, the three branches of law selected for examination, albeit giving rise to a legal duty to mitigate GHG emissions to various degrees, demonstrate profound entrenchment of the principle of territoriality. Two exceptions are discerned from the occasional lenient interpretation of the jurisdictional clause contained in human rights treaties and certain provisions under the UNCLOS. This is, however, without prejudice to

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90 Adrian Scribano, Freddy Timmermann Lopez, and Maximiliano E. Korstanje, *Neoliberalism in Multi-Disciplinary Perspective* (Springer, 2018) 29.

the application of the secondary rules of international law which, as argued, may independently constitute the legal basis for establishing secondary responsibility of States. Such legal technique, though underutilized, remains to be an indispensable facet of the complicit responsibility of foreign States for their significant contributions to the wrongful emissions of territorial States.

INTEGRATING MARKET-BASED INSTRUMENTS AND ENVIRONMENTAL REGULATIONS FOR SUSTAINABLE CORPORATE PRACTICES IN A MULTILATERAL WORLD ORDER: A COMPREHENSIVE ANALYSIS OF CARBON PRICING'S IMPACT ON BUSINESS SUSTAINABILITY AND NATIVE RIGHTS, INCLUDING SUBHEADS ON THEMES LIKE ECO-CRIMES AND ENVIRONMENTAL JUSTICE

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Abstract

This research paper investigates the intricate interplay between market- based instruments and environmental regulations within the context of a multilateral world order. It places particular emphasis on conducting a comprehensive analysis of the impact of carbon pricing. The study explores how carbon pricing affects business sustainability, addresses the issue of transboundary pollution and provides for safeguarding the rights of indigenous communities.

The paper commences by providing a contextual background that underscores the increasing global urgency to reconcile economic growth with environmental responsibility. It establishes that innovative approaches, such as market-based instruments and regulatory frameworks, are essential to achieving sustainable practices while simultaneously mitigating the negative impacts of transboundary

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pollution and protecting the rights of indigenous communities.

A crucial aspect of the research involves delving into the various carbon pricing mechanisms deployed worldwide, encompassing carbon taxes and cap-and-trade systems. The aim is to elucidate the global landscape of these mechanisms and highlight the diverse approaches adopted by different nations to tackle carbon emissions. Additionally, the paper delves into case studies that exemplify successful implementations of carbon pricing mechanisms, while also addressing the challenges and obstacles encountered during their deployment.

The paper then shifts its focus to examining the influence of carbon pricing on corporate sustainability practices. Drawing upon empirical data and case studies, it assesses the extent to which carbon pricing motivates businesses to adopt environmentally responsible strategies. It explores how carbon pricing incentivizes companies to reduce their carbon emissions and adapt to the evolving economic paradigm that prioritizes sustainability.

Another significant theme explored is the role of carbon pricing in reducing transboundary pollution. Through an in-depth analysis of pollution incidents and emissions data, the study scrutinizes the effectiveness of carbon pricing mechanisms in mitigating global environmental risks. It emphasizes the intricate interconnectedness of environmental challenges in our multilateral world order.

Furthermore, the paper scrutinizes eco-crimes and environmental violations within the ambit of carbon pricing. It employs case studies to illuminate legal actions taken against businesses involved in

environmental violations. This section also explores enforcement mechanisms and assesses the role of international law in addressing eco-crimes.

The paper concludes by summarizing the key findings and implications derived from the comprehensive analysis. It underscores the critical importance of adopting a holistic approach to integrating market-based instruments and environmental regulations. This approach prioritizes sustainability, justice, and transboundary cooperation within the framework of a multilateral world order.

In light of the continually evolving global challenges and opportunities within the spheres of business, environment, and justice, this research study provides invaluable insights that can inform policy development and corporate strategies, ultimately steering the world toward a more sustainable and equitable future.

Keywords: Carbon Pricing, Market-Based Instruments, Environmental Regulations, Business Sustainability, Transboundary Pollution, Indigenous Rights, Environmental Justice

1. INTRODUCTION

Pollution is defined as almost any human action that causes the natural environment to decline or degrade in quality. Environmental pollution is not a recent phenomenon, but it continues to be the biggest threat to mankind and the major factor in environmental degradation and mortality. Premature deaths from pollution were

estimated to account for 11 million deaths in 2019[1], which is more than three times the combined number of deaths from malaria, AIDS, and TB.[2]

In general, environmental pollution is worse in middle- and low-income nations than in developed ones; this may be because of factors like poverty, lax regulations, and ignorance of the many types of pollution. People may encounter pollution every day without realizing it, or may have become accustomed to it in the fast-paced lifestyles.[3] Even though it may seem impossible, not knowing what types of pollution exist leads people to engage in actions that produce harmful byproducts in amounts and forms that the environment is no longer able to fight without utterly altering its system.[4]

For instance, incorrect disposal of electronic waste and deforestation, all contribute to air, land, and water pollution. Other examples include burning bushes and crops, dumping household and agricultural waste into water bodies like rivers, ponds, lakes, harvesting

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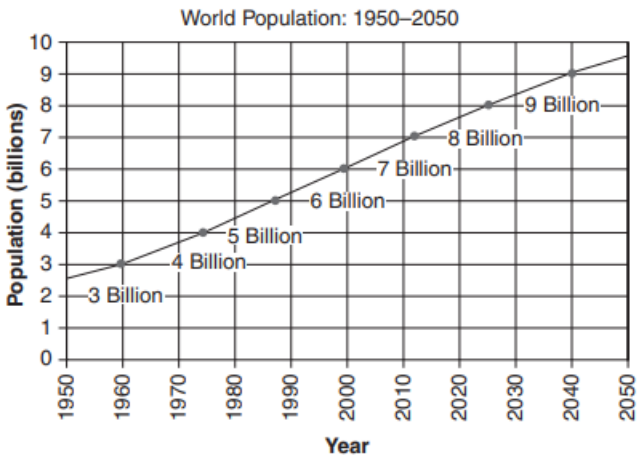
1 Araújo da Silva, F., Feldberg, E., Moura Carvalho, N.D., Hernández Rangel, S.M., Schneider, C.H., CarvalhoZilse, G.A., et al., 2019. Effects of environmental pollution on the rDNAomics of Amazonian fish. Environ. Pollution. 252, 180187. Available from: <https://doi.org/10.1016/j.envpol.2019.05.112>.

2 Landrigan, P.J., Fuller, R., Acosta, N.J.R., Adeyi, O., Arnold, R., Basu, N., et al., 2017. The Lancet Commission on pollution and health. Lancet 391 (10119), 462512. Available from: https://doi.org/10.1016/S0140- 6736(17)32345-0.

3 Muralikrishna, I.V., Manickam, V., 2017. Analytical methods for monitoring environmental pollution. Environmental Management. Butterworth Heinemann, Elsevier, pp. 495570. Available from: http://dx. doi.org/10.1016/b978-0-12-811989-1.00018-x.

4 Lin, C.-Y., Wang, C.-M., Chen, M.-L., Hwang, B.-F., 2019. The effects of exposure to air pollution on the development of uterine fibroids. Int. J. Hyg. Environ. Health 222 (3), 549555. Available from: https://doi.org/ 10.1016/j.ijheh.2019.02.004.

aquatic creatures with pesticides, and using chemicals in the form of fertilizers in the harvesting process. In addition, as the density of the human population grows, so does the human activities required to sustain this increase which in turn have a consequential effect on the environment.[5]



World population growth from 1950 and beyond. Credit: US Census Bureau

The impacts are not only on humans but also on other aquatic and terrestrial animals including microorganisms[6], which because of their abundance and diversity tend to maintain their biogeochemical function necessary for sustaining the ecosystem.[7]

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5 Vallero, D.J., Vallero, D.A., 2019. Land pollution. In: Letcher, M.T., Vallero, D.A. (Eds.), Waste. Academic Press, pp. 631648. Available from: http://dx.doi.org/10.1016/b978-0-12-815060-3.00032-3.

6 Xiong, W., Ni, P., Chen, Y., Gao, Y., Li, S., Zhan, A., 2019. Biological consequences of environmental pollution in running water ecosystems: a case study in zooplankton. Environ. Pollut. 252, 14831490. Available from: <https://doi.org/10.1016/j.envpol.2019.06.055>.

7 Schraufnagel, D.E., Balmes, J., Cowl, C.T., De Matteis, S., Jung, S.-H.,

Environmental pollution may be brought on by a variety of factors, including the transboundary transfer of pollutants from industrialized to developing nations or vice versa.[8] The contributing factors further include industrialization, urbanization, rising populations, mineral exploration, and mining. Environmental Pollution has continued to be a problem on a worldwide scale in part because of transboundary contamination. No nation can afford to be apathetic towards pollution since it may spread through several channels, especially through air and water, and cause devastation in other nations.[9]

A significant contributor to the contamination of the air, water, and soil with harmful metals is the transboundary transfer of defective electrical and electronic equipment (EEE) from industrialized to developing nations under the pretense of closing the digital divide.[10] Moreover, it is not unusual for people to claim ignorance of the fact that human activities have indeed disrupted the natural environment, and as a result, these activities continue even when they are linked to

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Mortimer, K., et al., 2018. Air pollution and non-communicable diseases: a review by the Forum of International Respiratory Societies' Environmental Committee, Part 1: the damaging effects of air pollution. Chest 155 (2), 409416. Available from: <https://doi.org/10.1016/j.chest.2018.10.042>.

8 Song, L., Zhang, B., Liua, B., Wua, M., Zhang, L., Wang, L., et al., 2019. Effects of maternal exposure to ambient air pollution on newborn telomere length. Environ. Int. 128, 254260. Available from: https://doi.org/10.1016/j.envint.2019.04.064.

9 World Health Organization, 2018. Global Health Observatory (GHO) Data, Mortality from Household Air Pollution. World Health Organization, Geneva, Switzerland.

10 Stokstad, E. Taking the pulse of Earth's life-support systems. Science, 308 (5718), April 1, 2005, 41–43. (2) Global Economic Growth Continues at Expense of Ecological Systems. Worldwatch Institute, January, 2008, <http://www.worldwatch.org/node/5456>.

deadly illnesses.[11]

Some human activities that have been shown to be environmentally harmful are nevertheless practiced in middle- and low-income nations, either as a result of subpar legislation, weak penalty enforcement or disregard as to how such actions affect the environment and public health.

An example of this is the *grasshopper effect*. Also referred to as "global distillation" the grasshopper effect is a special case if pollutant's fate and transport. The study of Dichlorodiphenyltrichloroethane (DDT), a pesticide, serves as an example. When DDT is used in a Latin American nation, it evaporates and is carried north by the prevailing winds. DDT condenses and falls to earth as it comes into contact with colder air. It again evaporates during a warm day. This procedure is repeated, sometimes infinitesimally. Finally, it is extremely cold in the far north of the Arctic and where the northern polar region of the earth serves as a sponge for DDT and other persistent organic pollutants (POPs), making it difficult for them to dissipate. (POPs) are organic pollutants. POPs reach the Arctic through soils and water where they build up in the food chain and accumulate in marine creatures' fat[12.]

Indigenous inhabitants of the Arctic, known as *the Inuit13*,

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11 Ney, R. E., Jr. Where Did That Chemical Go? A Practical Guide to Chemical Fate and Transport in the Environment. New York: Van Nostrand Reinhold, 1990.

12 Blais, J. M., Kimpe, L. E., McMahon, D. et al. Arctic seabirds transport marine-derived contaminants. Science, 309(5733), July 15, 2005, 445.

13 Cardenas J-C, Stranlund JK, Willis C. Local environmental control and institutional crowding-out. World Dev 2000, 28:1719–1733.

ingest these contaminated animals, which causes DDT levels in their body fat to rise to among the highest in the world. What's worse is that large quantities of DDT and other POPs are discovered in the fatty component of mother's milk since they concentrate in fat. while a result, while they breastfeed, babies are exposed to large levels of these contaminants.[14] This is also called as *bio-magnification*.

The brutal reality of bio-magnification among the native Inuit people of the Arctic, where contaminated animals contribute to disturbingly high levels of DDT in their bodies, is transitioned from, and we then set out on a voyage to investigate a global perspective on a critical remedy – the carbon pricing mechanism. While the predicament of the Inuit draws attention to the terrible effects of environmental contaminants, the larger global context necessitates the development of novel tactics to address another urgent problem: climate change. By putting a price on carbon emissions and accelerating the transition to a more environmentally friendly and sustainable society, carbon pricing, from a global viewpoint, offers a way to solve the environmental issues our planet is now facing.

2. CARBON PRICING MECHANISM: A GLOBAL PERSPECTIVE

2.1 Overview of Carbon Pricing

Discussions of climate policy frequently centre on the topic of carbon pricing. It was discarded at the Copenhagen COP in 2009, but

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[14] Scheer, R. Toxins drop in Arctic wildlife. Emagazine.com. July 21, 2008, <http://www.emagazine.com/ view/?4292>.

discussions for a climate accord continued in the years that followed.[15] Ideological opposition[16] to implementing a worldwide carbon pricing mechanism[17] thrives because there is still a lot of misinformation about the numerous benefits of doing so.

By penalizing energy sources in proportion to their carbon content, carbon pricing reduces emissions.[18] It is easily relevant to emissions resulting from energy usage, but it may also be expanded to include emissions from other sources[19], such as changes in land use.

The environmental benefits of carbon pricing come at a relatively modest cost[20], which helps to increase the social and political acceptability of climate policy. Included in this is the attribute of adjusted prices stimulating quick environmental innovation. These considerations are not given enough weight in the public discourse, where the price is typically minimized and the false notion that innovation policies suffice is pervasive is circulated by institutions with vested interests.

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15 Drews S and van den Bergh JCJM, 'What Explains Public Support for Climate Policies? A Review of Empirical and Experimental Studies' (2016) 16 Climate Policy 855–876.

16 Jenkins JD, 'Political Economy Constraints on Carbon Pricing Policies: What Are the Implications for Economic Efficiency, Environmental Efficacy, and Climate Policy Design?' (2014) 69 *Energy Policy* 467–477.

17 Bowen A, 'The Case for Carbon Pricing' (Policy Brief, Grantham Research Institute in Climate Change and the Environment, 2011).

18 Fischer C and Newell RG, 'Environmental and Technology Policies for Climate Mitigation' (2008) 55 *Journal of Environmental Economics and Management* 142–162.

19 Parry IWH, Evans D and Oates WE, 'Are Energy Efficiency Standards Justified?' (2014) 67 *Journal of Environmental Economics and Management* 104–125.

20 Dechezleprêtre A and Sato M, *The Impacts of Environmental Regulations on Competitiveness* (London School of Economics and Political Science, 2014).

According to the Polluter Pays Principle, carbon pricing alters the relative costs of all commodities and services.[21] As a result, businesses, consumers, and investors take into account not only their own costs and benefits, but also the social costs associated with (direct and indirect) emissions generated in every stage of the product life cycle, from resource to waste, when making decisions that result in Green House Gases (GHG) emissions.[22]

As a result, the entire economy becomes less carbon intensive since all consumers and producers will modify their choices to reflect prices that have been adjusted for climate externalities.[23] In order to achieve the same outcome using non-price instruments, the regulator would need to have access to all pertinent data on emissions and available methods for abatement in order to manage each polluting activity and behaviour in great detail.

Carbon pricing refers to the idea that the cost of fossil fuels will accurately reflect their carbon content.[24] Therefore, companies that utilize more carbon-intensive fuels will have higher input costs and consequently charge their clients greater output prices. Sectors that use these outputs as inputs will therefore notice an increase in the price of their outputs. Finally, customers who purchase goods or services

21 Unruh GC, 'Escaping Carbon Lock-In' (2002) 30 *Energy Policy* 317–325.

22 Jensen S, Mohlin K, Pittel K and Sterner T, 'An Introduction to the Green Paradox: The Unintended Consequences of Climate Policies' (2015) 9 *Review of Environmental Economics and Policy* 246–265.

23 Baranzini A, Goldemberg J and Speck S, 'A Future for Carbon Taxes' (2000) 32 *Ecological Economics* 395–412.

24 Metcalf GE, 'Designing a Carbon Tax to Reduce U.S. Greenhouse Gas Emissions' (2009) 3 *Review of Environmental Economics and Policy* 63–83.

from these latter industries will also pay more. A shift will occur to choices with relatively low direct and indirect emissions as all of these actors are encouraged to buy the cheaper input, product, or service.

Emissions trading systems (ETS) and carbon taxes are the two primary methods of carbon pricing.

An ETS, often known as a cap-and-trade system, limits overall greenhouse gas emissions and enables low-emitting companies to sell excess permits to higher polluters.[25] A market price for greenhouse gas emissions is established by an ETS by generating supply and demand for emissions permits. The cap aids in ensuring that the necessary emission cuts will occur in order to keep all emitters collectively within their pre-allocated carbon budget.[26]

By establishing a tax rate on greenhouse gas emissions or, more frequently, on the carbon content of fossil fuels[27,] a carbon tax immediately establishes a price on carbon. A carbon tax differs from an ETS in that the decrease in emissions it will produce is not predetermined, but the carbon price is.

The national and the economic conditions of a nation will determine the instrument to be used. Furthermore, there are more covert methods for more correctly valuing carbon, such as the

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25 Gevrek ZE and Uyduranoglu A, 'Public Preferences for Carbon Tax Attributes' (2015) 118 *Ecological Economics* 186–197.

26 Carattini S, Baranzini A, Thalmann P, Varone F and Vöhringer F, *Green Taxes in a Post-Paris World: Are Millions of Nays Inevitable?* (Grantham Research Institute on Climate Change and the Environment, 2016).

27 Brannlund R and Persson L, 'To Tax, or Not to Tax: Preferences for Climate Policy Attributes' (2012) 12 *Climate Policy* 704–721.

imposition of fuel taxes, the elimination of fossil fuel subsidies, and legislation that may take into account the "social cost of carbon."[28]

Carbon pricing, as opposed to other devices, can handle the enormous variety of GHG emitters, hence lowering the cost of pollution management. Companies that produce a variety of items or use unique technology may exhibit heterogeneity, which results in varying emissions per unit of production and uneven marginal costs of pollution abatement.

All polluters should select the amount of emissions reduction for which the related marginal cost matches the carbon price under ideal knowledge and substantive rationality.[29] A carbon price signal would therefore cause the marginal costs of abatement to become equal across all polluters, indicating that a certain level of abatement is satisfied at least globally.

A worldwide carbon pricing mechanism that applies to all nations and industries would prevent any emission spillovers or leakages, which are increases in carbon dioxide emissions in some nations as a result of reductions in emissions in other nations, that manifests as a transboundary spillover of carbon.[30] Moving polluting industries and changing comparative advantages that change international trade patterns are the processes by which this happens.

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28 World Bank & Ecofys, *State and Trends of Carbon Pricing—2015* (The World Bank, 2015).

29 Frey BS, 'A Constitution for Knaves Crowds Out Civic Virtues' (1997) 107 *The Economic Journal* 1043–1053.

30 OECD, Effective Carbon Rates—Pricing CO2 through Taxes and Emissions Trading Systems (OECD Publishing, 2016).

Both are prompted by relative cost rises in nations with tougher laws.

A global carbon price would guarantee that there would be no carbon leakage[31] since relative pricing for all carbon-intensive items would be uniform across all nations.

2.2 Analysis of the Challenges faced in the implementation of Carbon Pricing

However, carbon pricing faces five major challenges that limit its use for accelerating deep decarbonization. Five significant problems prevent the implementation of carbon price for promoting extensive decarbonization. In the beginning, carbon price frames climate change as a result of market failure as opposed to a major system issue. Furthermore, it places specific preference for efficiency over effectiveness. Third, it often encourages the optimization of current systems as opposed to transformation. Fourth, it implies a global policy approach as opposed to a context-specific one. Fifth, it fails to take political reality into account.

3. IMPACT ON BUSINESS SUSTAINABILITY

3.1 Effect of Internal Carbon Pricing and Corporate Sustainability Practices

Internal carbon pricing (ICP) has emerged as a popular tool for businesses to reduce emissions and combat climate change risks. In the following section the authors analyse the role and effect of Internal Carbon P`ricing on Corporate sustainability practices.

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31 Chichilnisky G and Heal G, 'Who Should Abate Carbon Emissions?' (1994) 44 *Economics Letters* 443–449.

By incorporating legitimacy and stakeholder perspectives into dynamic capability theory, the authors theorize the role of ICP. At the outset, the authors seek to argue that firms implement ICP to meet the expectations of stakeholders, which leads to corporate environmental strategic transformation, which improves a firm's dynamic capabilities.

Furthermore, the authors contend that the diverse nature of corporate motivation for such strategy transformation, as reflected by carbon dependency and corporate climate target, moderates the relationship between the extent of ICP and environmental outcomes. A testament to this fact is the Carbon Disclosure Project data from 500 publicly traded companies in the United States confirms that ICP reduces carbon emissions per employee and carbon emissions per revenue by 13.5% and 15.7%, respectively.

In essence carbon pricing is a market-oriented instrument that has been put into practice in several nations for cutting down upon greenhouse gasses while simultaneously combatting climate change.[32] Such Macro level carbon pricing schemes have formed the foundations for Emission trading schemes in regions such as the European Union and China as highlighted hitherto. On the other end of the spectrum at the micro level we examine the growth of internal carbon pricing which is seen to be on a rising trend.

ICP is a mechanism through which companies place a monetary value, this monetary value is associated with their green house gas emissions in a way that helps drive business towards

32 Anderson, 'Title of the Work' (2011).

sustainability. In practicality this would involve the ICP taking 3 predominant forms to effectuate monetary value generation that would lead to sustainability in business practices; these are:

1) *Internal Carbon Fee* by attaching a monetary value to each ton of carbon emissions

2) *Shadow Pricing* that involves setting a theoretical price on carbon to assist the firm in first prioritizing low carbon investments.

3) *Implicit Price Model* that involves firms quantifying both direct and indirect carbon emissions from their operations in order to set firm's prices internally so as to meet compliance standards as set out under corporate environmental performance and other business objectives.

3.1.1 Why should Reliance be placed on Internal Carbon Pricing?

The important question that looms is why should firms utilize internal carbon pricing? The simple answer is that ICP serves as an excellent risk management tool that helps monitor the regulatory environment and in addition also helps firms save on an entire host of business expenses and thus acts as a facilitator for the growth of a business. A proper internal carbon price can improve the competitiveness of a business.[33] Thus more and more firms have started to implement ICP in order to achieve lower carbon emission and as a result have better environmental performance.

Although case studies exist that highlight the relationship

33 Walker et al., 'Title of the Work' (2015).

between ICP and corporate environmental performance as an indicator for corporate sustainability practices particularly by Whitney and Colleagues[34], it becomes pertinent to note that these case studies are only reflective of individual phenomena and thus it becomes increasingly difficult to draw broad conclusions with regards to the general relationship that exist between environmental performance in the absence of strong economic tools and a large sample size as also highlighted by Kuo and Colleagues.[35]

In the following section we take the example of the United States of America one of the most carbons developed economies in the world, analyzing the ICP model within these firms, a prima facie base line analysis conclusion shows that implementation of ICP by firms helps reduce the carbon emission per employee and carbon emission revenue by a factor of 22.7% and 26.2% respectively.

A particular study by Zhu and colleagues further evidences this fact by highlighting that firms that implemented ICP in the United States had reduced carbon emission rates of 13.5% for Emission per employee and a reduction of 15.7% for Emission per revenue, the study utilized a combination of Heckerman's Two step estimator in collaboration with Tobit's regression method to arrive at this particular conclusion.

34 Anja, 'Title of the Work' (2016).
35 Ma and Kuo, 'Title of the Work' (2021).

4. ANALYSIS OF BUSINESSES ADAPTING TO CARBON PRICING: THE MUMBAI REVERSE SUPPLY CHAIN Model

Figure A.

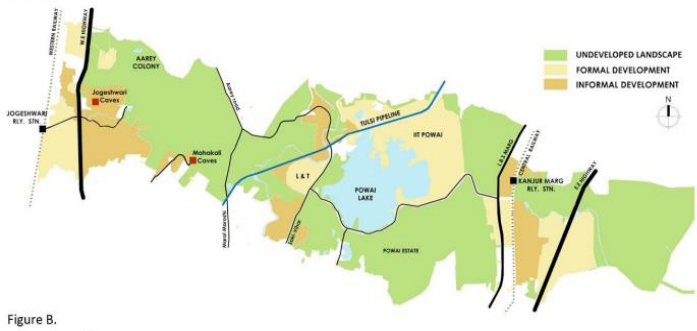
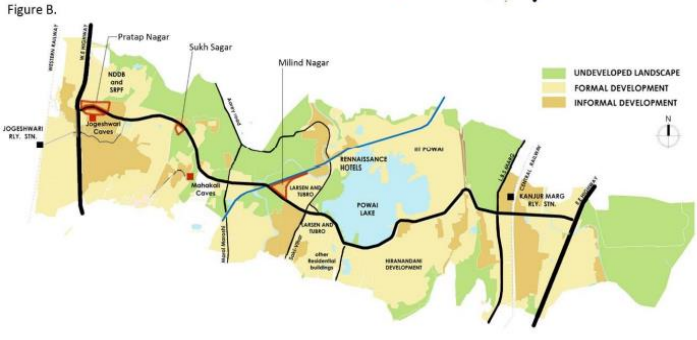


Figure B.



4.1 Exploring the Classical Circular Economic Model[36]

The common economic model that was traditionally associated with carbon pricing was that of the Circular Economy this involved a prevailing production paradigm of treating the environment as a large waste reservoir, the model was raised four decades ago in a report.

Needless to say, this model was largely unsustainable and is unsuccessful with regards to the its applicability in current

36 Alkhayyal B, 'Corporate Social Responsibility Practices in the U.S.: Using Reverse Supply Chain Network Design and Optimization Considering Carbon Cost' (2019) *MDPI* <https://www.mdpi.com/2071-1050/11/7/2097>.

contemporary environmental standards. Recently a research by Derigent and Colleagues[37] concerning product and material recycling in the context of a circular economy highlighted the same. Work by Govindan and colleagues has also found that an effective reverse supply chain can help reduce logistical issues and in order to decrease the unknown causes of return quantity and quality, a product acquisition management strategy has been adopted by several Indian firms.[38]

4.2 Case Study

Mumbai is known to be one the largest producers of GHG emissions and carbon in India. Three collection centers explored where located in the areas of Pratap Nagar, Sukh Nagar and Milind Nagar, the three reselling centers were located in the areas of Kanjur Marg and Jogeshwari and finally the remanufacturing facilities were located in the areas of Aarey colony and the Powai Estate.

Upon calculating the real distances between these location in miles, along with the relative levels of fuel costs and the emission levels of CO2 in these regions, additionally the quantity of laborers, the annual salaries of such laborers and production space were also explored. Finally, Data from electricity, natural gas, and fuel oil energy sources were examined along with their usage in each aforementioned

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37 Derigent W and Thomas A, 'End-of-Life Information Sharing for a Circular Economy: Existing Literature and Research Opportunities' in *Computer and Information Science* (Springer, Cham, Switzerland 2016) vol 640, 41–50.

38 Govindan K and Soleimani H, 'A Review of Reverse Logistics and Closed-Loop Supply Chains: A Journal of Cleaner Production Focus' (2017) 142 *Journal of Cleaner Production* 371–384.

region.

This particular example explored a mid-size LG A/C unit, model LW1213ER, with measurements of 24 6/9" x 16" x 23 2/6", and a market price of $349.99.[39] Two 12-foot trucks with a load volume of 475 cubic feet and a capacity of 58 A/C units each were assumed, based on interviews, for transportation.[40] Estimation of emissions was accomplished through the use of a direct carbon tax, with a value ranging between $40 and $120 per ton CO2 equivalent—as proposed in the 21st Conference of the Parties to the UNFCCC[41] in Paris, the U.S. Environmental Protection Agency[42], and the U.S. Interagency Working Group[43]—to clarify how proposed policies might impact the margin of profitability for remanufactured goods.

Authors have estimated the data that has been collected from each collection center with regards to the number of A/C Units received, the total items received this year that were under the same

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39 LG Electronics. Air Conditioners, LG Model: LW1213ER. Available online: http://www.lg.com/us/air-conditioners/lg-LW1213ER-window-air-conditioner (accessed on 15 October 2023).

40 Penske Truck Leasing Corporation. 12 Foot Truck. Available online: http://www.pensketruckrental.com/moving-trucks/12-foot-truck/ (accessed on 13 October 2023).

41 Conference of the Parties (COP21). The Paris Agreement. The United Nations Framework Convention on Climate Change (UNFCCC). Available online: <http://www.cop21paris.org/> (accessed on 12 October 2023).

42 US Environmental Protection Agency, *The Social Cost of Carbon. Climate Change—Social Cost of CO2, 2015–2050* <http://www3.epa.gov/climatechange/EPAactivities/economics/scc.html> accessed 12 October 2023.

43 Interagency Working Group. Technical Update on the Social Cost of Carbon for Regulatory Impact Analysis-Under Executive Order 12866; Interagency Working Group on Social Cost of Carbon, United States Government: Washington, DC, USA, 2013.

category as the A/Cs as well as the total income that is generated from the sale of the A/Cs concerned. Based on the availability of this data, the authors have then developed a deterministic model in order to test their hypothesis concerning reverse chain models to reduce Carbon emissions and price and supplement the ICP model discussed hitherto.

4.3 Results from the Study

Following the study with the data in the previous paragraph, the authors have found three particular results that are explained further in detail, firstly the deterministic model with minimum shipments is explained, secondly the effect of varying social cost of carbon values on manufacturing units is explained and finally the design of experiments to study the cost factor of carbon is explained

4.4 Analysing the Deterministic Model of Minimum Shipments

Through the above data, it was estimated that in case of not considering a carbon tax, the unit price would amount to $212 with a profit margin estimation of 26.4% with the sale price being $288 this is line with the current refurbished market price of LG A/Cs at present.[44]

Now if a tax similar to what was recommended by the USEPA in the United States in essence a carbon tax was applied then assuming the tax to be the recommended $40 per ton CO2 equivalent, the

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44 World Wide Voltage, *LG Electronics. Air Conditioners, LG Model: LW1213ER Refurbished* <http://www.worldwidevoltage.com/lg-lw1213er-12-000-btu-window-air-conditioner-with-remote-fectory-refurbished--only-for-usa--.html?utm_source=googlepeplaandutm_medium=adwordsandid=61865531738> accessed 11 October 2023.

additional taxation would reduce the profitability of the firms to 19.10% with the manufacturing price set at a constant $233 per unit of carbon produced.

From this data we can ascertain that the total remanufacturing cost was $233 per unit, and this devolved model was $116.99/unit under the current market price. The emission quantity was 0.07 tCO2e per unit. Comparing these to the manufacturing results that the EIO-LCA model demonstrated it can be find remanufacturing emission volumes were 0.084 Tc02e per unit lower than new manufacturing.

This difference between the two models commonly leads to what is known as the social cost of carbon and imposition of a carbon tax, which affects the internal carbon pricing (ICP) model.

The following is also similar to global trends as was seen in the case of the new manufacturing producer prices over a range of proposed social cost of Carbon (SCC) values as was done by Moore and colleagues.[45] The price set by Moore was $220 per ton, the following graph helps us understand that currently prevalent and existing approaches use different carbon policies with regards to the cost of impact of the carbon involved.

4.5 Analysing the Deterministic Model in light of Relaxation Constraints (Introducing Price Uncertainty to the Model)

In order to consider uncertainty effect of carbon price on supply chain network decisions and strategies, for the purposes of the

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45 Moore FC and Diaz DB, 'Temperature Impacts on Economic Growth Warrant Stringent Mitigation Policy' (2015) 5 *Nature Climate Change* 127–131.

model, the authors have considered multiple scenario clusters for the tax price, all with equal demand scenarios. The solutions of the deterministic model for different carbon prices are summarized in the table given below.

From the table we can see that with the introduction of price uncertainty there were three different configuration results for carbon prices ranging between $0 and $120.

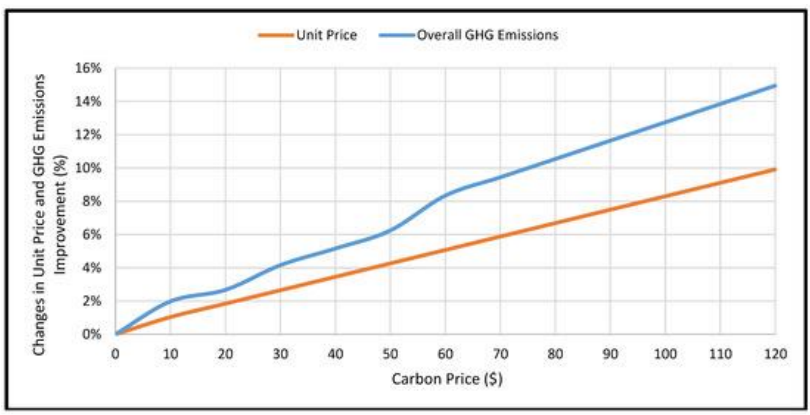
In the following table, the red colour indicates that the percentages concerning the change in unit price and emissions improvement are linear in nature, which indicates that as we increase the price of carbon through taxing mechanisms, the emissions also improve. This means that the amount of carbon being emitted also reduces with an increase in price. This finding of our study is in line with the popular notion that a larger carbon tax that leads to higher carbon pricing would in turn lead to sustainability.

Thus, from the table if we were to consider no carbon pricing indicating a value of carbon at 0$ or a minimum carbon tax leading to carbon values at $10 or 20$ it would depict the current status quo, with most countries particularly developing countries considering the implications of imposing a carbon tax on their outputs. Now increasing the carbon tax to $30 is reflected to lead to fewer facilities as costs rise which would indicate a supply chain configuration that is ultimately greener. Furthermore, as production is the leading contributor to GHG emissions, the reduction in facilities would lead to reduced production and thus reducing incoming transportation costs and emissions. This would also lead to location changes as

facilities move towards more economically feasible locations, in our Mumbai model this would involve firms moving their facilities from economically expensive regions such as Milind Nagar to relatively less expensive regions such as Pratap Nagar.

Similarly, if the carbon price was set at 50$ indicating a much higher carbon tax, it would once again be indicative of reduction in the number of facilities and further be supplemented by a reduction in the inbound and outbound transportation costs and emissions which would in turn allow for a more efficient and environmentally friendly model.

The following graph quantifies this theoretical approach analysing the relation between Unit price and emissions reduction performance changes at various carbon prices. The following graph showcases that the unit price rises in a linear fashion alongside the

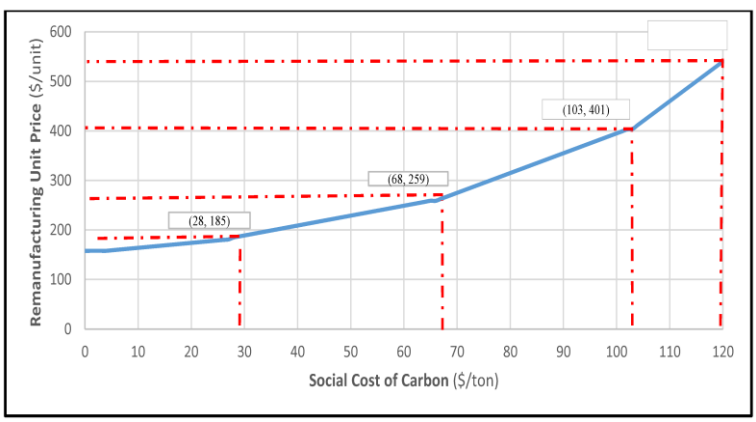


increase in carbon price. As seen upon the introduction of the carbon price, the emissions also improve significantly up to 2% following which the emissions improvement relatively slows down until it reaches 50$ then there is another leap with the introduction of changed

priced mechanisms due to a shift in facilities from more expensive areas to those that are relatively less expensive. Thus, the important correlation that can be drawn from this finding is that the carbon price changes and both unit price and emissions improvement are directly proportional to one another, with the increase in carbon price leading to an equivalent increase in both unit price and emissions improvement and increase.

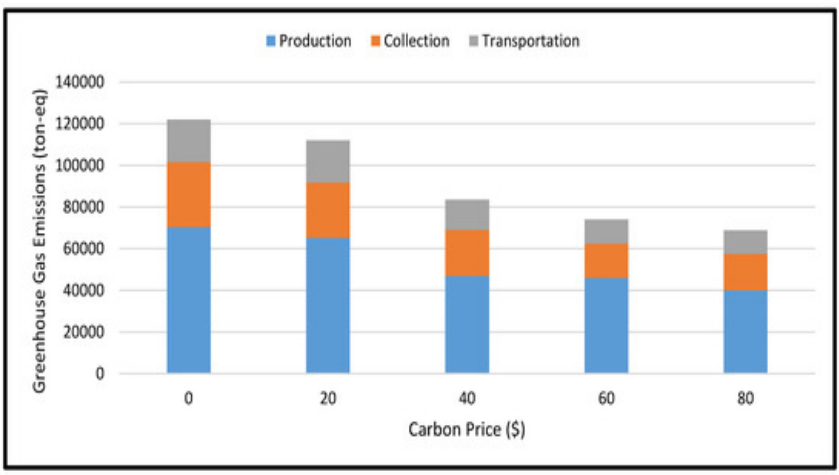
4.6 Analysing the Effect of Different Carbon Social Costs

The above case study was done in order to ascertain the social cost of carbon that could fall anywhere between 0$/ton to 120$/ton. The graph below indicates the effect of different social costs of carbon on the unit price.



From the graph it becomes evident that as the social cost of carbon approaches $68/ton and above the unit price of carbon becomes much more expensive. Mathematically this piecewise linear line represents four different segments with each segment having a successive pair of points connected by a straight line. These segments represent what are commonly referred to as system states.

The focus of this analysis was to understand the relationship between increasing price and the corresponding emissions rate. It can be seen that when the carbon price is raised from no carbon pricing at 0$ to 20$, production activities and the total amount of greenhouse gas emissions show only minor changes while when we increase this to a much higher price at 40$ ton there is a much more significant reduction in emissions. The cost increase at these facilities led to a converse emissions improvement at the facilities. This is illustrated in the below given figure.



4.7 Statistical Analysis using MINITAB Software

Finally, the authors utilized all this data and findings and conducted an estimating analysis of variance (ANOVA) of the regression analysis, utilizing the MINITAB 17 software in order to examine the effects of factors that were highlighted earlier as per the mathematical formula utilized by the authors. The software was used to test the regression analysis of the factors on the unit price as well as to determine whether the differences between these factors was

statistically significant. In order to test this null hypothesis (which meant that all factors mean were equal), a p-value that was less than or equal to the significance level of 0.05 would indicate that the hypothesis is rejected and it could be concluded that there was a significant difference between the means and by extension there was an extreme difference among the factors. The table below displays the results of the analysis by the MINITAB software.

From the results of the table, it can clearly be seen that the p-value is nowhere found to be more than the significance value of 0.05, this reflects that during the application of the mathematical model proposed by the authors. The various factors highlighted hitherto are significantly interdependent upon one another and thus indicative of the fact that in order for this model to be practically feasible the concerned government or authority while taxing carbon has to take into various factors of the industry such as production costs, transportation costs and other allied costs before a direct imposition of any such tax.

5. SUSTAINABILITY INDICATORS PRE AND POST CARBON PRICING IMPLEMENTATION

Ultimately from this research what can be understood is that carbon pricing done through the reverse supply chain model highlighted above is an absolute necessity as the model helps encompass and factor in the impact of supply chain operational and strategic actions on the environment. A case study based on real locations in Mumbai was also done in order to showcase the importance and real-world applicability of following such a model as

well as to clarify how the policy that has been proposed would impact the profit margins of the manufactured items of the facilities along with how they would be utilized to test the influence of emissions pricing on the optimal configurations of a reverse supply chain model.

The findings demonstrated that the carbon price ranges that were employed would control the quantity of greenhouse gas emissions produced with respect to the context of reverse supply chain operations.

Moreover, by applying the model we can see that the pricing of carbon emissions particularly at higher price points begins to have a negative effect on productions and transportation, and upon reaching a certain level it also leads firms exiting a certain region and moving to other cost-effective regions to continue their operations. Thus, the research presented theoretical modeling concerning reverse supply chain systems in the context of industrial systems within the city of Mumbai as a real-world example, something that is unprecedented in the current sphere of work.

The key takeaways from this theoretical model and case study is that we must focus on ensuring a balance between environmental wellbeing concerning carbon emissions and economic growth through the development of production facilities, The critical question that looms then is how does one achieve this sustainable balance? The simple answer to the question is to implement carbon pricing mechanisms that are not too high to discourage production activities or high enough that they lead to the relocation of manufacturing facilities or reselling centers rather we must focus on implementing

carbon pricing mechanisms that follow a deterministic model in order to ensure environmental balance while at the same time favoring economic growth and production.

The costs associated with remanufacturing and production are interlinked not just with the economy but with the environment as well, as a result it becomes particularly important to ensure that these centers and facilities in cities are of high reclamation levels and undertake recycling of products. Reminding us that the key to sustainable development is to ensure that not only is there economic minimization of cost but also that the environmental impact of operations is minimized. How exactly this can be achieved has been explained in detail under the conclusion section of this paper.

6. The Current Green Energy Industry is fed by the Blood of Children: Analysis of Native Rights and Environmental Degradation

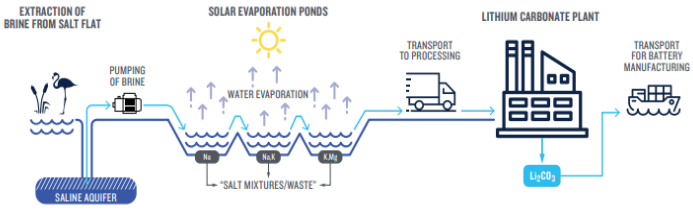
6.1 Blood Batteries: Impact of Li-Ion Batteries in the current global green energy market

It's possible that the lightest metals have the most drastic impacts. Our battery-powered civilization depends on lithium, often referred to as "white gold" to run our electric cars, computers, and other electronic devices. Due to an 8.9 percent yearly growth in worldwide market use for electronic products, the demand for lithium has risen quickly. And so has its price.

As hybrid and electric cars, energy storage technologies, and portable gadgets become more prevalent, this need will only grow.

Although lithium has been discovered on each of the six continents where people live, more than 75% of the world's lithium supply is hidden beneath the salt flats of Chile, Argentina, and Bolivia, together known as the *"Lithium Triangle."*

One of the driest regions on Earth, the Lithium Triangle requires miners to bore holes in the salt flats to pump salty, mineral-rich brine to the surface, complicating the process of extracting lithium. They then filter the resulting combination of potassium, manganese, borax, and lithium salts before letting it evaporate again for several months at a time. The filtering procedure is finished and lithium carbonate may be extracted after 12 to 18 months.



An astonishing 2.2 million litres of water are needed to create just one tonne of lithium, demonstrating the tremendous demand this sector makes on limited water supplies. The use of evaporation ponds, which, depending on the amount of surface area covered, may use an astounding 21 million litres of water day, worsens the environmental effect.

These ponds, which are used in the lithium extraction process to concentrate lithium from brine, are a crucial step. However, their voracious desire for water emphasizes how urgently the lithium industry needs appropriate water management practices.

The enormous Salar de Uyuni, a vast area of inland drainage in the central Andes that covers more than 10,000 square kilometres, is situated near the southern end of the Altiplano, in Bolivia. This area formerly belonged to a vast old lake that dried up and left the salt flat behind some 40,000 years ago. Long ago, *the local Aymara* population, who still rule the region, began to remove salt from the pan.

The Uyuni is also one of the richest lithium deposits in the world, with an estimated 9 million metric tonnes of lithium, adding to the estimated behemothic size of 21 million metric tonnes of stored lithium deposits in Bolivia alone.

The Atacama Desert in Chile, which is home to the Atacama Indigenous Community, is the place where the problem of water-intensive lithium production is most obvious. The community is closely entwined with the earth since it is located in this dry area, which they see as holy and essential to their way of life. The lithium boom, fueled by an increase in battery demand worldwide, has had a significant negative impact on indigenous peoples' access to water in the Atacama Desert.

The Atacama Indigenous Community faces the dismal reality of declining water availability as evaporation ponds multiply and suck enormous amounts of water from subterranean aquifers, endangering their livelihoods and cultural legacy.

Changes in flora and fauna can also be used to infer a drop in

water levels. Due of the geographic size at which they utilise wetlands[46], flamingos may be a powerful indication of environmental deterioration. A 10% to 12% decrease in the population of James and Andean flamingos, respectively, has been recorded in Salar de Atacama. This is related to the decrease in surface water, especially during the winter.[47]

Reduced flamingo reproductive success from 2017 to 2019 led to flamingo nestlings barely reaching the minimum number of 1,000 nestlings which is required for population size maintenance, below historical records.[48]

Since China's[49] involvement in the predicament of the Atacama Indigenous Community is related to the fact that it is a significant user of lithium, which has increased lithium extraction in places like the Atacama Desert. As its electric car sector continues to grow, China, a significant player in the global lithium-ion battery market, has an increasing need for lithium.

Therefore, it is in the best interests of Chinese businesses to

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46 Marconi P, Arengo F and Clark A, 'The Arid Andean Plateau Waterscapes and the Lithium Triangle: Flamingos as Flagships for Conservation of High-Altitude Wetlands under Pressure from Mining Development' (2022) *Wetlands Ecology and Management* https://doi.org/10.1007/s11273-022-09872-6.

47 Gutierrez JS et al., 'Climate Change and Lithium Mining Influence Flamingo Abundance in the Lithium Triangle' (2022) 289 *Proceedings of the Royal Society B: Biological Sciences* 20212388.

48 Gajardo G and Redón S, 'Andean Hypersaline Lakes in the Atacama Desert, Northern Chile: Between Lithium Exploitation and Unique Biodiversity Conservation' (2019) *Conservation Science and Practice* 94.

49 Reuters, 'Bolivia Taps China, Russia's Rosatom in Bid to Unlock Huge Lithium Riches' <https://www.reuters.com/world/americas/bolivia-seals-14-bln-lithium-deals-with-russias-rosatom-chinas-guoan-2023-06-29/> accessed 4 October 2023.

ensure a steady supply of lithium from places like the Atacama Desert. Lithium mining has expanded as a result of the development of China's electric car market and its reliance on lithium-ion batteries, placing additional strain on water supplies and having an adverse effect on nearby populations.

The carbon footprint associated with the lithium supply might be decreased by replacing around 30% of primary lithium with recycled lithium. This benefit for the environment, 10% or so has been assessed taking the batteries gathered into account.[50]

However, the European Commission calculated an average battery collecting efficiency of the current 45%, with a projected increase to at least 57% by 2030.[51]

This proportion ought to rise much higher combining technology gathering with stricter rules systems. Alternative methods are being researched such as biological recycling, which processes materials using bacteria, and hydrometallurgical methods, which employ chemical solutions in a manner akin to how lithium is first recovered from brine. But till then there is no positive end in sight.

6.2 Leaking Life: Li-Co is destroying life in Africa

The demand for cobalt from electric vehicles (EVs) surpassed

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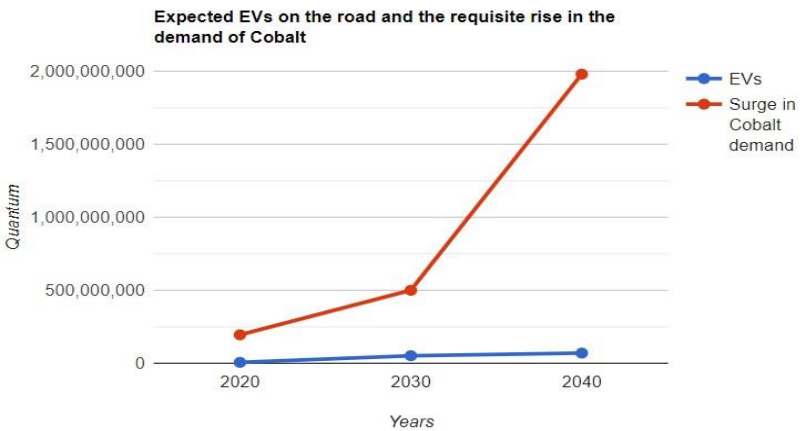
50 European Commission, Changing How We Produce and Consume: New Circular Economy Action Plan Shows the Way to a Climate-Neutral, Competitive Economy (12 March 2020).

51 European Commission, Commission Staff Working Document on the Evaluation of the Directive 2006/66/EC on Batteries and Accumulators and Waste Batteries and Accumulators and Repealing Directive 91/157/EEC (Brussels 2019).

that from other battery applications to become the largest end use sector in 2021, accounting for 34% of the overall demand of 59 kt. The fact that EV sales doubled above 2020 levels and that China accounted for more than half of worldwide sales and 64% of y/y growth helped to support this.



Due to their better energy density and performance, cobalt-containing cathodes continue to account for the majority of lithium-ion battery chemistries used in the EV industry. Cobalt is crucial for stability and safety. In 2021, nickel- and cobalt-based chemistries accounted for 74% of the worldwide market for light-duty electric vehicle batteries, while lithium iron phosphate (LFP) accounted for 25%.

Global mining activity has increased as a result of cobalt's essential significance in contemporary industries. The Democratic Republic of the Congo (DRC), a nation endowed with an abundance of cobalt deposits, provides a sizeable share of the world's cobalt supply. However, there is a negative aspect to this abundance.

Numerous uncontrolled and unmonitored mines in the

Democratic Republic of the Congo (DRC) employ minors in situations that are similar to modern-day slavery. These children toil through 12-hour shifts for pitiful wages that sometimes amount to only one US Dollar. The DRC is mineral-rich despite being one of the world's poorest nations. But in these mines, where much of the labour is done by hand with crude equipment, in perilous situations, and sometimes in appalling weather, a history of cruel colonial exploitation seems to be repeating itself.

The rush is on for cobalt, a mineral abundant in the DRC, and it has become more precious than gold due to its critical role in lithium-ion batteries that power smartphones and laptops. Children make up the majority of the workforce in the cobalt mining industry, labouring in abhorrent circumstances and without shoes. These children labour for multi-national firms in America and China, earning only a Dollar per day while they live in filth.

These mines are hazardous environments with hand-dug tunnels and no safety supports. Every day, miners—including kids as young as four—run the danger of death. Despite the acknowledged health dangers linked with cobalt exposure, they do not have any protective gear.

The Congolese Labour Code's Articles 159 to 169 define obligations for the employer, such as the enforcement of prevention measures, the availability of occupational medicine professionals, and the creation of a monitoring committee for health and safety issues. These articles make general provisions for health, hygiene, and security at work. In practice, fewer than 10% of miners are even aware of these

rules,[52] and artisanal mine security is extremely bad.

Cobalt miners in the Democratic Republic of the Congo are in a terrible predicament that offers a grim image of exploitation, misery, and uncertainty. The unpleasant fact is that the worldwide desire for technology and electric vehicles is driving up cobalt demand, which keeps the cycle of exploitation going strong.

7. ECO-CRIMES AND ENFORCEMENT

Mitigating the effects of climate change by showing a need to derive and implement solutions has been the impetus taken by policy makers around the globe, that has so far spanned two decades. The world is being confronted with the crux of this impetus in real time with it becoming hotter every passing day thereby raising concerns and potential risks for cities situated in the coastal regions getting submerged.

The United Nations Secretary General recently referred to the Intergovernmental Panel on Climate Change 2022 report as a "atlas of human suffering," pointing out that half of the world's population lives in cities and is vulnerable to climate change effects, as well as the deteriorating physical and mental health conditions of those communities facing heat stress, water scarcity, and food security threats.[53]

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52 World Bank and European Commission, *Evaluation of Carcinogenic Risks to Humans* (vol 86, Lyon, France 2008).

53 "Borenstein S, 'UN Climate Report: "Atlas of Human Suffering" Worse, Bigger' *AP News* (28 February 2022) https://apnews.com/article/climate-science-europe-united-nations-weather-8d5e277660f7125ffdab7a833d9856a3.

Actions to reduce greenhouse gas emissions and encourage activities that contribute to a future no-or-low carbon society are among the fundamental solutions that have gained worldwide support in the corporate and governmental sectors. The majority of these ideas and initiatives are motivated by the need to adhere to the Paris Climate Agreement's goal that global warming be kept to 1.5 degrees Celsius over pre-industrial levels.[54] Countries that put out seventy-three percent of emissions have committed to net zero emissions by 2050.[55]

Once the minerals have been processed, they are utilized in geothermal projects, hydropower, nuclear power, electric grids, solar photovoltaic ("PV") plants, electric vehicle ("EV") batteries, battery storage, wind turbines and wind farms, and solar PV plants.[56] Although there are currently active mining for these minerals all over the world, the quantity now needed to sustain the energy transition has fast exceeded the supply. According to the International Energy Agency, a ***"****typical electric car requires six times the mineral inputs of a conventional car and an onshore wind plant requires nine times more mineral resources than a gas-fired*

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54 United Nations Climate Change, *The Paris Agreement* <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

55 United Nations Secretary-General, 'Secretary-General's Remarks at 2021 Petersberg Climate Dialogue' (6 May 2021) <https://www.un.org/sg/en/content/sg/statement/2021-05-06/secretary-generals-remarks-2021-petersberg-climate-dialogue-delivered>.

56 Patel S, 'Energy Transition Facing Potentially Debilitating Critical Mineral Supply Gap' *POWER* (1 September 2021) <https://www.powermag.com/energy-transition-facing-potentially-debilitating-critical-mineral-supply-gap/>.

one."[57]

These factors make battery metals—lithium, cobalt, and nickel—a serious issue since they are required for the manufacture of electric vehicles.[58] In order to fulfil the growing demand for sustainable energy technology, some experts predict that the production of these minerals may expand by roughly 500% by 2050.[59]

These extractive sector operations and human rights abuses, particularly in relation to regional Indigenous populations, are well-documented. The United Nations Declaration on the Rights of Indigenous Peoples is the most important vehicle through which these rights are recognised and safeguarded on a global scale.60 Several of the rights stated therein are threatened by mining. Indigenous populations were not often contacted about the project and were not able to offer their free, prior, and informed consent to the mining activities that were being carried out on their lands at the time.[61]

In many indigenous communities, there is a general distrust

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57 *IEA Report Looks at Critical Minerals in Clean Energy Transitions Nuclear Engineering International* (6 May 2021) <https://www.neimagazine.com/news/newsiea-report-looks-at-critical-minerals-in-clean-energy-transitions-8725909>.

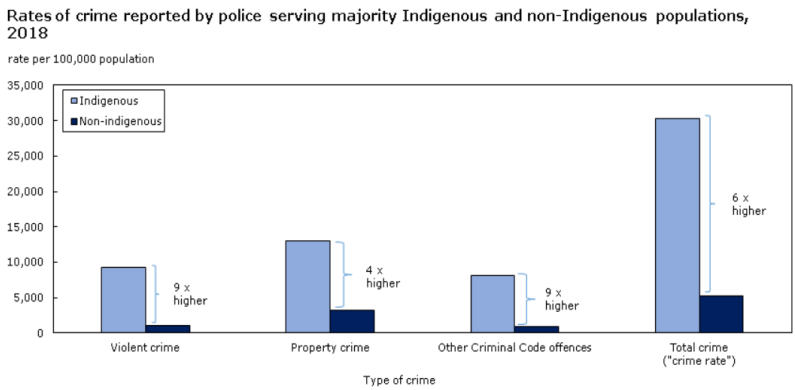
58 Dominish E, Teske S and Florin N, *Responsible Minerals Sourcing for Renewable Energy* (Institute for Sustainable Futures 2019).

59 Hund K et al., *Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition* (World Bank Group 2020) <https://pubdocs.worldbank.org/en/961711588875536384/Minerals-for-Climate-Action-The-Mineral-Intensity-of-the-Clean-Energy-Transition.pdf>.

60 United Nations General Assembly, Resolution 61/295: United Nations Declaration on the Rights of Indigenous Peoples (13 September 2007) at 14.

61 Aylwin J and Rohr J, The UN Guiding Principles on Business & Human Rights: Progress Achieved, the Implementation Gap and Challenges for the Next Decade (International Work Group for Indigenous Affairs 2021) 12 <https://www.ohchr.org/Documents/Issues/Business/UNGPsBHRnext10/inputs/iwgia_final.pdf>.

against the outsiders.[62] When these temporary workers from the outside are brough in to finish mining operations, crime and violence against women increase.[63] What happens next is a well-known pattern where indigenous communities file lawsuits to these mining activities; they start market-based campaigns; they send out leaders to address the media and politicians; yet the project goes forward as approved by the government. Seeing little recourse, Indigenous Peoples mount social opposition through on the ground protests and advocacy. These Indigenous human rights defenders are then criminalized, assaulted, or even killed.[64]



Source: State of The World's Indigenous People Report, 2019; United Nations Department of Economic and Social Affairs (UNDESA)

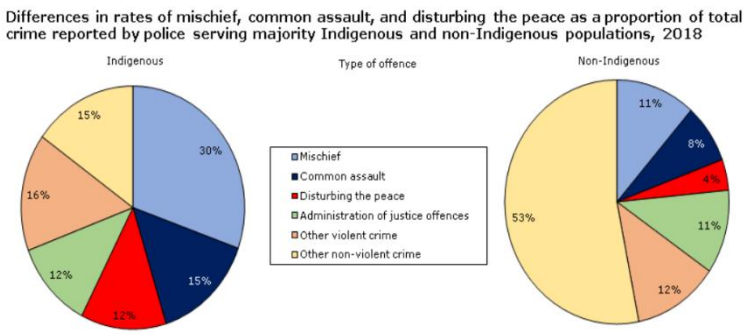
For instance, *the U.S. saw an influx of employees to the region following the 2006 discovery of oil in North Dakota's Bakken Formation*, and more

62 Block S, 'Mining Energy-Transition Metals: National Aims, Local Conflicts' *MSCI* (3 June 2021) <https://www.msci.com/www/blog-posts/mining-energy-transition-metals/02531033947>.

63 Searcey D, Forsythe M and Lipton E, 'A Power Struggle Over Cobalt Rattles the Clean Energy Revolution' *The New York Times* (7 December 2021) <https://www.nytimes.com/2021/11/20/world/china-congo-cobalt.html>.

64 Notess L, 'For Indigenous Peoples, Losing Land Can Mean Losing Lives' *World Resources Institute* (31 May 2018) <https://www.wri.org/insights/indigenous-peoples-losing-land-can-mean-losing-lives>.

significantly, the establishment of man camps, which are transient camps that house oil and gas workers.[65] As a result, the amount of violence against Indigenous women in the region increased dramatically. In counties in the Bakken that produced oil, *violent crime surged by 30%,* according to the Bureau of Justice, and *strangers to the land were responsible for 53% of these crimes.*[66] Other counties did not see increased crime during the same time period.[67]



Source: State of The World's Indigenous People Report, 2019; United Nations Department of Economic and Social Affairs (UNDESA)

Due to domestic legal systems that are frequently insufficient to adequately safeguard the rights of the impacted Indigenous Peoples, these kinds of flagrant criminal and human rights crimes take place on Indigenous territories. Numerous nations either don't explicitly

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65 *Violence from Extractive Industry 'Man Camps' Endangers Indigenous Women and Children First Peoples Worldwide* (29 January 2020) <https://www.colorado.edu/program/fpw/2020/01/29/violence-extractive-industry-man-camps-endangers-indigenous-women-and-children>.

66 Finn K, 'Recalibrating Risk Assessment for Indigenous Women' *Green Money Journal* (15 March 2020) <https://greenmoney.com/recalibrating-risk-assessment-for-indigenouswomen/>.

67 Martin K et al., *Violent Victimization Known to Law Enforcement in the Bakken Oil-Producing Region of Montana and North Dakota, 2006-2012* (RTI International, February 12, 2019) at 1 <https://www.ojp.gov/pdffiles1/bjs/grants/252619.pdf>.

recognise Indigenous forms of self-governance or don't offer special safeguards for Indigenous Peoples living there.68 Some nations do not recognise the presence of Indigenous Peoples in their constitutions or national laws, which eliminates any legal standing that might be used to defend Indigenous rights.[69] While some countries may recognize Indigenous customary laws, *"the interaction between systems frequently remains ad hoc and is strained by discriminatory attitudes."*[70]

This essentially implies that the goals and viewpoints of Indigenous populations are frequently ignored from the formal government planning and permitting processes.

8. CONCLUSION

In a world grappling with escalating environmental challenges, our comprehensive analysis has illuminated the multifaceted impact of carbon pricing mechanisms on business sustainability, transboundary pollution, and native rights. Throughout this research paper, we explored various themes, including eco-crimes and environmental justice, to provide a holistic understanding of the complex dynamics at play. As we draw our conclusions, it is evident that carbon pricing

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68 Miller-McFeeley B, 'To Create a Clean Energy Future, Mining Reform Must Be Front and Center' *Earthjustice* (28 June 2021) <https://earthjustice.org/from-the-experts/2021-june/to-create-a-clean-energy-future-mining-reform-mustbe-front-and-center>.

69 Corporations and the Rights of Indigenous Peoples: Advancing the Struggle for Protection, Recognition, and Redress at the Third UN Forum on Business and Human Rights Cultural Survival (March 2015) <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/corporations-and-rights-indigenouspeoples-advancing>.

70 United Nations General Assembly, *Report of the Special Rapporteur on the Rights of Indigenous Peoples* A/HRC/42/37 (2 August 2019) at 10.

stands as a pivotal tool in fostering sustainable corporate practices within the framework of a multilateral world order.

8.1 Fostering Sustainable Corporate Practices

The integration of market-based instruments and environmental regulations has been a defining aspect of our exploration. It is abundantly clear that carbon pricing incentivizes corporations to reduce their carbon footprint. As businesses are held accountable for their emissions, they are driven to adopt greener technologies, optimize resource use, and invest in cleaner energy sources. This not only benefits the environment but also contributes to their long-term economic viability. Sustainable corporate practices, driven by carbon pricing, have the potential to mitigate climate change's adverse effects while safeguarding the interests of future generations.

8.2 Internal Carbon Pricing in Addition to a Carbon Tax: The Need of the Hour

Through the detailed real world theoretical model discussed prior, the authors sought to develop a case where in the greenhouse gas emissions particularly carbon could be reduced while at the same time developing a model that would favor economic growth and minimize economic loss for the firms involved.

For this the authors narrowed down upon the reverse supply chain model. What becomes pertinent to understand that the reverse supply chain model is a dual pronged model which functions on two aspects or prongs.

Firstly, the imposition of a general carbon tax by the government or concerned environmental authority of a state. This is done in order to provide the initial incentive to shift towards environmentally sustainable practices and phase down their carbon dependency and output production.

Secondly the model focusses on the implementation of an internal carbon pricing mechanism that is to be implemented with the firms submitting their carbon reduction plans and models as to how they plan to go ahead with these reductions, the government or concerned environmental authority can then review these plans before providing clearances to such firms for the setting up of such facilities.

Thus, the solution to the carbon emission and problems lies at its heart in public private partnership, with the implementation of a reasonable carbon tax implemented in phases over a calculated period of time by the public sector in tandem with the implementation of internal carbon pricing mechanisms by the private sector. This theoretical approach is supported statistically by the evidences provided by the authors thus far. However there still lie hurdles to the implementation of such a process particularly bureaucratic redtapeism and profit driven firms setting up hard bargaining positions with regards to balancing the environment and economic growth and profits, only when we look past these differences can we truly see the light at the end of the tunnel.

8.3 Mitigating Transboundary Pollution

Transboundary pollution emerged as a critical issue under our

analysis. Carbon pricing's ability to transcend national borders and foster international cooperation is instrumental in addressing this challenge. By internalizing the external costs of pollution, carbon pricing mechanisms incentivize industries to adopt cleaner technologies and reduce emissions. This, in turn, mitigates the spillover effects of pollution on neighbouring countries, promoting global environmental stability. The reduction of transboundary pollution contributes to a more equitable and harmonious world order, where nations cooperate to safeguard shared ecosystems.

8.4 Upholding Native Rights and Environmental Justice

Our exploration of native rights and environmental justice has underscored the importance of inclusive policies. Indigenous populations, like the Inuit discussed earlier, often bear the disproportionate burden of environmental degradation. Carbon pricing must be implemented with careful consideration of these communities' rights and livelihoods. Through revenue-sharing mechanisms, targeted investments, and collaborative decision-making processes, carbon pricing can serve as a means to rectify historical injustices and empower indigenous communities to participate in sustainable development.

8.5 Eco-Crimes and Accountability

The concept of eco-crimes calls for a heightened focus on corporate accountability. Carbon pricing not only penalizes carbon emissions but also encourages transparency and accountability in business operations. It fosters a culture of responsibility, where

corporations are held accountable for their environmental impact. This, in turn, acts as a deterrent against ecological harm and promotes ethical corporate conduct.

8.6 Environmental Justice and Global Solidarity

In conclusion, the integration of market-based instruments and environmental regulations through carbon pricing offers a pathway toward a more sustainable, equitable, and just world order. It is not merely an economic tool but a moral imperative. By fostering sustainable corporate practices, mitigating transboundary pollution, upholding native rights, and combating eco-crimes, carbon pricing aligns with the principles of environmental justice and global solidarity.

To achieve these objectives on a multilateral scale, policymakers, businesses, and civil society must collaborate tirelessly. The journey toward a sustainable and harmonious world order demands concerted efforts, bold decisions, and unwavering commitment. Carbon pricing represents a beacon of hope, guiding us toward a future where businesses thrive, the environment flourishes, and native rights are respected—a future where the multifaceted dimensions of sustainability converge into a symphony of progress. It is our collective responsibility to seize this opportunity and shape a world where sustainable corporate practices are the norm, transboundary pollution is a relic of the past, and environmental justice prevails.