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EDITOR'S NOTE

The status of environmental protection, not just in India, but also the rest of the world has been in apparent flux over the last few years. Owing to a consistent clash between development on the one hand and the environment on the other, mankind seems to be taking an approach that is 'one step forward, yet two steps back' even in the rare instances where headway is made towards environmental protection. Often, the apparent victories for the environment are only piecemeal and evidently temporary fixes intended only to pacify those clamoring for reform, or relief.

Policy formulated by the government, both at the Centre and in the states, often bears evidence of dichotomy between environment and development. The proposed Thalassery-Mysuru railway line, which was to run through the ecologically sensitive forests in the Western Ghats, bears evidence to the same. The project was believed to have been shelved for two reasons. The first hiccup came in the form of denial of clearance for the Delhi Metro Rail Corporation to conduct a survey in the forest areas of Karnataka and Kerala by the Ministry of Environment, Forest and Climate Change.¹ Next, the Union Rail Minister Piyush Goyal went on record to state that the project had been shelved, post which no finances were allotted for the same.²

This apparent victory for the environment over development was rare, albeit very welcome by the resident-agitators of Kodagu. The Centre has however apparently yo-yoed on its stance with Union

¹ Centre agree to share 20% Funding for Thalassery-Mysuru Railway Line via South Kodagu, STAR OF MYSORE, (Jul. 5, 2018), http://www.railnews.in/centre-agree-to-share-20-funding-forthalassery-mysuru-railway-line-via-south-kodagu/, (last accessed Jul. 11, 2018).

² Prajwal Bhat, Victory for Kodagu Residents as Centre scraps railway line proposal, THE NEWS MINUTE, (Mar. 9, 2018), https://www.thenewsminute.com/article/victory-kodaguresidents-centre-scraps-railway-line-proposal-77674, (last accessed May. 16, 2018),

Minister of State for Tourism and Information Technology, K.J. Alphons has stated that the Centre will support the project and provide 20 percent of the investment cost.³ This follows representations by the Chief Minister of Kerala who has been actively pushing for the project.

Yet another instance of shortsightedness was the ban on plastic in Maharashtra. The ban was a significantly pro-environment measure owing to Mumbai's coastal nature with severe implications for marine pollution without a drastic reaction. Just eight days into the ban however, the Government issued a follow up notification easing the ban for retailers to assist with the creation of a mechanism for collecting and recycling plastic used in packaging.⁴ It also bought multi-layered tetra packaging under the ambit of the ban in the same swift motion, with employers being directed to move to recyclable packaging materials. The ban however was cited as having affected close to 3,00,000 jobs in the plastic industry. ⁵ Additionally, residents of Mumbai are facing difficulty with a shortage of appropriate alternatives.

Both of these telling illustrations reveal the state of Environmental affairs in the country: *first*, they reveal that in the contest between development and the environment, the policy-makers often put development first. *Second*, they reveal the evident non-application of mind when it comes to formulating policy, to ensure effective enforcement of policies to protect the environment. These illustrations reveal two extremes; on the one hand the pro-environment policy that

³ Supra note 1.

⁴ Express News Service, *Maharashtra Plastic ban: Notification eases norms*, INDIAN EXPRESS, (Jul. 3, 2018), https://indianexpress.com/article/cities/mumbai/maharashtra-plasticban-notification-eases-norms-5243320/, (last accessed Jul. 11, 2018).

⁵ How Maharashtra plastic ban has affected people, businesses in Mumbai, other cities: 5 points, FINANCIAL EXPRESS, (Apr. 4, 2018), https://www.financialexpress.com/industry/howmaharashtra-plastic-ban-has-affected-people-businesses-in-mumbai-other-cities-5points/1120872/, (last accessed Jul. 1, 2018).

was required was not delivered by the government. On the other hand, where the pro-environment approach was adopted, it was done with absolute disregard for practical concerns. Although one may argue that the plastic ban was in fact the need of the hour, one cannot deny in the same breath that the implementation of such policy could have been better.

While recognizing that this is a concern that is not only limited to India, the articles and essays curated in this Volume of ELPR explore these themes in various contexts, often, in an attempt to arrive at solutions to these problems. In doing so, this Volume effectively represents the values of the journal, in terms of ensuring the publication of contemporary pieces relevant not only to India, but also to the world around us. On this note, it gives us great pleasure to introduce the selection of Articles for the 6th Volume of ELPR.

In the first piece, 'The Supreme Court of India on Development and Environment from 2001 to 2017' Dr. Armin Rosencranz and Mukta Batra dwell on the conflict between development and the environment before the Supreme Court of India. The authors examine the attitude of the Apex Court towards cases of environmental significance in the 21st century, while also searching for an apparent trend adopted by the Court whether veering towards either a pro-environment or a prodevelopment point of view. The study reveals no apparent trend, and the authors thereafter propose solutions for the same, to secure India's environmental future.

Next Dr. Arindam Basu in 'Adjudicating Sustainable Development: A Theoretical Insight' argues that the concept of sustainable development has guided the Supreme Court of India's adjudication of individual rights. The paper examines the pattern of adjudication, by reviewing some of the landmark environmental law judgments given by the Supreme Court, in order to locate sustainable development in a rights-based regime.

The focus then shifts to environmental policy ideals and homegrown instances of departure from these ideals. In 'A critical examination of the State of Environmental Governance under Prime Minister Narendra Modi', Leo Saldanha warns that the Environment has taken the figurative backseat on the incumbent governments priorities. The paper argues that the BJP-led government has used the obfuscation of logic (in a field where science and rational thought are considered imperative), to dilute the expectations and role of the government in ensuring environmental security of the nation.

We then move to the international front, wherein the trend of environmental flux remains pertinent. This volume of the journal explores the most contemporary manifestation of this trend: Brexit through a paper authored by Dr. Paul Stookes titled '*Brexit and Implications for Environmental Law*.' In the article, Dr. Stookes argues that the status of environmental regulation in the UK has raised international concern, since the UK was dependent on the EU's laws on environmental protection to a large extent. The article contends that the implications of Brexit will be far reaching, with implications extending beyond socio-environmental problems in the least. The article considers these implications and discusses alternatives to EU law, in the context of abiding with international norms for environmental protection.

In '2017 Eritrean Environmental Legislation: Issues and Implementation Challenges', Senai Andemariam analyses the Eritrean environmental legislations on environmental protection and management, promulgated in 2017 from the view-point of substantive adequacy and challenges of

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implementation. He then goes on to enumerate certain recommendations to overcome such challenges.

Dr. Theodore Okonkwo in his piece titled, 'The Timeliness of the Law of Transboundary Aquifers' examines the phenomenon of transboundary aquifers, particularly, their position in International Law. The paper contains an enriching discussion on the various definitions attributed to transboundary aquifers by both bilateral and multilateral legal instruments. The paper argues that an effective law governing transboundary aquifers would go a long way in preventing conflicts between nations.

Thereafter, the focus shifts to the requirement for cutting edge technology in ensuring effective environmental governance and security. In 'Low Cost Air Quality Monitoring Systems: The Need of the Hour for India's Worsening Air Quality', Keith Varghese and Shyama Kuriakose seek to highlight the importance of AQM and data dissemination in India, touching upon the adequacy of the current number of AQM stations. The central argument of the paper however revolves around the change in technology of AQM over a period of time and its efficiency, with a need to re-evaluate such monitoring mechanisms, given the rise in air pollution and worsening air quality.

In 'Wildlife Trafficking Crimes- Issues with Enforcement', Anushree Malaviya seeks to initially identify the magnitude of the illicit trade in wildlife, with emphasis on its transnational character. Owing to such character, she argues that a strong enforcement mechanism (in terms of both hard and soft law) is imperative. Thereafter, she reviews the legislative and judicial developments in India and delineates loopholes and proposes solutions to address the shortcomings, with a view to developing a robust enforcement machinery.

Volume VI of ELPR is dedicated to Justice (Retd.) Christopher Weeramantry, former Vice-President of the International Court of Justice, who until his unfortunate passing last year was an integral member of our advisory board. We would like to express our gratitude to the Chief Patron and the Advisory Board of the journal for their continuous support towards the publication of this volume. We must mention the addition of new members of the Advisory Board in Prof. Roy Smith Lee, Moulika Arabhi and Nawneet Vibhaw. We would fail in our duties if we did not acknowledge the contributions of Dr. Venkata Iyer, Prof. N. Vasanthi, Prof. Sidharth Chauhan, Prof. Vivek Mukherjee, Dipankar Das, Devarshi Mukhopadhyay, Pranav Verma, Rahul Mohanty, Enakshi Jha, Shantanu Dey and Rakshanda Deka without whom the publication of this Volume would not have been possible.

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THE SUPREME COURT OF INDIA ON DEVELOPMENT AND ENVIRONMENT FROM 2001 TO 2017

Armin Rosencranz^{*} and Mukta Batra^{**}

ABSTRACT

The Supreme Court of India has been progressive in declaring that the right to a clean and healthy environment is a subset of the constitutional right to life. But in several cases where the Court has had to choose between environment and development, those cases can be identified as either pro-environment or pro-development, based on decision or dictum. There are no apparent trends that evolve either from the decisions of the Court itself or the underlying factors that motivate its decisions.

Over the first 17 years of this century, the Court's membership has changed many times, offering few opportunities for consistency or precedent. Additionally, a catena of cases illustrates judicial overreach. The Supreme Court has used continuing mandamus to retain jurisdiction over an issue that would otherwise remain in the domain of the legislature or executive.

Longer tenures of Supreme Court Justices, clearer articulation about why previous cases are distinguished or applied, and the

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abandonment of continuing mandamus, would result in greater clarity in the Supreme Court's jurisprudence on environmental law.

1. INTRODUCTION

India has been one of the first countries to recognize the environmental right to life¹ In 1991, the Supreme Court of India (the Court) held that the right to a pollution free environment is a fundamental right under Article 21 of the Constitution of India.² Since then, decisions of the Court have crystallized the principle that environmental degradation is a violation of the right to life and must be avoided 'at any cost'.³ The Supreme Court of India has therefore been instrumental in shaping India's environmental policies.

On one hand, the Supreme Court has been criticized for judicial activism when it has laid down environmental guidelines. On the other, activists criticize the courts alleged pro-development bias where large sums are involved.⁴Additionally, some critics contend that pro-environment rulings are the result of high publicity. We observe some judicial activism but find no definitive link between outcome and financial interest or public outcry.

In this article, we analyze reported and reportable judgments of the Supreme Court of India between 2001 and mid-2017 to unearth decisional trends. Almost all the cases mention the right to life, and most mention Article 21 explicitly in the judgment. The Court tends to defer to the appropriate government agency about

¹ Pollution Control Board II v. Prof M.V. Nayudu (Retd) & Ors, (2001) 2 SCC 62.

² Subash Kumar v. State of Bihar & Ors, (1991) 1 SCC 598.

³ MC Mehta v. Union of India (Aravalli mining case), (2008) 8 SCR 828.

⁴ Intellectuals Forum, Tirupathi v. State of AP & Ors, (2006) 3 SCC 549.

environmental impact, facts and scientific analysis. However, there is no clear pattern that suggests that publicity or financial stakes in a case influence a pro-environment or pro-development ruling.

This article is divided into five parts. After the introduction (Part I), we discuss, in Part II, cases where the Court has taken a largely pro-environment stance. In Part III, we discuss Supreme Court cases where the ruling or reasoning would be likely to promote development goals as put forth by the Government of India. Some decisions discussed in Parts II and III are seemingly balanced, or seemingly lean in favor of one interest; however, the reasoning adopted by the court is likely to support the opposing interest with different facts. In Part IV we discuss themes and issues/ trends such as judicial overreach and inconsistency which are visible from the decisions discussed in Parts II and III. The inconsistency is likely because Justices typically serve short tenures at the Supreme Court, and decisions of the Court rarely discuss distinguishing factors.

In Part V we conclude that the Court tends to defer to government decisions, and there is no clear nexus between financial stakes or publicity and the outcome of the case. However, where developmental interests are on the losing side of a case, despite the large sums already spent, the commercial burden borne by private industrial concerns is often accompanied with publicity and public outcry.

2. PRO-ENVIRONMENT CASES OF THE SUPREME COURT

The Court's pro-environment cases have a strong proenvironment leaning,but may be criticized for delays and incomplete action. The cases discussed below exhibit the Court's environmental outlook and some limitations. While many of the pro-environment cases did receive wide coverage, several cases with a pro-environment outlook were hardly publicized. However, even publicized proenvironment cases have dicta that support a pro-development stance.

T. N. Godavarman Thirumulpad v. *Union of India* (1995) arose from a writ petition filed to protect the Nilgiri forest from deforestation caused by illegal timber operations. ⁵ The Court created its own monitoring and implementation system at regional and state levels to regulate the felling, use and movement of timber across the country, to preserve India's forest cover.

In *Godavarman*⁶ and subsequent cases⁷, the Supreme Court has upheld the prohibition under Section 2 of the Forest Conservation Act, 1980, which prohibits the State Government and other authorities from allowing non-forest use without the prior approval of the Central Government. However, the case is still ongoing, under the Court's formula of "continuing mandamus."⁸ Over the last 20 years, the *Godavarman* case has caused enormous unemployment and

⁵ T. N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267.

⁶ Id.

⁷ Nature Lovers Movement v. State Of Kerala & Ors, (2009) 5 SCC 373; Balakrishnan Nambiar v. State of Karnataka (2011) 5 SCC 353.

⁸ Armin Rosencranz & Sharachchandra Lélé, *Supreme Court and India's Forests*, 43 ECONOMIC & POLITICAL WEEKLY 5, 11-14 (2008).

economic loss in Northeast India, where one of the primary avenues of employment is the wood products industry.⁹

In *MC Mehta* (Aravalli Mining),¹⁰ the Court restricted a significant amount of mining activities due to irreparable environmental damage to forest area and committed to protect the environment "at any cost" if remaining mines endangered the environment.¹¹ The Court looked at the larger site instead of focusing on a per-lease impact for a holistic analysis. The Court declared that mining activity can be permitted only on compliance¹² with stringent conditions and if the operation is environmentally sustainable. The subjectivity of these terms gives the concerned agency wide latitude in permitting or prohibiting mining activities.

Similarly, when faced with pollution caused by dyeing and bleaching works along the Noyyal River, the Supreme Court upheld the closure of select polluting units and allowed the remaining units three months to set up common effluent treatment plants.¹³ The treatment plants and preventive measures were an appreciable expense, estimated at 23 Crores; preventive measures were likely to cost 2 Crores. The court indicated that it would consider closure of the other units to avoid the 'point of no return' if they did not comply.¹⁴

⁹ Tiplut Nongbri, *Timber Ban in North-East India: Effects on Livelihood and Gender*, 36 ECONOMIC & POLITICAL WEEKLY 21, 1893, 1893-1900 (2001).

¹⁰ MC Mehta v. Union of India, supra note 3.

¹¹ *Id.* at ¶6.

¹² *Id.* at ¶37.

¹³ Tirupur Dyeing Factory Owner's Association v. Noyyal River Ayacutdar Protection Association & Ors, (2009) 9 SCC 737.

¹⁴ Id.

In the case of iron-ore mines in Karnataka, the Supreme Court had to consider two related and connected issues.¹⁵ First, whether the 4.5% contribution to the District Mineral Foundation (DMF) for infrastructure, social welfare, drinking water and watershed development was valid. Second, whether the Monitoring Committee could collect a contribution of 10% from sale proceeds for the Comprehensive Environmental Plan for the Mining Impact Zone (CEPMIZ), which would be overseen by a Special Purpose Vehicle. The Court invalidated the 4.5% royalty payable to the DMF and reserved judgment on the CEPMIZ, obligating the State of Karnataka and CEC to submit a detailed proposal about implementation of priority works.¹⁶ The Court, based on the Plan recommendations, prioritized pollution-prevention through infrastructure development, particularly railway sidings and the use of conveyor belts. The Court did not extensively discuss remediation and restoration of mined areas and stated that liability and sources of fixed funds would be after receiving a comprehensive implementation report that the SPV and CEC were directed to prepare.17

¹⁵ Samaj Parivartana Samudaya & Ors v. State of Karnataka & Ors,, (2017) 5 SCC 434.

 ¹⁶ The CEPMIZ was prepared by the State of Karnataka pursuant to an order of the Supreme Court. Pursuant to another order of the Supreme Court, Karnataka set up the Karnataka Mining Environment Restoration Corporation (KMERC), a Special purpose vehicle to implement the CEPMIZ.
 ¹⁷ Id. at ¶2.

Id. at ¶2. Also note that the Court has indicated three cost figures- the 10-year implementation costs of about 15,000 Crores, the SPV proposes to spend about 11,800 Crores and faces a shortfall of about 1,500 Crores, which would be made up by cost savings and reduction in project costs. (¶¶ 16-17) The court does not discuss the deficit between the proposed cost and the projected spending.

In Balakrishnan Nambiar v State of Karnataka (2011)¹⁸ the Court had to decide whether a plantation in the forest area, validly authorized by the State Government under the then existing law, could be renewed. Dense forest vegetation surrounded the plantation. The Court held that the State Government could not grant leases, unless the Central Government had de-notified the forest or granted prior approval for non-forest use. While this made non-forest use more cumbersome, it was still possible with Central Government approval.

The Court also directed all non-forest use in all States to cease forthwith to prevent tenants from lingering, and the forest department to take control over the land. However, there was no mention of whether the existing plantation crops were to be left untouched or replaced with foliage similar to the surrounding area. As the lessee was a valid occupant, there was no question of penalty or compensation under the statute. Such dicta could have proved to be valuable when liability for reforestation was at issue, particularly if the court had developed guidelines for reforestation, or created a test for what entity or authority is liable.

In Chongule \mathfrak{Co} Co. Ltd. v Goa Foundation¹⁹ the Court rejected the appellant's proposal to create an alternate forest to continue operation of their iron-processing and export operation on forest land. The Court, while denying the mining lease, observed that afforestation and reforestation schemes were archaic, and rarely

¹⁸ Balakrishnan Nambiar, *supra* note 7.

¹⁹ A. Chowgule & Co. Ltd. v. Goa Foundation & Ors, (2008) 12 SCC 646.

replaced lost ecosystem services. While observing that ecosystem services are not properly provided by such a scheme, the Court relied on the failure of past reforestation and afforestation schemes to deny the mining activity. It could be argued that the Supreme Court incorrectly forecasted the miners' future actions on the basis of extraneous considerations. The Court usually defers to the appropriate agency and arguably ought to have deferred in this case too.

In the case of Orissa Mining Corporation Ltd. v Ministry of Environment and Forests²⁰, the Supreme Court recognized the right of the Gram Sabhas, local village councils, to decide on mining grants. Here, Vedanta Resources Plc proposed to develop a bauxite mine in Niyamgiri Hills, Orissa.

There were widespread protests, as the land was sacred to the many Scheduled Tribes who lived in the area. The protests were widely covered nationally and abroad. *The Guardian* reported that the mining activity had to be stopped because of the widespread protests in the region.²¹

An opposition to the grant was filed in 2004, on grounds of displacement of the Scheduled Tribes, who are isolated from mainstream society and are unaware of their rights. The Central Empowered Committee, which was set up on the direction of the

²⁰ Orissa Mining Corporation Ltd. v. Ministry of Environment and Forest and Ors, ('Vedanta'), (2013) (6) SCC 476.

²¹ Kumkum Dasgupta, Vedanta's India mining scheme thwarted by local objections, THE GUARDIAN (Aug 21, 2013), https://www.theguardian.com/global-development/poverty-matters/2013/aug/21/india-dongria-kondh-vedanta-resources-mining, (Last accessed: Jul 17, 2017).

Supreme Court, filed a report in 2005 that highlighted potential environmental harm and recommended the closure of the attached refinery. In 2007, the Court banned Vedanta and its subsidiary Sterlite from taking on the project. However, Vedanta was given the opportunity to submit a modified proposal to the Court for consideration, so long as certain safeguards were met. Vedanta's modified proposal had to re-invest 5% of gross profits into the local community and be filed with a report about the projects impacts and the potential for local employment. Further, the venture had to be structured as a special purpose company in which both Vedanta and the State of Orissa held equity. In 2008, the project was approved by the Court, and in 2013, the Court invoked the Forest Rights Act and directed referendum. In August 2013, 12 Gram Sabhas conducted India's first environmental referendum, unanimously prohibiting the mining of bauxite in the Niyamgiri Hills. In January 2014, the Ministry of Environment and Forests (MoEF) decided to disallow the mining project.

The 2008 and 2013 decisions of the Court are markedly different. The first is largely pro-development, whereas the second is pro-environment and has acknowledged the right of the local people to shape their environment. Between the two decisions, the Court's composition changed drastically, and no member served on the bench of both decisions. The later bench disregarded the earlier court's ruling.

It is perhaps due to the isolation of the tribes and the sacredness of the hills, and the wide media coverage, that the Court enforced the provision of the Forest Rights Act, 2006, enabling the Gram Sabhas to decide on mining licenses via a referendum. Subsequently, the Supreme Court dismissed the Orissa Mining Company's petition challenging the referendum that prohibited Bauxite mining in the region. The court refused to hear the petition and directed the company to approach the Gram Sabhas directly.²²

In the case of the *Intellectuals Forum, Thirupathi* (2006)²³ the Court upheld a ban on the construction of tanks and new wells in an area suffering water shortage. However, the Court admonished and refuted the argument of activists that the Court has a prodevelopment or industry bias, particularly where large sums are involved. The Court directed the adoption of rainwater harvesting and monitoring its efficacy. This case has been cited subsequently to support a narrow view of the public trust doctrine.²⁴

3. PRO-DEVELOPMENT CASES OF THE SUPREME COURT

In *KLADB v. Kenchappa*²⁵, the outcome is seemingly proenvironment, as the court prohibited the operation of a research development facility in grazing lands of the Green Belt area. However, with modified operative facts the Court seems likely to support a pro-developmental ruling.

S. 47 of the Karnataka Industrial Areas Development Act (KIADB Act) has a *non-obstante* clause that overrides environmental

²² Financial Times, Mining in tribal Niyamgiri: SC rejects petition against local refusal consensus http://www.financialexpress.com/economy/niyamgiri-sc-rejects-petition-against-localrefusal-consensus/250110/ (last accessed Jan 8, 2018).

²³ Intellectuals Forum, *supra* note 4.

²⁴ Susetha v. Tamil Nadu, AIR 2006 SC 2893.

²⁵ KIADB v. Kenchappa, 2006 (6) SCC 371.

concerns to validate an allotment of land for an industrial project. Here, the KIADB agreed to allot land in the Green Belt, where industrial activity was prohibited. The allotment letter, however, made the grant of environmental clearance a precondition to allotment. The Court examined Section 47 and expressed concern about its overbreadth. However, it did not go into the validity of the

allotment. The Court examined Section 47 and expressed concern about its overbreadth. However, it did not go into the validity of the section, or whether environmental clearance was mandatory for industrial activities in green belt areas. This is because the allotment letter made environmental clearance a precondition to allotment – which was reason enough to deny the facility the right to operate. In the absence of the allotment precondition, it is likely that the Court would decide otherwise based on the dicta, which discussed developmental issues such as employment, growth of IT, reduced brain drain and the access to state-of-the-art disposal techniques.

In some cases, the Court has avoided the question on the grounds of *forum non-conveniens* or deference to the government or the appropriate agency. For example, the Court dismissed a petition pertaining to an interstate water dispute as it was pending before a constitutional tribunal.²⁶ In other cases, the Court has read in extraneous conditions to justify its judgment.²⁷

²⁶ Atma Linga Reddy & Ors v Union of India & Ors, (2008) 7 SCC 788. While this decision may be interpreted as an avoidance tactic, it is more likely to be a balanced one since the Constitution of India itself creates special Tribunals to hear interstate water disputes. Here, as the interstate water dispute was already pending, and the Supreme Court was asked to decide on the distribution of water, not the environmental impact of the project, this decision is consistent with the constitutional jurisdiction and avoids duplicity.

²⁷ Chowgule, *supra* n. 9.

In Essar Oil Ltd. v Halar Utkarsh Samiti rightarrow Ors.,²⁸ the Court had to decide whether a crude oil pipeline could run through a marine national park and sanctuary. The Court had to discuss whether the destruction of habitat by the project amounted to removal of wildlife, which is prohibited, subject to a few exceptions. The case was remanded for facts, but the Court observed that habitat destruction is prohibited as it results in the removal of wildlife. Further, the Court acknowledged the State's authority to allow removal and destruction of wildlife for its betterment, without proving actual betterment. This dictum would allow the destruction of wildlife for development concerns. However, the Court cautioned against indiscriminate grant of permits and said it would defer to the opinion of the State Government with regard to whether all precautions had been taken to ensure 'transient and minimal' environmental impact before granting a permit.

In some cases, the Court has applied the principle of proportionality, and favored industrial concerns. The French ship *Clemenceau* was denied permission for dismantling and was sent back to France after public outcry and wide media coverage. Subsequently, an action was brought against the dismantling of the ship *Blue Lady* in Gujarat.²⁹ The Court observed that dismantling the *Blue Lady* would create several jobs and salvage 41000 Metric Tons of steel.

The Court reasoned that the steel salvaged from ship breaking would reduce mining and reduce environmental impact if

²⁸ Essar Oil ltd v. Halar Utkarsh Samiti & Ors, (2004) 2 S.C.C. 392.

²⁹ Research Foundation for Science Technology and Natural Resource Policy v. UOI & Ors, (2007) 9 SCR 906.

properly monitored and implemented. The monitoring was left to the discretion of the appropriate authority. The Court, however, did not address the ethical issue that the pollution due to shipbreaking would largely be confined locally to Gujarat, whereas the benefits due to avoided mining would be felt elsewhere.

The same organization filed another case on the standards for disposal of hazardous waste consignments. Here, the Court held that the more stringent Indian standards would apply as opposed to the less stringent Basel Convention.³⁰ These cases, which involved impending import of pollutants, were decided quite promptly.

In contrast, the final decision of *Indian Council for Enviro-Legal Action v Union of India* (H-Acid case)³¹that dealt with the release of the toxic H-acid gas, took several years to decide and to implement. The Court's final judgment, which held against the polluters, could not be implemented for 16 years because the judgment debtors repeatedly sued the petitioners for contempt. The Court dismissed the contempt petitions and relied on agency estimates of remedial expenses, although the same agency (NEERI) had given two varied estimates in different reports on the same day. The Court accepted the NEERI reports as valid and asked the Central Government to calculate the cost of remedial measures.³²

³⁰ Research Foundation for Science Technology and Natural Resources Policy v. UOI & Ors, (2007) 15 SCC 193.

³¹ Indian Council for Enviro-Legal Action v. Union of India & Ors, (2011) 8 SCC 161.

³² The paradoxical practice of accepting reports or studies as valid, and then asking for additional studies is seen in a few of the cases here. At times, the additional study is for fact-finding, or for additional input on a narrower question, but often the scope or questions are ones discussed in the existing report, that the court has accepted as valid.

The Court has recognized that zoning and town planning is an important facet of sustainable development which forms a subset of the right to a pollution-free environment.³³ However, the Court has refused to demolish pre-existing constructions by *Galf Goans* when their legality under zoning laws and adverse environmental impact was challenged.³⁴ The Court has held that the right to a clean environment is not a subjective right and is limited to violations of Section 3 of the Environment Protection Act, 1986. This holding reduces the action ability of environmental claims that do not directly fall within the scope of the Act.

Similarly, the Court held that a mere violation of statutory effluent standards is not actionable. The petitioner has the burden to prove that the statutory violation results in actual degradation and thereby causes damage to the victims.³⁵ This creates an undue burden on the petitioner and defeats the Water Act, which relates to ensuring pollution-free water and water bodies in the country.³⁶

In *Jal Mahal Resorts*,³⁷ the Court had to decide whether a lease included a wetland and the validity of environmental clearances to divert drains to purify an artificial pond. The Court overturned the Rajasthan High Court's direction to dismantle a project diverting two drains undertaken to purify an artificial water body, even though

³³ Milk Producers Association, Orissa & Ors v. State of Orissa & Ors, (2006) 3 SCC 229.

³⁴ Gulf Goans Hotel Company Limited and Anr v. UOI, 2014 (10) SCC 673.

³⁵ See Deepak Nitrite Ltd v State of Gujrat & Ors, (2004) 6 SCC 402. This observation was partly overturned in Research Foundation Supra n. 28, where the court restricted this decision to Deepak Nitrite where no damage was proved, but stated that (i) the absence of damage will not prevent action for violation of effluent standards and (ii) the precedent is not relevant for the discussion of Research foundation.

³⁶ Pollution Control Board II v. Prof MV Nayadu (Retd) & Ors, (2001) (2) SCC 62.

³⁷ Jal Mahal Resorts v. KP Sharma & Ors, (2014) 8 SCC 804.

environmental impact assessment was not carried out in the sensitive area. The Court was faced with other considerations regarding the salinization of the wetland area. The Court held that part of the lake was to be re-conveyed to the State Government and that the leased area included a "buffer area" that abutted the wetland. The Court upheld the diversion of drains but prohibited construction on the buffer zone. The Court did not terminate the lease forthwith, perhaps because the lake was a popular tourist destination and resorts had invested heavily in its development. Instead, the Court cut the lease short from 99 to 30 years and declared that the lessee would be compensated for termination.

The Court has dispensed with the Environmental Impact Assessment³⁸ or public hearing requirements in several cases. Once a concern is established, the Court seems to favor its operation rather than closure. The Court has held that the absence of a public hearing of environmental impact is not sufficient grounds for plant closure, and a post decisional hearing is sufficient to achieve justice.³⁹ However, the Court did not discuss whether a post decisional hearing was a mere formality, and what would happen if the post decisional hearing would favor closure.

In *Re: Construction of Park at Noida* v *Union of India*⁴⁰, a project undertaken by the Uttar Pradesh Government, which would result in large scale deforestation, was challenged on grounds of non-

³⁸ Id.

³⁹ In Re: M/s Electrothem (India) Ltd. v Patel Vipulkumar Ramjibhai & Ors, SLP No.. 16860/2012.

⁴⁰ TN Godavarman v. Union of India, AIR 1997 SC 1228; In Re: Construction of Park at Noida v. Union of India (2011) 1 SCC 744.

compliance with the Act. The Okhla Bird Sanctuary lay adjacent to the proposed park, and its delicate ecological balance would be affected by the park. However, the Court allowed the park's construction, holding that it could resume on the condition that the proposed park would not exceed 25% of the total area. Whether the NOIDA park was necessary at all is itself contentious. Further, The Court allowed resuming of the park's construction on the mere technicality of the meaning of the word 'forest'. This narrow interpretation of 'forest' excluded areas where trees were purposefully planted, even if they hosted several migratory birds and provided ecosystem services just as natural forests. This designation of the vegetation as an "urban tree park" allowed the State Government to proceed without Central Government clearance and could have repercussions for generations to come. This interpretation will have far-reaching implications that may stretch to allow the clearing of artificially restored forests to reverse degradation due to mining.

Mining activities in the Kudremukh National Park, an internationally recognized biodiversity conservation hotspot, was at issue in *K.M. Chinnappa & Anr* v *Union of India & Ors.*⁴¹ The Court emphasized the importance and role of Environmental Law and Environmental Impact Assessment as instruments of environment protection, but upheld the Forest Advisory Committee's decision to permit mining for up to four years. It deemed this duration "acceptable". The decision is likely pro-development because the miners were given four years to wind up, and thus could make

⁴¹ K.M. Chinnappa & Anr v. Union of India & Ors, 2002 (10) SCC 606.

reasonable efforts to recover their investment instead of immediate stoppage. In contrast, the ban after four years, if implemented on time, is likely to have a better outcome than other pro-environment cases such as *Indian Council for Enviro Legal Action*, where 16 years elapsed between the final judgment and the direction to fix the cost of remediation.

Later, in *Goan Real Estate* v Union of India⁴², the petitioner was the owner of land near the Zuari River in Goa and had submitted plans for the construction of a hotel and residential complex. The Central Government relaxed the "No Development Zone" from 100 meters to 50 meters. Subsequently, the Supreme Court in Indian *Council for Enviro - Legal Action* v Union of India⁴³ held that this relaxation was illegal. This led to the issue of whether the petitioners' constructions, which had taken advantage of the relaxation, were valid. The Court held that the judgment had not specifically directed the demolition of existing structures, was not retroactive in operation and hence could not affect past transactions and that it could not be read as a statute.

In *G Sundarrajan* v. Union of India,⁴⁴ the Supreme Court approved the establishment of a nuclear power plant in Kudankulam by the Government once a checklist of conditions was fulfilled and appropriate approvals granted. Justifying its stand, the Court held that policy makers consider nuclear energy critical to sustaining India's economic growth. Project proponents had fulfilled all

⁴² Goan Real Estate v. Union of India, (2010) 5 SCC 388.

⁴³ Indian Council for Enviro- Legal Action v. Union of India, 1996 (3) SCC 212.

⁴⁴ G Sundarrajan v. Union of India, (2013) 6 SCC 620.

necessary safety requirements and followed a code of practices based on nationally and internationally recognized safety methods. The Court laid down 15 guidelines for the entities such as the MoEF, State of Tamil Nadu, and the Tamil Nadu Pollution Control Board to follow. This case seems to usurp executive branch functions, as discussed in Part IV.

The Court observed that the quality of equipment from a particular source (vendor) was suspect and, in effect, decided the suitable vendors for the project.⁴⁵ The Court adopted a utilitarian ratio, where the public policy was articulated as the maximum good for the maximum number of people. In a subsequent judgment on Interlocutory Applications, the Court held that there was no need to give further directions or to form a committee because the respondents were taking steps towards compliance.⁴⁶

Overturning a Rajasthan High Court pro-environment ruling, the Supreme Court in *Vardha Enterprises Pvt. Ltd.* v. *Rajendra Kumar Razdan* (2015)⁴⁷ held that wetland categories must be identified after elaborate enquiry by the Government. The area in which the construction was being undertaken had not yet been legally notified as a wetland. In the absence of a legal embargo, the applicant's right to construct could not be frustrated in anticipation of some likely embargo in the future. Mere land ownership vested in the applicant the legal right to construct.

⁴⁵ G. Sundarrajan v. UoI, (2014) 6 SCC 776.

⁴⁶ *Id.*

⁴⁷ Vardha Enterprises Pvt. Ltd. v. Rajendra Kumar Razdan, (2015) 15 SCC 352.

Interestingly, the Supreme Court has used a restrictive interpretation of the public trust doctrine in one case. In Susetha v Tamil Nadu (2006),48 the Court had to decide whether proposed construction over a disused artificial temple pond was valid. The temple pond was unused for several years and was proposed as a rehabilitation site for those displaced by a highway construction project. The Court observed that it is important to restore disused natural wetlands and water bodies, but that there is no duty to restore disused artificial water tanks. The Court exercised and laid down a high level of judicial scrutiny in distinguishing the government's obligation for public good from the more burdensome obligation as trustee of certain public resources. While the Supreme Court has prohibited alienation on ground of public trust, the public trust doctrine in India does not conclusively prohibit alienation of public trust lands. However, the Court did not explicitly limit the alienation of public trust lands for public use alone. This dictum could be used to justify alienation and changed use of public trust land.

4. THEMES AND ISSUES/ TRENDS

There seem to be no clear trends in the Supreme Court's environmental jurisprudence. However, we observe judicial overreach and inconsistency in decision making, both of which are discussed below.

⁴⁸ Susetha v. Tamil Nadu, AIR 2006 SC 2893.

A. Judicial Overreach

Judicialization of politics is a global trend, and functions which were once solely the domain of the government machinery began to be usurped by courts.⁴⁹ This leads to a breach of separation of powers. The basic structure of the Constitution of India includes a form of separation of powers⁵⁰ and limits the jurisdiction of Indian Courts over policy questions.

Justice, and later Chief Justice P. N. Bhagwati, who first recognised the concept of Public Interest Litigations in India, sparked a trend of judicial activism. The Supreme Court has extended the scope of fundamental rights and other law, and often created guidelines for administrative and legislative action through its activism. This trend, while common in environmental cases, also extends to issues such as intelligence, when the Supreme Court examined the inner workings of the Central Bureau of Investigation.⁵¹

The Supreme Court has often been proactive in environmental issues. It has: adopted the international principles of sustainable development,⁵² polluter pays, precaution, public trust,⁵³ and intergenerational equity; and included by an expansive interpretation a fundamental right to a clean environment and water.⁵⁴ The Court has created compensation schemes,⁵⁵ addressed

⁴⁹ LESLEY K MCALLISTER, MAKING LAW MATTER: ENVIRONMENTAL PROTECTION AND LEGAL INSTITUTIONS IN BRAZIL 174 (STANFORD LAW BOOKS 2008)

⁵⁰ State of Bihar v. Bal Mukund Sah, (2000) 4 SCC 640.

⁵¹ Vineet Narain v. Union of India, AIR 1998 SC 889.

⁵² Vellore Citizens Forum v. Union of India, AIR 1996 SC 2715.

⁵³ M.C. Mehta v. Kamal Nath, (1997) 1 SCC 388.

⁵⁴ Narmada Bachao Andolan v. Union of India and Ors, (2005) 4 SCC 32.

⁵⁵ M.C. Mehta v. Union of India, AIR 1987 SC 965.

unemployment,⁵⁶ discussed how environmental funds are to be spent,⁵⁷ and even interfered with zoning: an activity under the purview of the Town Planning Agency and/or the City Corporation.⁵⁸ The Court has effectively micro-managed forests by fixing timber prices and deciding the manner for disbursing remediation funds. The Court's directions have led to the creation of the Central Empowered Committee and the National Green Tribunal to implement environmental rights and resolve environmental cases respectively. In *Chongule*,⁵⁹ the Court considered extraneous conditions (actions of other entities that had managed reforestation activities in the past) and possible future actions of the petitioner to make a policy judgment banning reforestation and afforestation projects.

The perpetual oversight through continuing mandamus violates separation of powers. It is a tool to ensure implementation and compliance that would otherwise be unlikely after the Court issued its final judgment.⁶⁰ Without the continuing mandamus, courts would have relinquished control and the decision would likely be unimplemented. Continuing mandamus impedes resolution of the issue, and even where courts retain control through mandamus, orders are seldom implemented.⁶¹

⁵⁶ Research Foundation, *supra* note 29.

⁵⁷ Samaj Parivartan Samudaya, *supra* note 19, upholding the need for railway sidings to be a priority.

⁵⁸ Milk Producers Association, *supra* note 32.

⁵⁹ *Supra* note 22.

⁶⁰ Supra note 6.

⁶¹ Id.

The Court has often set guidelines and closely monitored executive action. In *Sundarrajan* I & II⁶² the Court laid down guidelines and monitored the vendor supply chain closely. Although the Court deferred the grant of clearance to the appropriate authority, it looked into policy considerations and declared the state's policy to be utilitarian. It then went on to state that there must be strict safeguards for the life of the affected population, as their safety was a part of the right to life. The Court monitored the development of the project closely, and found no need for additional intervention when it appeared that parties were taking steps to comply.⁶³

The Court does not defer only when it is established that the government was negligent, or varied from its standard procedure. Although, in *Sundarrajan*, the Court interpreted policy, it finally deferred to the government action. Policy questions would arise only if the government action was suspect, and the statute was unclear or suggested mischief.

B. Rules of Precedent and consistency:

"Consistency is the cornerstone of the administration of justice; [in its absence] there will be chaos in the administration of justice³⁶⁴

Although the Supreme Court is not bound by its own precedent, a rule has emerged that a Division Bench cannot overrule or comment on a decision taken by a coordinate bench.⁶⁵The decision of a larger Division Bench binds a smaller one, but where

⁶² *Supra* note 45 at 46.

⁶³ *Supra* note 46.

⁶⁴ State of Andhra Pradesh v. AP Jaiswal, AIR 2001 SC 499.

⁶⁵ Sub-Committee of Judicial Accountability v. Union of India, (1992) 3 SCC 97.

the smaller Bench finds such decision to be grossly incorrect, it may refer the matter to a larger Division Bench to reconsider.

When the Supreme Court departs from a widely cited precedent, distinguishing factors are seldom discussed and the basis for distinction is unclear. This also impacts the precedential value of the case.Several pro-development cases were decided on technicalities instead of impact. Many of the pro-development cases were decided in favor of governmental organizations.

Often, in pro-environment rulings, the Court ordered the closure of an industry, and the resultant loss impacted private industries, not government undertakings. Even companies with deep pockets, such as Vedanta Plc, were prevented from undertaking developmental activities even if the result would indirectly deprive the government of a source of revenue, e.g. royalty.

A review of the pro-development cases shows a common style. The Court emphasizes the importance of Environmental Law, discusses environmental jurisprudence, at times at greater length than in pro-environment cases, and then makes a pro-development holding. The Court has often placed an unjustified reliance on clearances and licenses by the government's environmental agencies to uphold the position that the environment is being adequately safeguarded.

There is a need for consistency and clarity in decisions where distinguishing factors exist. Judicial propriety and the doctrine of stare decisis place a strong emphasis on the need for consistency.⁶⁶ At the same time, judicial choice allows judges to respond to societal changes so that decisions are applicable. There is a fine balance between consistency and relevance. The Court tends to place weight on rulings of co-ordinate benches within the Supreme Court, although the rule of precedent does not strictly apply both amongst co-ordinate benches and within the Supreme Court. Greater clarity on these counts will enhance environmental jurisprudence and perhaps weaken challenges on grounds of judicial activism and violation of separation of powers.

C. Inconsistency:

The Supreme Court faces a significant and growing backlog of over 50,000 cases. ⁶⁷ Continuing mandamus prolongs cases further. Additionally, the short tenures of Supreme Court Justices⁶⁸ and the several vacancies in Court provide judges little time to bring reform.⁶⁹ For example, a reading of four mining cases from 2002-2013 show varied decision making while the reason for distinction is unclear.

⁶⁶ Union Of India & Anr v. Raghubir Singh (Dead) By Lrs. Etc, AIR 1989 SC 1933.

⁶⁷ Pending Court Cases, http://pib.nic.in/newsite/PrintRelease.aspx?relid=137291, (Last accessed 1 Nov, 2017).

⁶⁸ See Nikhil Mathija, The Office Of Chief Justice Of India: The Long And Short of itl, LIVELAW (Nov. 1, 2017) http://www.livelaw.in/office-chief-justice-of-india-long-short/, (Last accessed Jun 20,2018) as per which India has had 43 Chief Justices of India in its 70 years of independence.

⁶⁹ Rajya Sabha Departmental Parliamentary Standing Committee on Personnel, Public Grievances,Law and Justice, 87th Report: Inordinate Delay in Filling up the Vacancies in the Court and High Courts http://164.100.47.5/newcommittee/reports/EnglishCommittees/Committee%200n%2 0Personnel,%20PublicGrievances,%20Law%20and%20Justice/87th.pdf (Last accessed Nov. 4, 2017)

These mining cases were decided by three-judge benches, but the decisions are inconsistent. Under the Supreme Court's internal practice, the prior decision would bind, unless it was repugnant and referred to a larger bench for review. Between 2002 and 2013, the entire composition of the bench changed, and this could be one cause for inconsistency.

The Court went from permanently closing mines in Kudremukh in 2002,⁷⁰ to reopening the Bellary mines in 2013.⁷¹ Later in 2011, the Court relaxed the guidelines on the MoEF to avoid diversion of forests to the greatest possible extent. In 2013, the same bench that re-opened the Bellary mines prohibited Vedanta Plc from mining in Niyamgiri hills and upheld tribal rights. The second Samaj Parivartana case (2017) struck down one form of contribution for remediation and directed the CEC and state government to plan implementation of priority measures.

The decisions do not clearly distinguish one another, to account for the inconsistency. Diversity in the composition of the Bench is one reason for inconsistency. However, even the same bench can deliver different judgments, as is seen in Samaj Parivartan Samudaya (I) (2009) and Vedanta (2013)⁷²Perhaps this distinction was brought about because Bellary had functioning mines while Niyamgiri did not. Additionally, the reopening of the Bellary mines was ordered in the aftermath of the Chinese Olympics, when demand

⁷⁰ K.M. Chinnappa and T.N. Godavarman Thirumalpad v. Union of India (UOI) and Ors, AIR 2003 SC 724.

⁷¹ Samaj Parivartana Samudaya & Ors. v. State Of Karnataka & Ors, (2013) 8 SCC 154.

⁷² Both these cases were decided by Justices Alam, Gogoi and Radhakrishnan.

and prices of iron ore sky rocketed. Exports and business interests were probably considered. Another reason for the distinction may be the nature and uses of iron ore versus the uses of bauxite, the precursor of aluminium. But there is nothing on record to suggest this would be the case.

The Supreme Court has admitted that its interim orders often impede public welfare.⁷³ The pro-environment leaning of the Vedanta case may therefore be criticized as unwarranted compensation for interim orders to Vedanta and others that have profited at the cost of public welfare. This would be consistent with arguments that it is judicial overreach, because it is an attempt to set off perceived injustice to parties who were affected and those that benefitted. This approach was completely unconnected to the case at issue and inconsistent with existing law. However, the Court in Vedanta upheld a referendum of the Gram Panchayats, undertaken under law, and we note the subsequent withdrawal of approval by the Government. Had the Court overturned the referendum and the decision of the Government that would be judicial overreach. By upholding the referendum and the rejection, the Court upheld the separation of powers.

5. CONCLUSION

The publicity and financial impact of an environmental case does not solely determine the Court's decision. While several

⁷³ Utkarsh Anand, Our stays deprive Govt. of dues, help Adani, Essar and Vedanta: Supreme Court, THE INDIAN EXPRESS, (Nov 4, 2017), http://indianexpress.com/article/india/indianews-india/our-stays-deprive-govt-of-dues-help-adani-essar-and-vedanta-supremecourt/ (last accessed 21 Mar, 2018).

publicised cases, such as the *Godavarman* case, have protected the environment, it can be argued that the result was not necessarily proenvironment because it was vague, decided after many years, and not yet implemented. Further, publicised cases such as *Chinnappa* (Kudremukh Mining) have been pro-development in effect, as mining activities were allowed to continue for four years despite the ecological damage.

The Court tends to defer to the judgment of the Central Government, State Government or expert bodies on several issues. In one instance, the Court deferred to two NEERI reports in the H-acid case with different conclusions but published on the same day.⁷⁴ The Court often does not address directly related and foreseeable issues. Perhaps this is a precaution the Court takes so that its decision is not criticised or later struck down for judicial overreach.

The Supreme Court has been on the rise as a powerful and autonomous institution since the 1980s.⁷⁵ Judicial innovation and activism has extended the Court's reach and the scope of individual rights. However, the Court is still bound by restrictions to its jurisdiction under the Constitution of India, the Supreme Court Rules and the separation of powers.

The Court has limited jurisdiction on policy questions but has increasingly taken up policy questions. It has considered: national policy, international environmental principles, industrial concerns,

⁷⁴ Indian Council for Enviro Legal Action, *supra* note 32.

⁷⁵ Rehan Abeyratne, Socioeconomic Rights in the Indian Constitution: Towards a Broader Conception of Legitimacy, 39 BROOK. J. INT'L L.1 (2014).

employment, environmental impact, and fundamental rights in its decisions. The Court has also considered public outcry and widely publicized cases have often resulted in pro-environment holdings, even if the reasoning or dicta would support a pro-development stance when the Court is faced with slightly different facts.

The Court has been criticized for judicial overreach in policy matters and exercising jurisdiction through continuing mandamus, which prolongs but seldom results in effective enforcement. Added to this, short tenures of Supreme Court Justices contribute to inconsistency in environmental jurisprudence of coordinate benches. Further, cases often do not state the basis for distinction, making the analysis of existing law difficult and incomplete.

Longer tenures of Supreme Court justices, and a greater observance of the separation of powers are likely to improve consistency in decisions that can be implemented quickly. The Court should abandon continuing mandamus. Justices should be able to serve until at least age 70. Concerted efforts in improving judicial economy through crisper judgments, and longer tenures of Justices will improve consistency and efficiency of the Supreme Court of India.

ADJUDICATING SUSTAINABLE DEVELOPMENT: A THEORETICAL INSIGHT

Arindam Basu^{*}

ABSTRACT

Sustainable development presents opportunities for the states and their machineries to strive for development conditioned by the understanding that such progress does not compromise the wellbeing of the future generations. The understanding has long surpassed the rhetorical boundary in both international and national levels and evolved a great deal in recent times. Today we have accepted the fact that incessant development can put human security under stress and may lead to injustice. Thus, often human rights and the environmental issues have been merged together providing a backdrop that is rich in right based narrative. The Supreme Court of India has long been trying to secure rights to Indian citizens that are enshrined in the Constitution of the country. In doing so, time and again it has used sustainable development as a guiding concept. Consequently, a grand design is unveiled hidden beneath the volumes of Supreme Court judgments. However, such discourse should also involve an essential enquiry about the pattern of adjudication. Till date there is a dearth of literature on such issue. This paper aims to fulfil that gap.

1. INTRODUCTION

At the heart of it, sustainable development conceptualizes the idea of securing human wellbeing and environmental

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protection for the present and future generations. It involves a vision of this planet where everyone can live a healthy and prosperous life in harmony with nature. Sustainable development gained international prominence in 1987 when the World Commission on Environment and Development (WCED),¹ chaired by former Norwegian Prime Minister Gro Harlem Brundtland, published its report, Our Common Future, also known as the Brundtland Report. In the following decades, sustainable development gained a hegemonic status worldwide through a series of international, regional and national initiatives. The dichotomy of combining ecology with economy has made the concept challenging and ambiguous yet attractive for the world leaders (UNEP 2011; World Bank 2012). But, the realization of a sustainable society has remained a distant dream. All over the world, the pattern of unsustainable human lifestyle has led to the intense distributional conflicts, threatening to unveil a perilous conclusion.

It is understood that conservation process is subject to social factors, especially rights of the people in a given place. Also, conservation process potentially affects development as a whole. Thus, the debate should be focused on outlining economic development that would ensure the rights and desires of the common people without mindless running down natural resources. Else, the conflict between development and conservation will become intense. —As these divisions become more manifest, the

¹ WCED was established in 1983 for evaluating the possibility to integrate development and conservation aspects.

global replicability of North Atlantic styles of living will be more directly and persistently challenged. Sometime during the twenty first century, Galbraith's great unanswered question - How Much Should a Country Consume?' – with its Gandhian corollary, - How Much Should a Person Consume?' – will come finally to dominate the intellectual and political debates of the time.²

In India the same debate revolves round industrial and urban favoritism that often reflects in government decision-making process countered by an urge for more decentralized social and green developmental path. Immediately after independence, India, ravaged by widespread poverty, needed industry that would take the country ahead. Till 1970, developmental agendas surpassed ecological concerns, though poverty was still posing considerable difficulty. Environmental concerns, however, was not to be side-lined In decades India witnessed the anymore. to come, constitutionalisation of environmental concern and legislated several related laws and policies. However, the implementation of such laws has remained an area of concern, often leading to situations when human rights are ignored or trampled by powerful classes of the society. Today, it is an accepted fact that pollution free environment is indispensable for healthy human survival. Relentless developmental progresses can upset human security and may lead to injustice. Thus, often human rights and the environmental issues have been merged together providing a backdrop that is rich in rightbased narrative. This conceptual framework permits a good quality

² Ramachandra Guha, how much should a person consume? thinking through the environment, p. 250,2008.

of life for all people while ensuring social equity through sustainable development.

Up to the task, Indian judiciary, especially the Supreme Court, has long been trying to secure rights to Indian citizens that are enshrined in the Constitution of the country. In doing so, time and again it has used sustainable development as a guiding concept. This task performed by the Court has only become critical in years to come as new forms of rights have emerged.

People of India are now empowered by the regime of rights and the demand for implementation of such rights only indicate towards the fact that people want more than just rights now. People are frequently approaching Supreme Court as not enough had been done to deliver these rights to the people.

Although, it can be argued that the judicial review of laws made by the parliament or of the decisions taken by the branches of the government is actually a counter-majoritarian force,³ judicial decision-making raises some important questions, both theoretical and practical: What persuades the Court? How much decisionmaking is determined by legal reasoning? To what extent the Court relies on Constitutional principles? Do judges depend on policy principles other than using statutory rules?

The responses to these questions provide an opportunity to test the observations made by the court with rationality. As the concept of sustainable development is deeply intertwined in socio-

³ Alexander M. Bickel, The Least Dangerous Branch: The Supreme Court at the Bar of Politics, *pp.* 16-18, 1986.

political and economic dimensions, understanding the process of environmental decision-making by the courts on a theoretical front should enable a law student to appraise the judicial mind-set in a more elaborate manner.

The paper is divided into four chapters. The first chapter introduces the theme. The second chapter concisely explores the theoretical underpinning of adjudication process. The third chapter reveals the pattern of adjudication considering some landmark judgments delivered by the Court in the last three decades till date. The fourth chapter concludes the paper.

2. THEORIES IN ADJUDICATION: A BRAINTEASER

Stanley Fish, a noted American literary theorist and legal scholar, once said that theory does not constrain practice.⁴ This statement may be considered as emphatic as legal theories have achieved a distinguished position in legal scholarship over the years. Probably, the most influential account demonstrating the importance of legal theories is Lon Fuller's the Case of the Speluncean Explorers.⁵

A group of cave explorers, known as spelunkers, were trapped inside a cave because of a massive landslide. Somehow, they established contact with the rescue team but came to know that the rescue would take at least ten more days. They were already running

⁴ STANLEY FISH, DOING WHAT COMES NATURALLY: CHANGE, RHETORIC, AND THE PRACTICE OF THEORY IN LITERARY & LEGAL STUDIES, *p*. 321, 1989.

⁵ Lon L. Fuller, *The Case of the Speluncean Explorers*, 62 HARV. L. REV. 616 (1949). Available at http://w.astro.berkeley.edu/~kalas/ethics/documents/introduction/fuller49.pdf, (last accessed Jan. 19, 2018).

short of food and it was doubtful that they would survive for ten days. In desperation they decided to kill and eat one of their members at a time. They held a lottery and consequently, a loser was killed and eaten. After the rescue operation took place, they were prosecuted for murder. The prescribed punishment was death penalty. Judges had to determine whether they were guilty or not. The statute was clear and unambiguous but there was strong public opinion against the death sentence. Fuller wrote five conceivable judicial responses exploring the facts from the standpoints of profoundly different legal principles. None of the judges' theories could be called as sacrosanct. Each justice considered all the facts and circumstances of the defendants along with the possible consequence of their decision on the society. They also considered the receptivity of their decisions to the rule of law. Guided by their wisdom and experience, all the judges were committed to the appropriate role and function of courts in a legal system.⁶

In this famous hypothetical jurisprudential puzzle Fuller presented five comprehensive theories.⁷ In spite of criticisms, this thought experiment makes it amply clear that a theory elucidates the law as judges put confidence on their individual account while explaining the law.

⁶ The final verdict was 2-2, Justice Tatting having withdrawn. The decision of lower court was thus affirmed, and the Speluncean Explorers were given capital punishment. *Ibid*

⁷ One can understand that if there was only one justice to review this case, then the result would have been determined by the one prominent theory of one of the five judges. But if there were more than two justices assigned for the case then the theories would have been irreconcilable with each other. *Ibid*

Why concentrate on theories then? Because sustainable development is a contested concept which is continuously getting pushed by solicitation for 'greater than before' benchmarks, the normative swing of its fundamental nature is inevitable. Ideally, such unpredictability should be stabilized in the distant future when our society will learn to utilize its resources sensibly. Till then the reactionary force, rising consequentially must be counterbalanced with outmost caution. From the legal standpoint, much of sustainable development depends on acceptable and appropriate lawmaking, implementation of those laws and most importantly review, analysis and interpretation of such laws by the judicial body.

It is stated that judges enjoy considerable amount of freedom while adjudicating a dispute. This decision-making autonomy of the judges is an involuntary freedom. Sometimes, it is the consequence of legalism 's inability to decide the outcome alongside with the difficulty, often impossibility, of verifying the correctness of the outcome, whether by its consequences or its logic. This inability and the difficulty or impossibility create an open area where judges can have discretion, a blank slate, on which their decisions are to be inscribed.⁸

While dealing with environmental harms, often marred by 'diffusion syndrome', the freedom of judges is conditioned by moral, legal and normative reasoning. The mystifying distinction between moral, legal and normative rational may sometime cause difficulty under which adjudicators have to toil hard to deliver justice. For

⁸ RICHARD A. POSNER, HOW JUDGES THINK, p. 9, 2010.

example, not to throw garbage on the street is a normative question. Whether throwing garbage on the street is wrong, is a moral normative question. But whether throwing garbage on the street is unlawful or illegal is essentially a legal normative question. The conceptual fluidity of sustainable development can make these types of investigations far more indistinct than one can imagine. For example, whether economic development is important for society is a normative question. But whether economic development is to be achieved at the cost of environment is a moral normative enquiry. Similarly, whether achieving economic development at the cost of environment is unlawful or illegal is a legal normative question. Here, a hurriedly made decision by the court can upset the ecological stability of the society in long run. Thus, the theoretical foundation of judicial discretion and adjudication process becomes a crucial criteria in environmental matters. Therefore, it may not be unreasonable to spend some time in understanding perceptible theories of adjudication.

2.1. Theories of Adjudication: A Brief Outline

About 2400 years before, in ancient Greece, Aristotle, one of the most important philosophers of all time, discussed about justice elaborately. He differentiated between 'corrective justice', 'commutative justice 'and 'distributive justice '. According to him justice means providing everyone what he or she deserves. We must look for the purpose first and then ask how an institution properly can work towards meaningful realization of this purpose.⁹ In his celebrated work, Nichomachean Ethics, Aristotle argued that it is the relative claims of individuals on the basis of which goods should be distributed. This allows us to stand on a platform where different notions of justice can be tested for fulfilling the purpose.

Michael Walzer in one of his most important but somewhat forgotten work on the concept of justice identified eleven goods of society.¹⁰ Walzer maintained that the common considerations shared between the people of a state should regulate these goods. For achieving justice, limits of these goods must be established and protected. Let us consider an instance. Lack of access to education at the grass root level in India had been a problem for many years. For the betterment of society access to basic education is an imperative function that state should perform. For that the boundaries for providing basic education must be laid down and protected. Ideally, this 'protective entitlement' must not be extended during higher education and thus, depends on much complicated understanding of equality and equal protection.¹¹

⁹ Aristotle, Nocomachean Ethics: Book V. Available at http://classics.mit.edu/Aristotle/nicomachaen.mb.txt, (last accessed Dec. 25, 2017); AMARTYA SEN, THE IDEA OF JUSTICE, 2009.

¹⁰ These goods are (1) membership in the community, (2) security and welfare, (3) money and commodities, (4) office, (5) hard work—jobs that nobody wants to do in society, (6) free time, (7) education, (8) kinship and love (family), (9) divine grace, (10) recognition, and (11) political power. M WALZER, SPHERES OF JUSTICE: A DEFENSE OF PLURALISM AND EQUALITY, 1983.

¹¹ This must be considered with reference to certain exceptions that may be created under the scheme of the Constitution of the country. In India this gets influenced heavily by caste and religious considerations. Few important questions can be posed regarding prioritization of entitlements. For example, which is more fundamental right to environment or right to education? Is there any relation between the two i.e. Can one augment the other? Can one justify the act of transgressing the boundary in the context of greater good? I intend to argue more on this in the chapters to follow.

Judicial system that is developed over the centuries, largely govern the notion of justice. This is a bulk residual function apart from the role that legislature and executives perform. As distributive justice in the contemporary world takes over other form of justice¹² judges face a stern challenge to balance various competing interests. The realm of their decision-making paradigm keeps on interacting with many social, political and economic aspects of our daily life. Hence, for understanding the working of the judicial system, contemporary legal theories have devoted substantial amount of time for many years.

Few years after the spawning of Hart-Fuller debate, perhaps the most celebrated jurisprudential debate of all time, another lasting disagreement ensued between Hart and Dworkin. It started with Dworkin's formative criticism of H. L. A. Hart's theory of legal positivism.¹³ It occupies an important position in the history of legal debates particularly those that discuss the role of judges in society, the mentioning of its central part is important. The debate brings out significant facets of the role of judges in the society. With all complex interpretations, Hart-Dworkin debate stands on the relationship between legality and morality. Dworkin maintains that legality is eventually determined not by social facts alone, but by moral facts too. If a judge wants to decide the content of morality in order to decide the requirement of law, social facts cannot be the

¹² Certainly, this form of justice is the most desirable in majority of environmental disputes in India as they originate from resource distribution conflicts.

¹³ Since then many accounts have been presented either supporting Hart or favoring Dworkin's arguments. Recently, the debate has assumed renewed significance after the publication of the second edition of Hart's Concept of Law where Hart's gave long waited posthumous answer to Dworkin's critique.

sole determining factors. This argument actually challenges positivist postulate about the nature of law where legality is determined by social practice and never by morality.¹⁴

Hart primarily maintains that judges are within bounds to legislate on the basis of rules of law. Judges live by the —the hole in a doughnut rule free to move within it as they want particularly when a rule fails to direct a fact situation. He then has discretion to decide the outcome.¹⁵

The significance of this deliberation in environmental law can be overwhelming as judges often face the moral dilemma whether to uphold the developmental activities over the environmental concerns or to stop it sacrificing the prospect of economic growth of the country. The process of judicial review apart from requisite rule of law encompasses wide range of discretion. The use of such discretion largely is governed either by morality or social facts or both.

Certainly, the role judges play to develop social choices has always been an important one. Frequently, they influence social behavior or be influenced to regulate social practices within a complex set of written or unwritten norms.¹⁶ During 1960 and 1970,

¹⁴ Scott J. Shapiro, *The "Hart-Dworkin" Debate: A Short Guide for the Perplexed, Public Law and Legal Theory,* Working Paper Series, Working Paper No. 77, (2007), at *p. 5. Available at https://law.yale.edu/system/files/documents/pdf/Faculty/Shapiro_Hart_Dworkin_D ebate.pdf*, (last accessed Jan. 19, 2018).

¹⁵ Then the crucial question is whether principles comprise the doughnut itself or the doughnut hole keeps on binding the judges? RONALD DWORKIN, TAKING RIGHTS SERIOUSLY, at p.34, 1977.

¹⁶ These norms draw their forces from written laws or accepted social practices. Not necessarily that they should always achieve customary status.

in continental Europe sociological aspects of law was greatly emphasized on. Being a part of legal order judges occupy an important position in society where rules oversee human conduct. Logically, the role of the judges is defined by a number of shared expectations.¹⁷ Though, in normal circumstances rules are expected to help society in proper functioning, there are often conflict-ridden scenarios that judges are eventually expected to resolve.¹⁸

Again, it is tempting enough for judges to rely more on intuitive approach particularly in a situation where there is no rule or the rule itself may be interpreted in an open-ended way.¹⁹ It is doubtful whether judges should take this approach more in those situations emerging from precedents or statutes. In fact statutes do not provide, at least theoretically, such opportunities as they are enacted for specific purposes. But often shoddy drafting or lack of insight on the part of the legislatures leads to vacuum forcing judges to rationalize.²⁰

If there is a demand that like cases should be treated alike, such a demand too assumes a standard against which 'like'can be measured and this, it must be admitted, is not easy to construct.²¹

¹⁷ VILHELM AUBERT, ELEMENTS OF SOCIOLOGY, at pp. 40-41,1970

¹⁸ The situation becomes more complex when more number of people are involved demanding their rights. Such is the case in majority of environmental disputes as resource distribution conflicts threaten a class or group of people, mostly downtrodden desperately forcing them to knock the door of judiciary for last hope.

¹⁹ M.D.A. FREEMAN, LLOYDS INTRODUCTION TO JURISPRUDENCE, p. 1552, 2007.

²⁰ For example, it is common in India for alleged industrialists to move the court for motion to quash petition filed against them on the ground of freedom of trade. Courts in such situations favour the socially desirable rational choices either allow the industry to function or stop its operation. *Ibid*

²¹ Often in environmental matters court deviates from its earlier standards to justify either to promote development or conservation. It is quite possible to raise a question how far

The larger the problem, the solution to it becomes more difficult as varied claims by different stakeholders are to be sorted out. In environmental matters it is particularly acute as many claims come before the court as public interest litigation involving large number of affected people. Here, delay in dispensing justice runs the risk of diminishing the value of the judgment. A standardized approach can be helpful here as the court is not required to walk in an uncharted territory. On the other hand, as many environmental claims vary from social and geographical set up, applying set standard may not give desired result forcing judges to look beyond the horizon.

There is another important aspect one should not lose sight. The adjudicative process is one of constant interaction between judges, the legal professionals, litigants and the general public. The entire system would breakdown if it grows out of the proportion. One has to understand that in the entire thread judges occupy an indispensable fraction and are given a defined role. They cannot perform all the functions.²² Set standard and rules enables judges to keep the volume of litigation within manageable portions. The knowledge that judges adjudicate according to established rules enables the volume of litigation to be contained.²³

This mind-set of the judges can be disputed in environmental matters. For example, environmental right has been a hotly debated

a set standard is desirable in large scale environmental pollution that casts its effects for longer period of time. *Ibid*

²² Though, in modern times, in appropriate situations judges do perform the role of law and policy-maker too ²³ In environmental law this has proven a problematic area initially as in India number cases in Supreme Court continued to rise during 1990s and first part of 21st Century. In recent years, the load is shared somewhat by National Green Tribunal.

issue for many decades in India. The lack of standard in many related cases²³ compelled judges to rely on the principle of natural justice.²⁴ The result is the constant expansion of some of the constitutional provisions²⁵ to include right to clean environment. In the process, courts often tend to protect the right to environmental resources indispensable for one's survival.²⁶ Further, the demand that environment has to be 'clean', free from pollutants, tend to connect the argument with the justification for undertaking the cost-benefit analysis towards the value of certain acts of the alleged polluters to the society in comparison to bargaining the survival of affected individual or group with human dignity. This is in contravention of the application of the principle of natural justice. If it can be agreed that right to environment is fundamental or customary (Perhaps, there is no doubt that right to environment is a natural right) the focus should be predominantly on 'right to environment' and not on 'right to environmental resources'. However, judges should not be blamed for this twist. It is the lack of insight on the part of the legislature that believe that for example, right to education is more fundamentally required than right to environment.²⁷

²³ For example, water right which is arguably the most fundamental of all environmental rights.

²⁴ The dilemma of a judge in a case where there is no established precedent or standard to rely upon, is nicely summed up by the classic statement of Lord Viscount Simonds: —In the end and the in the absence of the authority binding this House, the question is simply what does justice demand in such a case as this?....If I have to base my opinion on any principle, I would venture to say it was the principle of natural justice.I [National Bank of Greece and Athens S.A. v. Metliss, (I958) A.C. 509].

²⁵ The most notable of all of them is Article 21.

²⁶ Right to livelihood is an indispensible part of right to environment established through judicial precedents.

²⁷ By an amendment to Article 21 the Parliament included right to education much later but not yet right to environment. Of course, if Article 21 is further amended to include

2.2. Putting Theories into Practice: Approaches and Methods

Any discussion on decision-making process of the courts would be imperfect without the two seminal distinct approaches – formalistic and realistic. Together, 'legal formalism' and 'legal realism', with their long historical lineage in law have acquired complex connotations. Both theories have not been understood properly, especially legal realism. Frequently, these two approaches are oversimplified. According to formalists, judges apply the governing law to the facts of a case in a logical, mechanical, and deliberative way. For the formalists, the judicial system is a giant syllogism machine, and the judge acts like a highly skilled mechanic. Legal realism, on the other hand, represents a contrast. For the realists, the judge decides by feeling and not by judgment; by hunching and not by ratiocinationl and later uses deliberative faculties not only to justify that intuition to himself, but to make it pass muster.²⁸

It is a fact that all these approaches of law over the considerable period of time have significantly influenced the mindset of the judges. As a result, their decisions mirror these aspects one way or the other. In India, the famous sages and jurists described in detail the judicial system and legal procedure prevailed in ancient India till the close of the Middle Ages. The judges and counsellors

right to environment in near future, it would not make right to education less fundamental. In fact, it is a question of the process of prioritization for recognition of rights where the act of our Parliament remains questionable.

²⁸ Chris Guthrie, Jeffrey J. Rachlinski, Andrew J. Wistrich, Blinking on the Bench: How Judges Decide Cases, (2007), at p.2., http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1707&context=facpub, (last accessed Dec. 25, 2017).

were on a role to guide the king during the trial of a case and used to prevent him from committing any error or injustice. During Mughal period India had a well-organized system of government and many rulers dispensed justice efficiently with the help of learned *qazis*.

In India, legal jurisprudence is historically influenced by English tradition. British rulers brought common law system in the country which over the centuries developed into an elaborate adversarial system and retained even after independence. The independent position of judges provides an effective check on the arbitrary power of legislative and executive organs. Also, hierarchical set up ensures the dispensing of law in just manner.²⁹

Nonetheless, elimination of the possibility of other influences is also not feasible as Indian legal system has gone through the significant changes since independence drawing inspiration from many countries. Presence of these varied influences is starkly visible in environmental matters as this legal field started flourishing in the age of fast information sharing.³⁰

The judicial system in India is one of the elaborate judicial systems in the world. The system has grown rapidly in the past decades and largely reflects India's social, economic and political

²⁹ Justice S. S. Dhavan, *The Indian Judicial System A Historical Survey*, Allahabad High Court, Available http://www.allahabadhighcourt.in/event/TheIndianJudicialSystem_SSDhavan.pdf

http://www.allahabadhighcourt.in/event/TheIndianJudicialSystem_SSDhavan.pdf (last accessed Jan. 19, 2018).

³⁰ As administrative structure of environmental statutes is largely influence by American environmental laws. Also, accepting several principles, e.g. polluter pays, precautionary etc. and doctrine like public trust amply illustrates the fact.

development.³¹ In India, popular opinion about the role of the courts appears to be tentative and diverging. But it can hardly be denied that courts in India have tried to maintain their efficacy and sincerity as institutions of democracy. This legal discourse also has become apparent in several environmental disputes in the recent past. Much has been talked about Supreme Courts' landmark decisions and their impacts on social life.

It is also a fact that the Supreme Court cultured itself gradually over the period of times. It was largely eager to build its castle on the common law tradition of the country in the initial days and thereafter slowly searched for inspiration in growing volume of international law. There is no doubt that this approach enriched our environmental jurisprudence in a long run. But this approach, as interestingly pointed out by C.M. Abraham, cannot be seen as retrogression bound for restoration of our ancient legal order but as an advance from an imperfect or partially established modern legal order. While developing this jurisprudence the Court did not blindly relied on post-materialism of western culture. Rather, it had been able to slowly cuddle a jurisprudence that was distinctive and India's own post-modernist take on environmental laws.³²

Indian environmental jurisprudence demonstrates the characteristic features of Indian conceptual understanding of law

³¹ National Court Management Systems (NCMS), Policy and Action Plan, (2014), Available at http://supremecourtofindia.nic.in/ncms27092012.pdf, (last accessed Jan. 19, 2018).

³² C. M. ABRAHAM, ENVIRONMENTAL JURISPRUDENCE IN INDIA: THE LONDON-LEIDEN SERIES ON LAW, ADMINISTRATION & DEVELOPMENT, p. 138, 1999.

essentially captured in the concept of *dharma*³³ in adapted forms. Indeed, in India's distinctive multicultural and democratic setting, this new postmodern legal philosophy can be termed as *neo-dharmic* which has eventually established a new public law regime as the apotheosis of the new constitutional law rational in India. It infuses and directs Indian environmental jurisprudence by bringing in indigenous and traditional understandings of nature as well as developing them in tune with the ideology of the new world order on environmental issues.³⁵

Certainly, India's environmental jurisprudence has grown with the aid of innovative rationales of the Apex Court. It can be said that much of its development takes place because of the application of certain legal principles under the garb of sustainable development. But so far, the legal literature in India has largely overlooked how judicial preferences shape this doctrinaire and perennial nature of environmental jurisprudence.

Judicial decision-making in India is marked by the presence of order and reason, in contrast to the fasts, threats of selfimmolation, shouting of slogans, hurling of inkwells and paperweights, and fisticuffs which are increasingly becoming a routine feature of legislative and executive decisional processes.³⁴ Compared to the Supreme Court of United States of America the study on the Supreme Court of India is inadequate. More attention

³³ This is not to be understood as institutionalized form of *dharma* as envisaged by the Constitution of the country in post-independence period. ³⁵ See Abraham, Supra n. 37, at pp. 138-139.

³⁴ George H. Gadbois, Jr., *Indian Judicial Behaviour*, 5 ANNUAL NUMBER THE SEVENTIES 3, p. 149, 1970.

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should have been paid to it as being the highest decision-making institution of the country it has a great bearing on the social life as a whole.³⁵

3. PATTERNS OF ADJUDICATION

The two major sources with which the Indian Supreme Court had shaped environmental jurisprudence in last three decades are statutes and the Constitution. The following sections discuss the typical motivations and constraints that had influenced the judicial behavior in environmental litigations thus far.

3.1. On Fairness, Political Considerations and Social Consciousness

The judicial fairness and spirit, at the heart of it, supports behavior that often spills over the apparent legitimate margin given to the judges by the law-makers and the constitution of a country. What makes judicial approach attractive is its incessant striving for re-inventing impartiality in a challenging situation. Even legal theorists who believe that judges should be rule-appliers and impartial fact-finders have shown certain amount of leniency in their attitude.³⁶

Though, judges are occasionally found having political opinion, 'political' is a misleading term that should be sensibly parsed before applying it to judicial behavior. A judge may be bluntly 'political' and can make decisions to reflect his party loyalty. A judge

³⁵ MANAS CHAKRABORTY, JUDICIAL BEHAVIOUR AND DECISION-MAKING OF THE SUPREME COURT OF INDIA, 2000.

³⁶ Posner, *Supra* n. 8, at *p*. 5.

can also be 'political' when his decisions actually mirror the platform of a political party, though as a matter of conviction rather than party loyalty.³⁷ The decisions delivered by the Supreme Court in last three decades do not reflect any predominant loyal behavior on the part of the judges, even in extreme environmental atrocity like Bhopal disaster or in vastly controversial Tehri or Narmada projects. It is difficult to believe that judges are insulated from social upheavals. Rather, it is logical that at their position they are privy to significant amount of information that common people yet to receive. Their decisions, thus, ideally should reflect social consciousness. Generally, the Supreme Court of India in environmental matters had certainly been vigilant over realities of our society. This was starkly visible when litigations on mining catastrophes like Dehradun,³⁸ Samatha,³⁹ Lafarge,⁴⁰ Samaj Parivartana Samudaya⁴¹ or Orissa Mining Corporation⁴² reached before the Court and it consciously tried to clamp-down on illegal practices. In similar vein, it strongly reprimanded hazardous industries for violating laws.43 Some of the significant judgments on

³⁷ *Ibid* at p. 9.

³⁸ Rural Litigation & Entitlement Kendra v State of Uttar Pradesh, AIR 1985 SC 359.

³⁹ Samatha v State of Andhra Pradesh, AIR 1997 SC 3297.

⁴⁰ Lafarge Umiam Mining Private Limited. v. Union of India, (2011) 7 SCC 338.

⁴¹ Samaj Parivartan Samudaya v State of Karnataka (Bellary Mining case), (2012) 7 SCC 407.

⁴² Orissa Mining Corpn. Ltd. v Ministry of Environment & Forests, (2013) 6 SCC 476.

⁴³ By the Notification dated December 15, 2016 published in the Gazette, the Union Ministry of Agriculture and Farmers Welfare (Department of Agriculture, Co-operation and Farmers Welfare) announced the decision to ban manufacture, import, formulate, transport, sell and use of 18 of the 66 pesticides which are still registered for domestic use in India but banned or restricted in one or more other countries due to health and environmental concern. This is a welcome step taken by the government that definitely is inspired by some of the decisions delivered by the Court so far. See Gopal Krishna, 18 Pesticides Banned, 48 Pesticides like Monocrotophos, Paraquat Dichloride, Glyphosate yet to be Banned, Toxics Watch, (2017).

Available at http://www.toxicswatch.org/2017/01/18-pesticides-banned-48- pesticides-like.html (last accessed Jan. 19, 2018).

regulation of hazardous industries include Shriram Gas Leak Case,⁴⁴ Vellore Citizan Welfare Forum v Union of India,⁴⁵ Research Foundation for Science Technology and Natural Resource Policy v. Union of India & Ors.,⁴⁶ A. P. Pollution Control Board v. Prof. M. V. Nayudu⁴⁷ and Research Foundation for Science v Union of India.⁴⁸

Industries that encroached upon forest rights and paid little attention to protection of natural resources also in most of the cases did not escape strong judicial scrutiny. As in *Ganesh Wood Products*,⁴⁹ *Banwasi Seva Ashram*,⁵⁰ *Tarun Bharat Sangh*,⁵¹ *TN Godavarman*⁵² and *Samatha*⁵³ the Court strongly reprimanded unbalanced and illegal practices. On the other hand, the Court often recognized the need of water for agricultural purposes and generation of the electricity for the masses, especially for poor and marginalized classes. In doing so, it vehemently tried to strike a balance between development and conservation. Though, the results were often not free from controversies. *Tehri*,⁵⁴ *Narmada*⁵⁵ and *ND Jayal*⁵⁶ are the examples. In all those decisions the Court treated human rights issues involved with some degree of limited understanding.

⁴⁴ M.C. Mehta v Union of India, AIR 1987 SC 1086.

⁴⁵ Vellore Citizan Welfare Forum v Union of India, AIR 1996 SC 2715.

⁴⁶ Research Foundation for Science Technology and Natural Resource Policy v. Union of India & Ors., Writ Petition (C) No.657 of 1995.

⁴⁷ A. P. Pollution Control Board v. Prof. M. V. Nayudu, (2001) 2 SCC 62.

⁴⁸ Research Foundation for Science v Union of India, (2012) 7 SCC 764.

⁴⁹ State of Himachal Pradesh v Ganesh Wood Products, AIR 1996 SC 149.

⁵⁰ Banvasi Seva Ashram v. State of Uttar Pradesh, AIR 1987 SC 374.

⁵¹ Tarun Bharat Sangh v. Union of India, 1992 SC 514.

⁵² T.N. Godavarman v. Union of India, AIR 1997 SC 1233.

⁵³ Samatha v. State of Andhra Pradesh, AIR 1997 SC 3297.

⁵⁴ Tehri Bandh Virodhi Sangharsh Samiti v. State of Uttar Pradesh, 1992 SUPP (1) SCC 44.

⁵⁵ Narmada Bachao Andolan v. Union of India, AIR 2000 SC 3751.

⁵⁶ N.D. Jayal v. Union of India, AIR 2004 SC 867.

Often, a case involving environmental concern includes thorny political questions. The recent verdict of the Court in ongoing *Arjun Gopal Case* is a clear example of that. The Order, quite surprisingly, invited both accolades and criticisms. Pointing towards the high level of pollution in the city likely to be generated during Diwali Festival, a segment of the civil society happily praised the decision. The rivals had expressed their anger at the Supreme Court for being indifferent to Hindu sentimentalities.⁵⁷ Sadly, the Court was forced to express its disappointment over the issue by saying that its order was misconstrued and unnecessarily communalized. It is true that the Order put several traders, manufacturers, distributors into difficulty during festive season. But in the absence of clear indulgence,⁵⁸ it may not be proper to think that the Court worked with any pre-determined political motive.

When it comes to sustainable development, undoubtedly the Supreme Court remained observant about India's international commitments. Its strong support for the concept after Earth Summit and the economic liberalization in the country is a clear proof of its awareness, dispelling any assumptive disagreement. It is also noteworthy that even in those early years, in its decisions, the Court was regularly mixing substantive and procedural aspects identified in the Rio Declarations.⁵⁹ Seemingly, it may appear that the approach of

⁵⁷ They argued mainly that the Supreme Court was keen to apply universal standards of human rights and pollution control laws to Hindu customs only and tend to be more liberal when it comes to customs of other minority faiths.

⁵⁸ If found, such indulgence on the part of a handful of judges may produce a negative effect on a particular issue, but unlikely will alter the firm judicial behaviour.

⁵⁹ Many of those aspects are important for proper understanding of sustainable development.

the Court had been *ad hoc*, but cumulatively it revealed a shape that seamlessly fused into a progressive pattern in years to come.

3.2. On Environmental Statutes, Gap Filling and Law-Making

In deciding environmental cases, the Supreme Court had vastly used innovative perception. It is best illustrated in S, hriram, Bichhri, Vellore, Span Motel, Lafarge and OMC and notably, they all produced similar results - protecting the environmental concerns. But this effort of the Court to pioneer environmental jurisprudence had often brought it to the uncomfortable practice of legislating. Though, it is a well-established idea in modern legal jurisprudence that a strict separation of power is not desirable in a welfare state, it cannot be said that the Supreme Court had done it not too frequently and without purpose.⁶⁰ But, we should not miss the fact that even when the Court uses its legislative capacity, it works under certain limitations that are not applicable to legislators. On the contrary, the judiciary enjoy a lot more flexibility when it comes to deciding over standing, expert opinion and ways of review. In India, use of this freedom had been particularly of much significance as there had been considerable gaps between legislative intent and executive implementation. It may be called judicial activism. But it's an 'activism' demanded by ecological urgency, tendering social aspects in varied dimensions. Ideally, such aspects should be covered

⁶⁰ Julius Stone once commented: The principle of the Swiss Civil Code that where the law is silent or unclear the judge must decide the case as if he were a legislator, still sounds strange to us, even after a century of demonstration, from Bentham through Holmes to Professor Pound and Cardozo and Lord Wright, that this is what in fact happens daily in our courts. JULIUS STONE, THE PROVINCE AND FUNCTION OF LAW: LAW AS LOGIC, JUSTICE AND SOCIAL CONTROL; A STUDY IN JURISPRUDENCE, p. 500, 1950.

at least tacitly (In fact, they are present in all environmental laws) by all environmental legislations. Hence, they are rightfully called 'socially beneficent legislations' and whenever the Supreme Court was asked to interpret the provisions of any such legislation, it, thus, in most of the cases adopted purposive interpretation. Only in some small number of cases, it subverted the idea carved in the statutes, rules or regulations. *Diksha Holding*,⁶¹ *Essar Oil*⁶² and *Deepak Nitrate*⁶³ are clear examples where the Court overlooked the impact of aggressive industrial practices over the natural environment without much justification.

However, here, the efforts of the Court to apply the concept of sustainable development to favor the 'development' at the behest of liberal interpretation of environmental laws, is questionable. This is particularly true as legislators while enacting environmental statutes before allowing any industrial activity with possible and environmental impact within its provisions, considers all perceivable externalities (Or at least it should implicitly perceive the same, otherwise the very purpose of such legislation becomes questionable). If any industry fails to observe the guidelines provided by the law, either civil or criminal punishments are prescribed. Therefore, interpretation of any environmental law, allowing any industry to further operate even after its disobedience, on the ground of larger developmental interests, not only undermines the object and purpose of such legislation but also provides undue leverage to

⁶¹ Goa Foundation v Diksha Holding Pvt Ltd., AIR 2001 SC 184

⁶² Essar Oil Ltd. v Halar Utkarsh Samiti, (2004) 2 S.C.C. 392

⁶³ Deepak Nitrate Limited v State of Gujarat, (2004) 6 SCC 402

industrial activities.⁶⁴ Moreover, it seemingly runs the risk of preferring haves over have-nots while encouraging further resource distribution conflicts. Theoretically, it can also be argued that such liberal interpretation is constrained by higher constitutional mandate of interpreting positive rights into negative one, a jurisprudence which had been developed by the same Apex Court long before with sufficient entrenching effect. But apart from these limited experiences, as revealed by majority of the case laws, the Supreme Court mostly remained pragmatic and aware. Therefore, in my opinion, it typically adopted an approach that had been formalistic with a core of realism. Neither did it became too conservative nor did it transgress the boundary too far. Shriram, Bichhri, Vellore Citizen, Sachidanand Pandey⁶⁵ CRZ Notification case, Span Motel case, Samatha, M.V. Nayudu, Intellectual Forum⁶⁶ and Lafarge are the best examples where pragmatism of the Court had been exemplary. On the other hand, while allowing any developmental projects it always tried to justify its stand on the ground of larger public interests.

3.3. On Inferring Constitutional Mandate

Evidently, the means of implementing constitutional power had been prodigiously influenced by the Supreme Court of India and

⁶⁴ What will happen to the violators or industries once they are punished in terms of paying compensation is a contentious area of all environmental laws. Though, there are provisions for increased fines or imprisonment for repeat offence, more is left to the judges' discretion. If a statute is for the conservation of natural resources, how regulation is to be prioritized over prohibition has never been clarified by the courts of India. Rather, sustainable development as a concept is used comfortably to justify such decisions. Further, the courts have never paid any attention to the fact that sustainable development only presents guiding criteria for sustainability. Surprisingly, it is used by the courts as a principle, trumping the very purpose of a statute.

⁶⁵ Sachidanand Pandey v State of West Bengal, AIR 1987 SC 1109

⁶⁶ Intellectual Forum, Tirupathi v. State of A.P. & Ors., AIR 2006 SC 1350

in environmental matters it was even more prominent. This was largely because the guidelines of statutory and constitutional interpretation developed by the Court itself, persuasively restructured the allocation of decision-making authorities. We already know that there is no provision in the Indian Constitution that speaks for fundamental environmental right. Time and again, statutes also failed to provide redress to right-violation as there had been problem of implementation. Thus, the Court meaningfully adopted an activist role in environmental matters which in turn, greatly helped the government to understand how constitutional power was to be carried out.

Some rudimentary misgivings about the interplay of different fundamental rights with right to life and liberty encompassing the right to clean and healthy environment⁶⁷ was nicely clarified by the Court at the earliest opportunity.⁶⁸ However, never was it elucidated by the Court that the Indian Constitution had adorned the concept of sustainable development before its endorsement by Brundtland Commission. Nonetheless, it did not hesitate to interpret the doctrine within constitutional mandate subtly in 1980s at least in two cases⁶⁹ and more elaborately in 1995-96 through *Bichhri* and other cases.⁷⁰ What paved the way of this frictionless taking on the concept was the flexibility provided by the Constitution itself. By exercising

⁶⁷ The common defense had been right to carry on trade and business which the Court explained by saying that no freedom could press for recognition that undermines the duty associated with it.

⁶⁸ In Dehradun and Subhash Kumar the Court started revealing the basis of inclusion of right to clean and healthy environment within the sphere of Article 21.

⁶⁹ Dehradun and Shriram remained the exemplary decisions.

⁷⁰ Vellore, the second Indian Council case, S. Jagannath and CRZ Notification cases are still regularly cited by the courts all over India.

the power of judicial review, the Court directly passed judgments on the validity of the governmental arrangements that in turn forced the authorities to re-think about their decisions related to the allocation of resources. *S. Jagannath, CRZ Notification, Span Motel, MV Nayudu, Intelelctual Forum, Samaj Parivartana Samudaya, Lafarge* and *OMC* cases are perhaps the best examples of this effort. In essence, the Court's 'formalistically realist' attitude constantly helped the government to understand the means of constitutional power in much better way.⁷¹ Especially, riding on *Samatha* and *T.N. Godavarman* judgments, the Parliament did enact the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 to correct the historical injustice done to forest dwellers. Subsequently, it also enacted the Compensatory Afforestation Fund Act, 2016.⁷²

However, it is also true that judicial indifference in limited number of cases cut assertively in favor of those having narrow developmental ideas.⁷³ Therefore, *Tehri*, *Narmada, Deepak Nitrate, Essar Oil* or *N.D. Jayal* and majority of the town planning cases⁷⁴ could have been adjudged with more nuanced approach. But one thing is certain that lack of strong review in these cases did not hinder the growth of sustainable development as an important environmental concept. Rather, as an evolving concept, it benefitted

⁷¹ For example, in issues related to water rights, the importance of 73rd and 74th Amendment of the Constitution is unmistakable.

⁷² E-Waste (Management) Rules, 2016, Solid Waste Management Rules, 2016 are significant rules notified by the government in recent time.

⁷³ The demand was justified by promoting some of the obligations of the state over other state responsibilities. Surprisingly, the Supreme Court while supporting such demands and prioritizing few Directive Principles over others, had never given any theoretical justification on which it based its decisions.

⁷⁴ Calcutta Youth Front, S.N. Rao, Bangalore Medical Trust, Almitra Patel are the examples.

even more from those cases where the Court adopted its narrow application.⁷⁵

Overall, the Court treated sustainable development with syllogistic reason in all three decades to gradually shape it into a coherent legal doctrine. In recent time, the Supreme Court continues to maintain its balanced stand. *Paryavaran Suraksha Samiti*,⁷⁶ *Manohar Lal Sharma*⁷⁷ *M.K. Balakrishnan*⁷⁸ and *Arjun Gopal*⁷⁹ are clear examples of that. The little fluctuation in consistency can be identified as sector specific which I will discuss more elaborately in the next part.

3.4. On Judicial Implementation of Sustainable Development with or without Human Rights

The Supreme Court's innovative treatment of right to life and liberty to create a new environmental jurisprudence cannot be assumed as sacred and immaculate as it appears.⁸⁰ As case laws deliberated in this work starts from 1980s, the Court's playing-field was situated at a vantage point from where it was able to travel effortlessly between different generations of human rights. Interestingly, in the beginning, it was keen to read 'green rights' with rights those are fundamentally civil and political in nature. Not that though socio-economic rights were ignored completely. But they were given somewhat ancillary treatment. This was best illustrated by

⁷⁵ The Court itself was benefitted and also the implementing agencies understood the nuances and loopholes in much better manner in years to come.

⁷⁶ Paryavaran Suraksha Samiti V. Union of India, Writ Petition (c) no. 375 of 2012.

⁷⁷ Manohar Lal Sharma v. Principal Secretary, (2014) 9 SCC 516.

⁷⁸ M.K. Balakrishnan v Union of India, Writ Petition(s) (Civil) No(s).230/2001.

⁷⁹ Arjun Gopal v Union of India, 2017(12) SCALE 348.

⁸⁰ One plausible argument can definitely be put forward that it might slow down the natural institutional growth of environmental laws in the country.

two major litigations of the time – *Dehradun* and *Shriram*. Later, the less than desirable outcome in *Bhopal* litigation also failed to add any specific dimension.⁸¹ Markedly, the international politics and development of this time had left its profound influence over the judicial reasoning. Construing sustainable development within 'right framework' with much decisiveness, almost in no time since its endorsement in international law, thus, actually reaffirmed India's commitments towards the protection of global environment.

It is quite remarkable that while dealing with environmental matters the Supreme Court had never adhered to the strong form of judicial review in pure sense. There was not a single instance where the Court had denounced an environmental statute or provision as unconstitutional.⁸² For practical reason, the remedies for violations of social and economic rights cannot demand immediate one-stop solution. For government functionaries it will take time to provide shelter or relocate large number of people ousted by a mega project. The delay in implementing any rehabilitation programme, however, always attracted strong scrutiny by the Court.⁸³ This is obvious because the problem of overdue remedies to social and economic rights should logically put forward strong alternative remedies.⁸⁴ Understanding this, the Supreme Court nicely maintained a balance between these different remedial forms. It had never been shy to

⁸¹ As I have already argued that this could have been the case after Shriram to establish firmly the effectiveness of polluter pays principle in India.

⁸² Though, injunctive relief has been common phenomenon and frequently the Court detailed out government responsibilities. But they are somewhat remedial in nature rather than complete alteration of legal regime.

⁸³ As amply evidenced by Tehri, Narmada and ND Jayal.

⁸⁴ MARK TUSHNET, WEAK COURTS, STRONG RIGHTS, 2008.

pass strong restraining order for violation of rights in general. As experience shows, this approach gradually worked for better realization of human rights, in general, through improved governmental responses.⁸⁵ Significantly, the Court's approach has been relentless. It has also never developed any differentiating approach towards recognition of different generations of rights in environmental matters, and sustainable development's fuzzy suppleness had definitely helped the Court to maintain this attitude in a long run.⁸⁶

The Court's early sense of trepidation over environmental matters steadily developed into more accommodative behaviour as it delved deep into the core of sustainable development, bringing the 'second level' meaning of sustainable development into life. *Lafarge* and *2G Spectrum* amply illustrated this. What remains commendable is that the Court's idea of accommodating the demand of market society, represented dominantly by rich and powerful class, to a constitutionalized rights paradigm. This, by far has created a diffusing effect of minimizing the possibility of confrontation over right claims yet placing substantial responsibility over government to implement its social and democratic policies.

The careful study further indicates towards a further possibility that the Supreme Court might have adopted a sectoral approach while dealing with different environmental problems. The

⁸⁵ In the areas of hazardous substance regulations, mining, town planning this is most prominent.

⁸⁶ The ambiguous characteristic of the concept perhaps is the reason. What was more visible in later decisions was the international community's increasing focus on the realization of rights at the grass root level.

Supreme Court had shown the most restrictive attitude towards hazardous industrial activities. Except *Essar Oil*,⁸⁷ *Shriram*, *Bhopal*, *Bichhri*, *Research Foundation* and *MV Nayudu* all met with similar fate. The overwhelming deterring temperament in *Shriram* and *Bichhri* slowly gave way for attitude of regulation in *MV Nayudu* and *Research Foundation*.

For the protection of coastal zone, the Supreme Court all along adopted preventive attitude with continuous emphasizing on sustainable development and socio-economic rights.⁸⁸ This it did commendably amidst constant dilution of the CRZ Notification Rules over last two decades.

The prickly issue of right to water is cleverly merged by the Court with right to life and livelihood⁸⁹ and sustainable development had always played a vital role there. This is also perfectly in tune with renewed sustainable development goals even though the Court had not defined the minimum core of the right so far.⁹⁰

⁸⁷ A judgment that patently denied the Court's own rationality developed in many of the like cases.

⁸⁸ Indian Council for Enviro-legal Action, S. Jagannath, Vaamika Island are good examples of Court"s positive attitude. Diksha Holding is only notable case where it opined differently.

⁸⁹ As in Chameli Singh the Court emphatically stressed on right to food, water, decent environment, education, medical care and shelter.

⁹⁰ While the basic need and right to water is universally acknowledged as an important right, in India t is not precisely outlined. This is primarily because it has not been possible to specify a level below which the right to water can be said to be denied. It is for this reason that the literature on social and economic rights produced by the United Nations over the years emphasizes that all socio-economic rights subject to a regime of _progressive realization can only be effective if _minimum core obligations' are built in to them. See Videh Upadhyay, Water Rights and New Water Laws in India: Emerging Issues and Concerns in a Right Based Perspectives,

India Infrastructure Report, (2011), https://www.idfc.com/pdf/report/2011/Chp-5-WaterRights-And-The-New-Water-Laws-In-India.pdf, at p.58,(last accessed Jan. 19, 2018).

Yet, the attitude of the Court differed when it dealt with livelihood issues of the poor people. For example, in *Olga Tellis* it turned to the negative obligations generated by socio-economic rights. But in *Almitra Patel* it was much less sensitive. Likewise, in *Narmada* it largely ignored the foot-dragging in the matter of rehabilitation. What is interesting is that in all these cases the Court approved the projects with differential approach.

The two controversial areas where the Supreme Court had shown patently development friendly attitude are dam building and town planning.⁹¹ The town planning cases are comparatively less highlighted than dam construction controversies. However, here also unlike dam construction cases, the Court did not follow a set pattern while deciding all town planning cases.⁹²

It can be observed that the Apex Court's strong and weak approach towards environmental protection went in tandem with the rise and fall of economic conditions of the country. The Court generally, went for strong enforcement when country's economy had been struggling and adopted weak enforcement strategy when economy revived its growth. Obviously, the treatment of sustainable development also oscillated between these two extremes. Overall, the Court had used sustainable development for progressively cultivating a culture of liberal institutional guidance. It cannot be said that the approach toiled without much rubbing with disparagement. Some of

⁹¹ The most notable are Tehri, Narmada, ND Jayal and Mullaperiyar cases.

⁹² In Almitra Patel, the observation of Justice B.N.Kirpal was completely uncalled for. On the other hand, in Tirumala and Rajendra Shankar the Court emphasized strongly on the observance of the rules laid down for the purpose.

them were bestowed with reasons and some not. Within, the Court had been able to envision the constitutional spirit that often miscarried by the government.

The effort not only internalize the 'externalities' in the rightbased framework but also profoundly, fortify the ever-growing environmental jurisprudence in India.

4. CONCLUSION AND SOME SUGGESTIONS

So, what has the Supreme Court done in terms of putting theories into practice? it has been largely successful in construing disagreeable aspects of sustainable development in fairly rational manner and has been able to instill reasonable amount of predictability in changeable social backdrop. Also, the issue of distributive justice is addressed by it with the recognition of enforceable rights of poor people in more forceful manner. In that arduous process its judges often preferred formalistically rational choice of legal reasoning and offered the idea that non-legal rules do not have much bearing on the outcome of disputes as judging is a rulebound process.

Also, accepting the idea that changing society is the breeding ground of new ideas, judges applied the law to the best of their capabilities and aptitudes,⁹³ espousing legal realism into decisionmaking process.

⁹³ Frank B. Cross, Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance, 92 NW. U. L. R. 251, pp. 255-64, 1997.; Frank B. Cross, Decision making in the U.S. Circuit Courts of Appeals, 91 CALIFORNIA LAW REVIEW 6, 2003.

However, this may invite criticisms as it is believed that there is no clear delineation between the particular work on judgment and decision making that has captured the attention of legal scholars and work in cognitive or social psychology generally, which has long had an influence on the law. If we were to pose the question by asking what psychological factors influence individual judgments and choices, we would have to consider a full range of possibilitiesbeliefs, attitudes, emotions, and social forces, along with purely cognitive processes.⁹⁴ Likewise, the degree to which Supreme Court Justices act tactically between themselves produces four insinuations: (1) bargaining, (2) forward thinking, (3) manipulating the agenda, and (4) engaging in sophisticated opinion writing.⁹⁵

Having said this, it also cannot be denied that the coexistence of need for conservation and development was more of a natural belief than forced idea. That natural belief in a scattered manner slowly permeated in the legal protection. Today, sustainable development has become an indispensable factor in international and national environmental legal process and we no more treat it as a two-dimensional entity. This is evident in the 2030 Sustainable Development Agenda and the 17 Sustainable Development Goals, identifying the natural environment and its life-support services that must be protected if we are to fulfil the needs of nine billion people by 2050.

⁹⁴ Donald C. Langevoort, Behavioral Theories of Judgment and Decision Making in Legal Scholarship: A Literature Review, 51 VANDERBILT LAW REVIEW, pp.1499-1540, 1998.

⁹⁵ LEE EPSTEIN AND JACK KNIGHT, THE CHOICES JUSTICES MAKE, 1998.

The understanding of conservationism of nature and its role had always been there in Indian society. However, that social and philosophical belief was not featured in early Indian Constitution. But when it did, it took little time for judiciary to realize the power of such constitutional provisions in the midst of growing environmental devastation all over the nation. Especially, the Supreme Court's effort to revive environmental integrity had been commendable as it cleverly used sustainable development to justify the need for conservation and development together.

Because sustainable development includes 'right' dimension, the Supreme Court of India slowly fused the broad constitutional mandate into a defined environmental jurisprudence that is rich in right-based narrative. However, this legal discourse had been conflict-ridden and gradually evolved as today's 'conservation and development' regime from early 'conservation versus development conservation' outlook. The or development versus new understanding favorably includes involvement of various stakeholders and their perspectives, with the idea of integrating diverse values and goals.

Largely, it was seen, as revealed by the case laws that compromised judicial attitude in environmental matters meet halfway through the constitutional mandate. The disagreement between legislature, enforcement agencies and the courts over rightframework in environmental controversies, paved the way for more holistic application of sustainable development in environmental laws in India. Even so, some thoughtful suggestions may be explored by the Apex Court in days to come. It has generally given us adequate guidelines and solutions to major and highlighted problems so far. Issues at the micro level are also to be paid careful attention. For example, ensuring public participation at the early stage in governmental decision-making process over natural resource allocation will further strengthen the environmental jurisprudence in India. Also, the Court may think of developing a common guideline, for instance identifying minimum core, of rights rather than having sector specific approach. This is particularly of much significance as theoretical justification of protecting right-framework cannot be a fluctuating one.

The success of achieving sustainable development in today's world rests on becoming practical about governance and its forwardlooking understanding of interrelations between complex economic and ecological systems. The challenge of judiciary will be to ensure accountability in that system. Therefore, it has to be constantly vigilant over governmental policies and long-term agendas. It has to remember that such system is organic in nature. Corruption and malpractices also organically develop in tandem to adjust with judicial vigil. Thus, the Court should have an open-ended and evenhanded attitude to negate any such possibilities. The choices between technology and behavior are also to be understood with 'ahead of its time' mind-set as problem like climate change is going to push everything, including judicial approach, to come up with ingenious solutions in future. Sustainable development hides within it the risk of priority distortion as it has drifted from an incoherent concept to a more contestable one where the powerful stakeholders seek the opportunity for more control. To tackle this, the Court may be required to return to the original idea of sustainability while leaving sufficient liberty for government to make selections on priority. This is particularly important because the idea of sustainable development stands on a bottom up approach. Also, it is time for the Supreme Court of India to remind the government to give importance to programme-specific prioritization.

A CRITICAL EXAMINATION OF THE STATE OF ENVIRONMENTAL GOVERNANCE UNDER PRIME MINISTER - NARENDRA MODI

Leo F. Saldanha^{*}

ABSTRACT

India has developed its own unique jurisprudence on Environmental issues over time, largely framed by policy that has been adopted by the government and also the outcome of judicial interventions, international agreements and public pressure. Where such policy must be guided by science and rational thought, it has come to be grounded in ideology and short-sightedness. This turn of events has been near rampant in the Modi-led NDA government presently at the helm of affairs. Among other things, what has become particularly worrying, based on the Prime Minister's own rhetoric, is the focus on development, often at the cost of the environment and human rights. This essay seeks to undertake a critical evaluation of the present government's approach to environmental policy and concomitant environmental issues that the government is charged with addressing. It begins by discussing the ideal approach to environmental policy and observes how policy decisions are increasingly predicated upon the 'obfuscation of logic.' It then compares the policy ideals previously espoused by the Indian Republic with the new approach that has emerged guided largely by the nature of politics favoured by the Bharatiya Janata Party. In

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sum, the paper concludes that implementing ideological beliefs under the garb of environmental policy, while eschewing scientific thinking, bode ill for the future of environmental policy and ecological security of India.

1. INTRODUCTION

A democratic polity is characterized by how public policy is evolved. The Supreme Court of India has highlighted the foundational prerequisites of evolving public policy in *Delhi Transport Corporation v D.T.C. Mazdoor Congress* in the following manner:

"The absence of arbitrary power is the first essential of the rule of law upon which our whole constitutional system is based. In a system governed by rule of law, discretion, when conferred upon executive authorities, must be confined within defined limits. The rule of law from this point of view means that decisions should be made by the application of known principles and rules and, in general, such decisions should be predictable and the citizen should know where he is. If a decision is taken without any principle or without any rule it is unpredictable and such a decision is the antithesis of a decision taken in accordance with the rule of law."¹

This ruling strongly suggests that public policy needs to be the outcome of deeply democratic reasoning, while accommodating dissent, and ensuring that decision making is a rational exercise of executive power.

¹ Delhi Transport Corporation v. D.T.C. Mazdoor Congress, 1990 SCR Supl. (1) 142.

If we were to examine how public policy is being shaped in India today, we find that individual opinions, investor induced pressure, even myths, are becoming the basis for influencing and determining the nature and direction of public policy. This is not to suggest that such factors did not play a role in shaping public policy in the past. Most certainly they did. But what is distinctively different about how policies are being shaped by the Bharatiya Janata Party government at the Centre, is that they are being re-imagined and restructured to serve the political philosophy and ideological moorings of the party. Can subjective, motivated and ideologically rooted opinions be allowed to shape public policy? This essay examines what impact policies woven out of such methods will have on the State of India's environment and in advancing ecological security of present and future generations.

1.1. Obfuscation as 'science':

Dr. Harsh Vardhan, currently Minister in charge of India's Ministry for Environment, Forests and Climate Change, and also Science and Technology Minister of India, infamously claimed in the 105^{th} Indian Science Congress (March 2018 at Imphal, Manipur) that the renowned scientist Stephen Hawking had said Vedas are superior to Einstein's $E=mc^{2}$.² Hawking never said anything like that. But truth and science seems irrelevant to the Modi administration. As was

² See, Stephen Hawking said theory in Vedas superior to Einstein's E=mc2: Science minister, THE TIMES OF INDIA, (Mar 19, 2018), https://timesofindia.indiatimes.com/india/stephenhawking-said-theory-in-vedas-superior-to-einsteins-emc2-scienceminister/articleshow/63335106.cms, (last accessed Feb. 5, 2018).

revealed in a compilation by Altnews,³ Dr. Vardhan's claim is only the most recent of a series of dubious claims of the Vedic age being the pinnacle of scientific advancement in all of humanity's civilisation process. Prime Minister Narendra Modi has himself led such obfuscation of science, and history, by claiming in a conference of medical practitioners that plastic surgery was advanced in the Vedic period as is evident from the mythical elephant headed Lord Ganesha. He also claimed that Karna, a key character in the epic Mahabharatha, was a product of genetic engineering. Human Resources Development Minister Satyapal Singh has claimed that Darwin's theory of evolution is scientifically wrong, as none have seen an ape turn into man. The same Minister has also claimed that an Indian invented the aeroplane before the Wright Brothers. The Minister for AYUSH has claimed Yoga cures cancer and Rajasthan's Education Minister and Panchayat Raj Minister Vasudev Devnani has claimed that the cow is the only animal that inhales and exhales oxygen. Devnani also has claimed that 1000 years before Newton, a certain Brahmagupta II explained the Theory of Gravity.

Such ludicrous claims have been systemically disseminated by Rashtriya Swayamsevak Sangh (RSS), the parent organisation of BJP, as part of its socio-political project for making India a Hindu Rashtra (Hindu theocratic state) by uniting all Hindus, who constitute a majority of India's population, as one community. To achieve this,

³ Arjun Sidharth, BJP and Science: From Ganesha's Plastic Surgery to Yoga can cure cancer', ALTNEWS, (Feb .9, 2018), accessible at: https://www.altnews.in/bjp-science-ganeshasplastic-surgery-yoga-can-cure-cancer/, (last accessed Feb. 9, 2018).

RSS propagates the Hindutva ideology,⁴ which claims all those who are born in India, irrespective of their religion, are Hindus. And that everyone must participate in rebuilding India to reclaim the greatness of the Vedic period. RSS' key ideologue M S Golwalkar has said this involves "organis(ing) the entire Hindu society, and not just to have a Hindu organization within the ambit of this society" and that this has been the idea "(r)ight from its inception" (of RSS) which has "clearly marked out as its goal the moulding of the whole of society, and not merely any one part of it, into an organized entity."⁵

The Vedic period indeed was marked by various contributions to the advancement of science and mathematics, as was the case in other periods of India's history. But in the Vedic period was also born the Varna system, the basis of the highly divisive caste system, which in subsequent centuries has been made by praxis and enforcement systemic to social life in India. The Vedic Age is therefore a period of various social achievements as also social regression. There is, however, no evidence to suggest that during the Vedic period a scientific theory as robust as Einstein's Theory of Relativity was ever developed.

1.2. Obfuscation as 'logic':

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Prime Minister Narendra Modi has employed his oratory skills to great effect. This has helped the electoral prospects of BJP

⁴ Hindutwa (Hinduness) was popularized by V D Savarkar of the Hindu Mahasabha, a terminology that explicitly advocated the creation of India as a Hindu nation. Savarkar, interestingly, was an atheist.

⁵ SHANKAR GOPALAKRISHNA, UNDERSTANDING THE RSS AND THE SANGH PARIVAR, 22 (2018).

to not only capture power at the Centre, but also in most States of India. However, the same oratory skills have also been employed to make statements that have had a rather debilitating impact on how India responds to contemporary environmental challenges.

This is particularly evident in how Mr. Modi addressed climate change and its consequences. When addressing young and impressionable students from across India in September 2014, an event that was televised on all channels and also broadcast via national radio, thus commanding a massive audience, a rather worried student asked Mr. Modi how India was preparing to tackle climate change. The question, in effect, laid out a platform for Mr. Modi to explain how he would lead the country into a secure future. Mr. Modi responded: "Climate has not changed. We have changed." If one were to be under the impression that a philosophical point was being made here, or if it actually was a gaffe, Modi then went on to say: "Climate change? Is this terminology correct? The reality is that in our family, some people are old ... They say this time the weather is colder. And, people's ability to bear cold becomes less." What Modi ended up doing here was to employ obfuscation as logic. In the process, not only did Modi forfeit a tremendous opportunity to assure a young person that his administration was serious about responding clearly and firmly in addressing climate change impacts, but he also lost the opportunity to awaken India's massive population, especially the youth, to the serious threats the country faces from climate change and of the need for major course corrections. Such comments confused a nation and had international repercussions as well. Coming as it did at the

very beginning of Mr. Modi's term as Prime Minister, many wondered if he is a climate sceptic, perhaps even a denier.⁶ As the leader of the world's second most populous country, a major emitter of greenhouse gases, such articulation buy Modi was perceived as indicative of how his administration would work to tackle climate change. As it turned out, it was more than indicative of Mr. Modi's approach to environmental governance.

For leading environmental correspondent Nitin Sethi, "environmental decisions are not about protecting some anodyne and aesthetical idea of 'environment and forests'. These are decisions that apportion natural resources in an economy – either for a few or for many. They hold the potential of shaping the economy and the nature of economic and social justice in a society". He argues that "...policy decisions on environmental issues are a toughie. Even when such decisions are taken with the most honest intentions they require locating a fine balance between the contesting demands over lucrative resources on some occasions and between profit-making and public health and safety at other times. They involve and impact large business interests at all times."

1.3. Can Obfuscation become Policy?

Environmental governance in India is essentially about delivering to a crucial assurance made in the Constitution of India. This is articulated in Article 39 which requires the State to "...direct

⁶ Malini Mehra, The miseducation of Narendra Modi on climate change, CLIMATE HOME NEWS, (Sep. 8, 2014), http://www.climatechangenews.com/2014/09/08/the-miseducation-ofnarendra-modi-on-climate-change/, (last accessed Feb. 9, 2018). See also Suzanne Goldenberg, Is Narendra Modi a climate sceptic?, THE GUARDIAN, (Sep. 9, 2014), https://www.theguardian.com/environment/2014/sep/09/narendra-modi-india-primeminister-climate-change-sceptic, (last accessed Feb. 9, 2018).

its policy towards securing (a) that the citizens, men and women equally, have the right to an adequate means of livelihood; (b) that the ownership and control of the material resources of the community are so distributed as best to sub-serve the common good; (c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment." This Article requires decisions that involve use of natural resources, impact lives and livelihoods of millions, and determine the economic and socio-ecological security of present and future generations, need to be outcomes of carefully constructed arguments which are tested by democratic reasoning. Being in Part IV of the Constitution containing the Directive Principles for State Policy, Article 39 is not judicially enforceable. However, as Article 37 demands, the principles laid down in Part IV "...are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws."

Evolving policies and public schemes are like weaving a fabric - the fabric is as strong as the tensile strength of the threads that hold it together. The threads that construct strong and progressive policies are based on a very careful understanding of the historical context of the issue being addressed, a thorough analysis of its socio-economic and political context, and a fairly clear assessment of how the policy would impact short and long term goals. The resilience of a democratic process is tested by how it manages to weave progressive and inclusive policies into praxis. When evolving laws and policies, or in amending or reformulating them to adapt to the dynamic demands of the nation, principles set out in Article 39 should serve as a ready reckoner. Obfuscation clearly has no role in such a schema.

This is particularly important in India because our environmental jurisprudence is constructed from multiple learnings from a very complex set of factors, and that over decades. This includes horrific accidents such as the leakage of toxic gases from the Union Carbide/Dow Chemicals factory in Bhopal in 1984 killing and maiming thousands. The Environment Protection Act, 1986, is in some ways a response to prevent such events, and is also an effort to ensure rule of law works to prevent such incidents from taking place. For a similar reason, pollution control laws have been strengthened, and when necessary new ones initiated, such as those to tackle hazardous waste, e-waste, plastic, etc.

Thousands of struggles and public actions have informed and caused reform in laws governing forests, wetlands, biodiversity, coastal areas and in securing the traditional rights of Adivasis over forests. Some of these are the Biological Diversity Act, 2002 and the historic Forest Rights Act, 2006. Multiple public interest litigations have been advanced to tackle the loot of natural resources, contain damage to the environment and protect human rights. As a consequence, various path-breaking judgments have been delivered, particularly by the Supreme Court of India which invoked and integrated progressive environmental and human rights principles into our environmental jurisprudence. Alongside, India has also demonstrated great willingness to work with the community of nations to respond to global and regional environmental challenges and initiatives. In the process, various international environmental and human rights treaties have been ratified. All this set the stage fo building a strong network of environmental administration and regulatory institutions, so that the important task of securing India's ecological and social security was not left to chance.

In this context, if we review the statements made by the Prime Minister Modi and the Environment Minister, and also those of other senior functionaries of the government, they come across as reckless and dismissive of such serious matters of public concern. This does not bode well for governance at all. When deliberate obfuscation is being passed off as statements of the government's understanding of an issue, or for advancing narrow political agendas, the consequences can be quite unpredictable, dangerous and irreversible.

2. SECURING ENVIRONMENTAL GOVERNANCE IN AN AGE OF GLOBALISATION

There is little dispute that the state of the environment of India is far from healthy. This can be perceived in various ways. Despite the enactment of a variety of progressive environmental legislations, regulations and norms, their implementation has been weak. Institutions set up to assist in the implementation of these laws and norms, and also regulate against pollution, have weak funding from State and Central budgets and thus have very thin administrative base, even as they are required to periodically monitor and regulate a vast variety and network of industries and urban and industrial areas across India. This is clearly evident in the woeful state of the massive Ganges River which is highly polluted throughout its flow through the plains of north India. This is also true of most rivers across India. The largely unplanned industrialisation and urbanisation in India has compounded the problem and caused a range of complex environmental, social and health problems. Responses to address them have been symptomatic at best. It should come as no surprise then that recent analysis of the state of pollution worldwide by the World Health Organisation reveals nine of ten most polluted cities in the world are in India.⁷

When it comes to usage of water, much of India's ground water resources have been overdrawn. This is posing a variety of problems in sustaining agricultural productivity and to public health.⁸ The state of India's forests is not healthy⁹ despite claims to the contrary made by the Forest Departments and Ministry of Environment. The Alliance of Leading Environmental Researchers and Thinkers says this is the outcome of "*excessive optimism*."¹⁰ In coastal areas fisher people report fish drought and sharp decrease in fish diversity due to contamination of coastal waters, and

⁷ Shafi Musaddique, Here are the world's 10 most polluted cities – 9 are in India, CNBC, (May. 3, 2018), https://www.cnbc.com/2018/05/03/here-are-the-worlds-10-most-polluted-cities--9-are-in-india.html, (last accessed Feb. 9, 2018).

⁸ Prabhat Singh, India's Groundwater Crisis: Depleting groundwater levels the biggest threat to rural livelihoods and food security, LIVE MINT (May. 1, 2015), https://www.livemint.com/Opinion/v4nXpXNxSJtxQNlEbvtJFL/Indias-groundwatercrisis.html, (last accessed Feb. 9, 2018).

⁹ A.K. Ghosh, Real state of India's forests, DOWN TO EARTH, (July 15, 2016), http://www.downtoearth.org.in/blog/real-state-of-india-s-forests-54908, (last accessed Feb. 9, 2018).

¹⁰ Priya Davidar, Debate Erupts over Status of Wildlife in India, ALERT, (Jun. 14, 2016), http://alert-conservation.org/issues-research-highlights/2016/6/13/1qjx5muigu4ne5891 sfyq6fnunw7yw (last accessed Feb. 9, 2018).

overexploitation by industrial fishing.¹¹ There is also the disturbing fact that about half of India's coastline is prone to erosion.¹²

Pastoralists are engaging in distress sale of livestock as they are losing access to grazing pastures, and are not able to find fodder. In fact, India, overall, has 63% less fodder than is needed to provide for the approximately 500 million livestock. Of late the fear of right wing lynch mobs attacking cattle traders has also affected pastoralists and farmers from gaining economically with beef production.¹³ A decade after the Forest Rights Act was enacted, less than half of the 45 lakhs claims to forest rights have been settled.¹⁴ In the farming sector rising input costs and dwindling gains has made the life of a farmer miserable. As a result, over 3 lakh farmers have committed suicides since 1995, unable to pay off their mounting debts and face humiliation.¹⁵

It is clearly evident that natural resource dependent communities, who form a major proportion of India's population,

¹⁴ Dommen C. Kurian, 2005, Implementing the Forest Rights Act: Lack of Political Will?, Oxfam India Policy Brief, Oxford UK, https://www.oxfamindia.org/sites/default/files/PB-implementing-forest-rights-actlack-of-political-will-261115-en.pdf, (last accessed Feb. 10, 2018).

¹¹ Neha Jain, India's seas are gasping for oxygen and this can affect fish catch, MONGABAY, (Mar. 13, 2018), https://india.mongabay.com/2018/03/13/indias-seas-are-gasping-for-oxygen-and-this-can-affect-fish-catch/, (last accessed Feb. 10, 2018).

¹² Manupriya, 45% Of India's Coastline Facing Erosion, INDIA SPEND, (Aug. 11, 2015), http://www.indiaspend.com/cover-story/45-of-indias-coastline-facing-erosion-34881 (last accessed Feb. 10, 2018).

¹³ Jitendra, How is fodder crisis rendering livestock vulnerable?, DOWN TO EARTH, (Mar 23, 2017), http://www.downtoearth.org.in/coverage/drought-of-fodder-52671, (last accessed Feb. 10, 2018).

¹⁵ Chaitanya Mallapur, Agricultural output rose five fold in 60 years but farming sector is in distress, HINDUSTAN TIMES, (Aug 1, 2017) https://www.hindustantimes.com/indianews/agricultural-output-rose-five-fold-in-60-years-but-farming-sector-is-indistress/story-cu3zGEbBAb5yB9l2LoJAvN.html, (last accessed Feb 10, 2018).

are not gaining from the 'good life'¹⁶ that was promised when India's economy was liberalised and globalised. Instead, they are struggling to survive and their distressing state is indicated by the historically unprecedented farmer suicides.

President K. R. Narayanan presciently warned of the implications of the paradigm of development globalisation advocates in his Republic Day address in 2000. He lamented that globalisation was producing "(*t*)*he unabashed, vulgar indulgence in conspicuous consumption by the noveau-riche (which) has left the underclass seething in frustration.*" And painfully commented that "(*o*)*ne half of our society guzzles aerated beverages while the other has to make do with palmfuls of muddied water. Our three-way fast lane of liberalisation, privatisation and globalisation must provide safe pedestrian crossings for the un-empowered India also, so that it too can move towards 'equality of status and opportunity.*"¹⁷ President Narayanan was alerting the nation to growing discontents that were spreading across India, and was worried that it would intensify and spread if due care was not taken to ensure development and governance was made inclusive, and with due dispatch.

Some years later, in 2006, Home Minister Shivraj Patil tabled

¹⁶ In his address to the National Development Council in 2001, Shri. A. K. Antony, then serving as Chief Minister of Kerala, had lamented that the much promised 'good life' had not reached at least a third of India's population, and they continued to suffer like before. The speech delivered on 1st September 2001 at the 49th meeting of the Council can be accessed at: http://planningcommission.nic.in/plans/planrel/ pl49ndc/index.php?state=kerala.htm.

¹⁷ See, The President Speaks a speech by K.R. Narayanan in LOOKING EAST A SYMPOSIUM ON THE NEED TO REFOCUS OUR FOREIGN POLICY, Seminar, No. 487 (2000), http://www.india-seminar.com/2000/487/487%20narayanan.htm, (last accessed Feb. 12, 2018).

a report in Parliament, entitled *Status Paper on the Naxal problem.*¹⁸ This report indicated the extent of discontent then prevailing in India. The report reveals that 220 districts in India, roughly equivalent to 40% of India's landmass, were not governed effectively by the State due to Naxal led insurgency. Interestingly, almost all of these affected districts are forested and tribal dominated. The discontents and ensuing conflict should come as no surprise given that these are areas where mineral extraction, deforestation and exploitation of labour and of farming communities is massive. Political representation is weak, and the capacity of communities to find agency to articulate their world views is almost wholly absent here through formal systems of governance. Unless communities here organise themselves into mass movements, there is rarely any acknowledgement of their concerns and distress, and thereby no effective redressal of their demands for just and secure life.

The dubious role of GDP as an indicator of economic success:

Yet, such realities appear to have very little impact in the shaping of national economic policies. Predominantly, the success of a government is determined by how it has sustained a healthy rate of economic growth measured as it is in terms of Gross Development Product (GDP) terms. International financial institutions like the World Bank, International Monetary Fund, Asian Development Bank, political formations like the G8, Davos summit, etc., and also large financial banks, have primed GDP as an indicator of success or

¹⁸ Union Home Minister Mr. Shivraj Patil, Government of India, *Status Paper on the Naxal Problem*, http://www.satp.org/satporgtp/countries/india/document/papers/06Mar13_Naxal%20Problem%20.htm, (last accessed Mar. 6, 2018).

failure of economic policies. As national leaders respond to such pressures, government's focus on delivering to such perceptions, respond with deals that sweeten the investors' taste, and in the process the real needs of the citizenry is ignored. Investor induced pressures also work to sustain this approach to governance and play on the need to be competitive in a globalized world to promote schemes and policies that return healthy returns to investors, unmindful of what this does to the socio-economic status of the citizenry. Commenting on GDP forming the unitary indicator for evaluating governance and economic policies, *The Economist* observes that it is "*a measure created when survival was at stake, took little notice of things such as depreciation of assets, or pollution of the environment, let alone finer human accomplishments*" and "*treats the plunder of the planet as something that adds to income, rather than as a cost*."¹⁹

Of such "*widespread plunder*" President Narayanan had warned about two decades ago. Over the past couple of years, Oxfam has produced reports that reveal the beneficiaries of such a model of development: 8 men own half the world's wealth, and 42 people have wealth equal to the 3.7 billion poor people of the world.²⁰ And the gap is widening, not closing: 82% of the wealth generated globally in 2017, ended up with the top 1%.²¹ What we are witnessing is a

¹⁹ The Trouble with GDP: Measuring Economies, THE ECONOMIST, (Apr. 30, 2016), https://www.economist.com/news/briefing/21697845-gross-domestic-product-gdpincreasingly-poor-measure-prosperity-it-not-even, (last accessed Feb. 15, 2018).

²⁰ Larry Elliot, Inequality gap widens as 42 people hold same wealth as 3.7bn poorest, THE GUARDIAN, (Jan. 22, 2018), https://www.theguardian.com/inequality/2018/jan/22/inequality-gap-widens-as-42-people-hold-same-wealth-as-37bn-poorest, (last accessed Feb 28. 2018).

²¹ See, Richest 1 percent bagged 82 percent of wealth created last year - poorest half of humanity got nothing, OXFAM, (Jan 22, 2018), https://www.oxfam.org/en/pressroom/pressreleases/

struggle between economic policies driven by, and servicing the interests of, powerful global financial powers and the super-rich, who are also increasingly capturing or manipulating political power to serve their goals. Efforts invested over decades through various legislative and policy initiatives, and programmatic actions, to build equity as the basis for governance, is being comprehensively sidestepped. As the Oxfam study reveals, the top 1% is clearly winning. And in India, such disparity has reached frightening proportions, as reports reveal that the top 1% had 58% of India's wealth in 2014, and this has increased to 73% in 2017 and 35% in 2000.22 As Oxfam reports, "India's top 10% already held over half the country's wealth (52%) in 1991, but the situation worsened further by 2012 with their share in total wealth rising to 63%.... In the same period, the share of wealth held by the bottom 50%, which was already low at 9% in 1991, fell to 5.3%."23 Overall, it is clear that prevailing economic policies are designed to accentuate such disparities.

This raises serious questions about the role of public policy as an instrument of governance and its responsibility in delivering to a key promise of democracy: development with equity. As Arjun Appadurai explains, "*(d)emocracy rests on a vision. And all visions require*

^{2018-01-22/}richest-1-percent-bagged-82-percent-wealth-created-last-year, (last accessed Feb. 28, 2018).

²² See, India's richest 1% corner 73% of wealth generation: Survey, TIMES OF INDIA, (Jan. 22, 2018), https://timesofindia.indiatimes.com/business/india-business/indias-richest-1-corner-73-of-wealth-generation-survey/articleshow/62598222.cms, (last accessed Feb. 28, 2018). See also, Rukmini S. India's staggering wealth gap in five charts, THE HINDU, (Dec. 8. 2014), http://www.thehindu.com/data/indias-staggering-wealth-gap-in-five-charts/article10935670.ece, (last accessed Feb. 28, 2018).

²³ Ajai Sreevatsan, India's top 10% own 63% of country's wealth, bottom 50% own 5.3%: Oxfam report, LIVE MINT, (Feb. 23, 2018), https://www.livemint.com/Politics/ 9stBSHEcP13HsQ4oG5RCcJ/Indias-top-10-own-63-of-countrys-wealth-bottom-50own.html, (last accessed Feb. 28, 2018).

hope. But it is not clear whether there is any deep or inherent affinity between the politics of democracy and the politics of hope."²⁴ That surely seems to be the case in the indecent accumulation of global wealth in the hands of a tiny number, almost all of who are citizens of democratic countries. What then is the future of democracy, if it cannot guarantee equity for all? This when, as the World Bank reports "Human capital - the skills, experience and effort of a population, is the world's greatest asset. It accounts for about 65% of global wealth."²⁵ In India this would mean that natural resource dependent communities produce much of the wealth but gain nothing at all from it despite their hard work.

3. Power to the people

As we focus on the fault-lines of globalisation, and worry about its implications, it is worth taking note of several path-breaking legislations India has passed to ensure development with equity, as promised in Article 39, becomes a reality. These include the Constitutional 73rd Amendment (Panchayat Raj) Act, 1992, Constitutional 74th Amendment (Nagarpalika) Act, 1992, Panchayat Raj (Extension to Scheduled Areas) Act, 1996, Biological Diversity Act, 2002, and Scheduled Castes and Scheduled Tribes and Other Traditional Forest Dwelling Communities Act, 2006 (popularly known as Forest Rights Act). The basic premise in passing these laws is that with devolution of power to Local Governments and with

²⁴ Arjun Appadurai, *Hope and Democracy*, 19 PUBLIC CULTURE 29, 29 (2007), accessible at: http://www.arjunappadurai.org/articles/Appadurai_Hope_and_Democracy.pdf, last accessed (Mar. 18, 2018).

²⁵Year in Review: 2017 in 12 Charts, WORLD BANK, (Dec. 18, 2017), http://www.worldbank.org/en/news/feature/2017/12/15/year-in-review-2017-in-12charts, (last accessed Feb. 28, 2018).

decentralisation of administration, governance institutions become accessible to people at a level closest to them. In addition, greater transparency and accountability would result. All this would aid in building a form of governance that would, in time, ensure prudent use of the "material wealth" for "common good", and ensure "operation of the economic system does not result in the concentration of wealth and means of production to the common detriment."

Laws are part of an ongoing effort to respond to a Constitutional schema that promises development that advances social and ecological security. Key mechanisms to make this a reality involve and include advancing governance through empowered Local Governments and their instrumentalities, such as Panchayats (in rural areas and Councils and Ward Committees (in urban areas), and the developmental efforts of both urban and rural areas would be coordinated by District/Metropolitan Planning Committees. Forest Right Committees would play a substantive role in in forested areas and Biodiversity Management Committees in biodiversity rich areas, and also where there is traditional knowledge associated with local bioresources. Together, these constitutionally mandated bodies would govern administration and development from the ground up, as is envisaged in the 11th and 12th Schedules of the Constitution, which are associated with the Panchayat Raj and Nagarpalika Acts respectively. Environmental governance is an integral part of the functioning of Local Governments, as is envisaged through these laws, in particular Article 243ZD and ZE.

Notwithstanding all these promises, the decentralisation of

administration and devolution of power in India's governance systems has not taken place despite the passage of 25 years of the enactment of the Panchayat Raj and Nagarpalika Acts. The continuance of centralised economic planning by State and Central Governments has been a key reason for this situation. Moreover, neo-liberal economic policies have dominated the governance landscapes during this period and ensured that decision making relating to mega projects, particularly those that involve massive allocation of natural resources or involve major financial investments, are within the domain of State and Central administrations and their decisions are opaque to public oversight. Globalisation has played a significant role in this process for it demands a decision-making framework that is supportive of the competitive nature of investors, especially foreign corporations, and promotes prime attention of key governance bodies on quick turnaround in decisions to investor induced demands. This is an investment of faith in the Mayo doctrine which promotes decision making by a few over the democratic choices of many. However, the laws listed above are all reflective of the Ripon Doctrine which advocates representative decision making as a key method of governance, and as a necessary prerequisite for ensuring developmental decisions are an outcome of carefully and democratically debated choices of resource use, of investment of labour, of production of wealth and also about how revenue streams generated are guided by principles of equity.²⁶

²⁶ For a discussion on approaches to governance advocated by Lord Mayo in 1870 and then by Lord Ripon a decade later, both Viceroys of the British Empire to India, see, W.S. Seton-Karr, Lord Ripon's New India Policy, 1 THE NATIONAL REVIEW, 208-223 (1883); see also Benjamin Weinstein, Liberalism, Local Government Reform, And Political Education In

4. SITUATING MODI ADMINISTRATION'S APPROACH TO ENVIRONMENTAL GOVERNANCE

Prime Minister Narendra Modi's administration is pushing environmental governance in a direction opposed to the very nature of environmental jurisprudence that India has built over decades. In that sense, it is steeped in following the Mayo Doctrine. Soon after assuming power, amongst the first major decisions Mr. Modi took is to set up a High-Powered Committee to review India's environmental and forest protection laws²⁷ and with a mandate to "review these Acts and suggest appropriate amendments to bring them in line with their objectives" (emphasis supplied). Merely two months was allotted to deliver a report on reshaping and realigning six very complex environmental laws of India. It was also admitted that "two months given to the Committee are not adequate for a thorough examination, revamping and redesigning of the various Acts and rules", and yet the Committee submitted its report in November 2014, within four months of being given the task,²⁸ under the chairmanship of former Cabinet Secretary Mr. T S R Subramanian.²⁹

Great Britain And British India, 1880–1886, 61 THE HISTORICAL JOURNAL, 181-203 (2018), https://www.cambridge.org/core/journals/historical-journal/article/liberalism-local-government-reform-and-political-education-in-great-britain-and-british-india-18801886/641525816F5D286E5A95D615209EA480, (last accessed Mar. 18, 2018).

 ²⁷ Megha Barhee, Indian Govt Sets up Committee to Review Environmental Laws; Not Everyone Is Happy With It, FORBES, (Oct. 16, 2014) https://www.forbes.com/sites/meghabahree/2014/10/16/indian-govt-sets-up-committee-to-review-environmental-laws-not-everyone-is-happy-with-it/#345853534deb, (last accessed Feb. 28, 2018).

²⁸ Ministry of Environment, Forest & Climate Change, Government of India, *The Report of High Level Committee to review various Acts*, http://envfor.nic.in/sites/default/files/press-releases/Final_Report_of_HLC.pdf, (last accessed Mar. 6 2018). (*hereinafter Subramanian Report*).

²⁹ Mr. T S R Subramanian was Cabinet Secretary from 1st August 1996 to 31 March 1998. Following the submission of this report, Mr. Subramanian chaired another committee to

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Given the speed with which the Committee prepared its report, the 'consultation' processes that it engaged in was found wanting in many respects and was widely criticised as an exercise steeped in dismissing the critical importance of democratic debate and dissent in such a fundamental review of environmental and forest protection laws. In a critique of the Committee's report offered by Environment Support Group, co-authored by this author, we held that:

"(w)hen phrases such as proposing 'specific amendments' to existing environmental laws '...to bring them in line with current requirements to meet objectives' are employed, it could be interpreted in any manner possible. Such a phrase does not mean anything specifically, yet could be interpreted in any manner possible. This gives rise to all sorts of suspicions and worries especially because environmental and forest protection laws of India have a direct bearing on securing the ecological and economic security of not just present generations, but generations to come."³⁰

The Committees' approach can be summarized as promoting reform of India's environment and forest protection laws by investing 'utmost good faith' in investors and developers to selfregulate, thus 'making doing business easier in the country'.³¹ In effect, this proposal inverted dismissed the very praxis foundational

evolve a new education policy. He passed away on 26th February 2018 at the age of 79 years.

³⁰ Leo F. Saldanha & Bhargavi S. Rao, A Non-trivial Threat to India's Ecological and Economic Security: A Critique, ENVIRONMENT SUPPORT GROUP, 2 (2014), http://esgindia.org/sites/default/files/campaigns/press/esg-critique-tsr-subramanianreport-dec-.pdf. (hereinafter ESG Critique), (last accessed Mar. 28, 2018).

³¹ Subramanian Report *supra* note 27 at 57.

to environmental governance in India: democratic decision making with oversight from autonomous regulatory agencies review. There is little doubt that environmental decision making in India has been largely ritual and rarely democratic. It has also been extremely ineffective in addressing key concerns of impacted communities and final decisions are almost entirely based on information supplied by investors in securing environmental and forest clearances. Mr. Jairam Ramesh, former Union Minister of State for Environment and Forests, had said that the rate of according environmental clearances to projects was 'unnaturally' and 'unhealthily' high' and that "one analysis indeed indicated that the percentage of approved projects works out to 99.1%."32 And as Green Tapism: A Review of the Environmental Impact Assessment Notification – 2006, co-authored by this author documents, it has resulted in promoting investments 'even when they encroach upon and fundamentally violate key precepts of Indian environmental and forest protection legislations.³³

Jairam Ramesh was making the case that for effective implementation of India's environmental and forest protection laws, the competence and capacities of environmental decision-making bodies needed to be enhanced and democratised with due dispatch. The Subramanian Committee, in contrast, was arguing that

³² Nitin Sethi, Only 19 projects were denied green clearance from 2008 to Aug 2011, THE TIMES OF INDIA, (Aug. 16, 2011), http://timesofindia.indiatimes.com/home/environment/Only-19-projects-were-denied-green-clearance-from-2008-to-Aug-2011/articleshow/9617490.cms, (last accessed Mar. 28, 2018).

³³ Leo F. Saldanha, Abhayraj Naik, Arpita Joshi & Subramanya Sastry, Green Tapism: A Review of the Environmental Impact Assessment Notification – 2006, ENVIRONMENT SUPPORT GROUP, 7 (2007), https://www.academia.edu/1155083/Green_Tapism_A_Review_of_the_Environmenta l_Impact_Assessment_Notification_2006, (last accessed Mar. 28, 2018).

environmental regulation, despite its admitted weaknesses, must not come in the way of business. This even when the Committee admitted that "our businessmen and entrepreneurs are not all imbued in the principles of rectitude – most are not reluctant, indeed actively seek short-cuts, and are happy to collaboratively pay a 'price' to get their projects going; in many instances, arbitrariness means that those who don't fall in line have to stay out".³⁴

The Committee went even further. In what can be considered subordination of environmental governance to executive decisionmaking powers of the Environment Ministry, admittedly arbitrary, the Committee recommended that even if "...the Ministry may not be in a position to give detailed reasons for its decisions, which may be couched in generic terms", it could take decisions in certain matters suo moto.35 This was deeply problematic in multiple ways, particularly in highly contentious cases. Besides, such a proposal is in clear violation of the Constitutional 73rd Amendment (Panchayat Raj) Act, 1992, Constitutional 74th Amendment (Nagarpalika) Act, 1992, and the Scheduled Castes and Scheduled Tribes and Other Traditional Forest Dwelling Communities Act, 2006, amongst others, which require environmental decision-making is to be an outcome of discussion and debate in constitutionally appointed and elected Local Governments. For instance, Article 243 ZD and ZE of the Constitution requires District Draft Development Plans are developed democratically taking into account the use of water, natural resources and environmental concerns. It is also in gross variance to Principles 10 and 11 of the Rio Declaration on

³⁴ Subramanian Report *supra* note 27 at 8.

³⁵ ESG Critique *supra* note 29 at 31.

Environment and Development (1992) which argue for environmental decision making to be democratic as "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level" (Principle 10), and "States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply" (Principle 11).³⁶

It is knowledge that such constitutional common requirements and international commitments have been rarely complied with in India's environmental regulation and governance systems. An apt example would be the manner in which India pushed through the massive iron ore mining and steel plant by South Korean giant POSCO, and this was blocked largely due to the successful resistance by local communities in Jagatsingpur district of Odisha.³⁷ In that sense, the Subramanian Committee was an opportunity to fundamentally reform environmental governance by promoting meaningful and sincere implementation of environmental and forest protection laws and to deepen democratic decision making. This was forfeited, however, as the Committee responded to the key directive of the Government, which was to "review these (environmental) Acts and (to) suggest appropriate amendments to bring them in line with their objectives."

³⁶ The Rio Declaration On Environment And Development (1992), http://www.unesco.org/education/pdf/RIO_E.PDF, (Last accessed: Jun 20,2018)

³⁷ For a detailed critique of the environmental and social impacts of the POSCO project, and also how applicable laws and policies were sidestepped in advancing the project on the claim that it serve the "strategic interest" of the country, *see*, Leo F. Saldanha and Bhargavi S. Rao, *Tearing through the Water Landscape: Evaluating the environmental and social consequences of the POSCO project in Odisha, India,* ENVIRONMENT SUPPORT GROUP (2011), http://www.indiaenvironmentportal.org.in/files/water-landscape-esg-posco-final-27may201.pdf, (last accessed Mar. 28, 2018).

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The ESG Critique discussed the major lacunae in the Subramanian Report as follows:

"The task of identifying gaps and proposing reforms expectedly would involve deliberate, careful and sensitive analysis of various factors, and would demand deeply democratic consultations with a range of constituencies across the length and breadth of this vast country, filled as it is with multiplicity of languages, geographies, ecologies and aspirations. Adequate time is of essence to interrogate such complex terrains, as is also the quality of the dialectic employed.

The High- Powered Committee admittedly has not had the necessary time, which it was aware of right at the inception of its appointment. It would have been expected from men who have held high positions of power to negotiate with the Government a reasonable duration to address all the complexities involved, lay down the framework of engagements in a transparent manner, and then go about its task. The Committee has been content in rushing through this terrain and produced a report that does have some ideas worth considering. But in the end, the recommendations of the Committee appear to be nothing more than a cacophony of different voices, in which the one who shouted loudest was heard, and millions who could not, or were not allowed to, were never heard. As a result, this is a Report that does not represent India's challenges in environmental governance."

The failure of the Subramanian report in addressing the real challenges of environmental governance in India may also be perceived in comparison with the 1980 "Report of the Committee for Recommending Legislative Measures and Administrative Machinery for Ensuring Environmental Protection"³⁸ constituted by the Government of India. This report was written with great far-sightedness as is evident from this excerpt:

"The Committee would like to emphasise that at present the greed of commercial interest and their lack of concern for the future, as well as the genuine needs of the poor for essential articles of daily need such as fuel and fodder, contribute to the denudation of forests and vegetation and thereby to the degradation of the environment. Legislative measures should be devised to curb the degradation caused by profit motive through several punishment, while appropriate steps should be taken to meet the needs of those below the poverty line...".

Following the submission of the Subramanian Report, there has been widespread criticism that it clearly was an exercise responding to the dominant economic agenda of BJP, placing business interests over ecological security of India. Unmindful, even bridling at such criticisms, Mr. Modi remains committed to this approach. Several of his key economic reforms, particularly demonetization and the introduction of Goods and Services Tax regime, have failed to deliver, and have also been termed a colossal

³⁸ Department of Science and Technology, Government of India, Report of the Committee for Recommending Legislative Measures and Administrative Machinery for Ensuring Environmental Protection, (Sept. 15, 1980).

failure by Subramanian Swamy, a key economist of BJP.³⁹ And it has been argued that "(*t*)bree years into its five-year term ..the Modi government's approach to social policy remains unclear"⁴⁰, engaged in "grandstanding", and which "stems in large part from his preoccupation with presentation over substance."⁴¹

In a country where most are worried endlessly about their day to day existence, given the highly stressful state of their personal economies, the role of a leader is crucial in directing policy and guiding governance to serve the interests of most peoples, if not all. Yet, the Modi administration has quietly proceeded to implement various aspects of the Subramanian Report, and even proceeded to take steps to make the National Green Tribunal dysfunctional. Jairam Ramesh has challenged such efforts in the Supreme Court arguing that ""(*d*) *ilution of the independence of the NGT is a direct dilution of the fundamental right to a clean environment and a balanced ecosystem*."⁴²

³⁹ Press Trust of India, Demonetisation a 'failure', GST 'nightmare' at present but BJP will win 2019 elections: Subramanian Swamy, FINANCIAL EXPRESS, (April 9, 2018), https://www.financialexpress.com/india-news/demonetisation-a-failure-gst-nightmare-at-present-but-bjp-will-win-2019-elections-subramanian-swamy/1126738/, (last accessed Mar. 28, 2018).

⁴⁰ Yamini Aiyar, *Three Years On, the Modi Government Still Has Gaping Holes in its Social Policy*, THE WIRE, (Feb. 1, 2017), https://thewire.in/economy/social-policy-three-years-modigovernment, (last accessed Mar. 28, 2018).

⁴¹ Modi blues: India's prime minister focuses too much on appearances, THE ECONOMIST, (Nov. 2, 2017), https://www.economist.com/news/leaders/21730880-consequences-are-beginning-catch-uphim-indias-prime-minister-focuses-too-much, flast accessed Mar. 28, 2018).

⁴² IANS, BJP Government may disband National Green Tribunal: Jairam Ramesh, (Aug. 30, 2017), THE NEWS MINUTE, accessible at: https://www.thenewsminute.com/article/bjpgovernment-may-disband-national-green-tribunal-jairam-ramesh-67624, (last accessed Mar. 28, 2018).

4.1. Serving the Hindutva agenda by the problematic misuse of environmental laws:

One deeply disturbing aspect of the Modi administration's approach to environmental governance is that it has attempted to employ environmental laws to serve the Hindutva agenda of his political party and of the Sangh Parivar in the end. While claiming Vedas to be superior to the Theory of Relativity positions faith over science, arguments contesting and trivialising well founded and harshly experienced climate change realities dismisses the very need for factoring a range of complexities in today's decision making. Such articulations aren't random or co-incidental, but are part of a wellorchestrated effort to subordinate reason and rationale to faith and lumpenised decision-making. ideology, perhaps even This comprehensively displaces and dismisses the role of rationale and scientific temperament in public decision making.

This is the very outcome of the controversial 23 May 2017 Notification which the Indian Environment Ministry introduced under the Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017.⁴³ This Notification was widely perceived as an effort to divide society on what people eat. The amendments actively restricted trade and slaughter of cattle, expanded the meaning of cattle to also include camels, and introduced restrictions and monitoring mechanisms that would render impossible cattle trade,

⁴³ For access to the Rules and accompanying Notification see, Vidhya Kumaraswamy, Prevention of Cruelty to Animals (Regulation of Livestock Market) Rules, 2017, LAWLEX.ORG (May 29, 2017), accessed at: https://lawlex.org/lex-pedia/prevention-cruelty-animalsregulation-livestock-market-rules-2017/13779, (last accessed Mar. 28, 2018).

slaughtering of cattle for food and particularly the consumption of beef. This was effectively an attack on personal choice, and on the Right to Livelihood of millions who are associated with rearing livestock and trading cattle for slaughter. And this was done through a Notification which does not require Parliament scrutiny. This at a time when lumpen lynch mobs allied with the Sangh Parivar were actively attacking and killing Muslim cattle traders, Dalits and also those who were suspected of consuming beef. In the back drop of nation-wide protests, a Public Interest Litigation was filed seeking a stay and quashing of the Notification by the Madras High Court. The Court stayed the Notification, a decision subsequently confirmed by the Supreme Court. A miffed Ministry finally withdrew the Notification in November 2017. It is evident from this that BJP is restless in utilising environmental laws to serve its political agenda, and the need for rationality and democratic debate in such matters is of little concern to its Hindutva project and constitutional norms are often comprehensively side-stepped.

Formulating law and policy in such a prejudicial climate responds to and encourages the lumpenisation of political discourse. It also brings to fore the role of science and scientific reasoning in guiding public decision making. It is imperative to be reminded here of a debate that prevailed in Constituent Assembly while drafting the Constitution over the cow slaughter issue. While there was a widespread view to not get into the question of what people eat, the demand for regulating peoples' consumption practices, in particular the protection of cows from slaughter, was brought up by Thakurdas Bhargava who claimed "(t)he Hindu sentiment in favour of cow protection is old, widespread and deep-seated and it has taken no time to rouse at this moment to a pitch when it is difficult, if not impossible, to ignore it. I think that the matter does require consideration and we must take a decision whatever it is after due consideration. The Hindu feeling on account of recent happenings is very much agitated and this movement, like the movement in favour of Hindi, is bound to gain strength more rapidly than we can imagine"⁴⁴ About such an argument, legal commentator A. G. Noorani records that it "…. began by paying obeisance to science and modernity and ended up with the religious plea"⁴⁵.

5. CONCLUSION

India has largely evolved its environmental jurisprudence on the basis of rationale and democratic reasoning. This is evident in how the N. D. Tiwari Committee approached the need to consider environmental impacts of development and to ensure that development with equity is not lost sight of. More recently, Jairam Ramesh as Environment Minister has demonstrated how law, science and public opinion can be integrated in formulating a policy on highly controversial issues, such as the re-examination of the controversial approval accorded by the Genetic Engineering Approval Committee (later approval was rephrased as Appraisal) for B.t. Brinjal, India's first genetically modified food, without any public

⁴⁴ VALMIKI CHOUDHARY, DR RAJENDRA PRASAD: CORRESPONDENCE AND SELECT DOCUMENTS,91-92 (1947), as quoted by A. G. Noorani, *The Ban on Cow Slaughter*, FRONTLINE (Jun. 24, 2016), http://www.frontline.in/social-issues/the-ban-on-cowslaughter/article8700526.ece. [last accessed Mar. 28, 2018].

⁴⁵ A.G. Noorani, *The ban on conv slaughter*, FRONTLINE, (Jun. 24, 2016), http://www.frontline.in/social-issues/the-ban-on-cow-slaughter/article8700526.ece, (last accessed Mar. 28, 2018).

consultation. In evolving this policy, Ramesh personally conducted Public Consultations⁴⁶ which witnessed the participation of thousands, in seven locations nation-wide, and finally came up with a reasoned decision to issue a moratorium on the release of the GMO product which he based on a range of scientific evidence, widely prevailing public doubt and guided by the Precautionary Principle⁴⁷. Ramesh repeated a similar exercise of public consultations on two other contentious issues, the 'reform' of the Coastal Regulation Zone Notification and the National Green Mission. These consultations set a rather high standard for the methodology that could be employed to democratise environmental governance, which was seen until then as largely a preserve of the technically skilled and of the scientific community. Here were efforts to humanise environmental governance and to bring it within access of ordinary folks nationwide. However, such popular approaches did not result in systemic reforms required to address the critical gaps in India's environmental governance.

Jairam Ramesh eventually capitulated to the realpolitik of decision making when under pressure from the Prime Minister Dr. Manmohan Singh's office, he approved a controversial clearance to the massive steel project promoted by South Korean POSCO in Orissa, overlooking reports of two Expert Committees, which he had

⁴⁶ Centre for Environment Education, Ministry of Environment and Forests, Government of India, *National Consultations on Bt Brinjal*, available at: http://www.moef.nic.in/downloads/public-information/Annex_BT.pdf, (last accessed Feb. 28, 2018)

⁴⁷ Ministry of Environment and Forests, Government of India, *Decision on Commercialisation of B.t. Brinjal*, http://www.moef.nic.in/downloads/public-information/minister_ REPORT.pdf, (last accessed Feb. 18, 2018).

appointed, and when both committees had recommended a comprehensive rethink of the environmental clearances accorded to the project. Ramesh justified this decision as required to protect the "strategic interests" of India.⁴⁸ The project, however, was eventually abandoned due to strong resistance from local communities led by the POSCO Pratirodh Sangram Samithi.

For environmental justice to gain more than a foothold in economic decision making, it has to be an outcome of a complex set of actions, intricately linked to local, regional, national and global law and policy actions, path-breaking judicial decisions, and various progressive programmes and schemes. Ensuring such efforts result in action is crucial as India witnesses unprecedented expansion of industrial, commercial, urban and infrastructure sectors, and also consumerism, which has been building up since the 1990s. While there has been a massive surge in economic productivity, it has resulted in grossly unequal accumulation of wealth and also served a debilitating impact on the country's environment and public health.

The populism with which Mr. Modi's Government has promoted development as a major plank for demonstrating his political achievements has been premised on ease of doing business as a prime goal. This has meant social and environmental concerns are subordinated to "*utmost good faith*" in investors to adhere to environmental regulatory norms. This has fundamentally altered the

⁴⁸ Abhay Sahoo & Prashant Paikeay, Scandalous Decision of Jairam Ramesh to Clear the POSCO Project: Environment Minister Disregards Findings of His Own Review and Statutory Clearances Committees, MAINSTREAM (Feb 12, 2011), https://www.mainstreamweekly.net/article2590.html, last accessed (last accessed Mar. 28, 2018).

nature of environmental jurisprudence which India has evolved over decades. The emasculation of the National Green Tribunal, and that also through a Finance Bill, is clearly indicative of the intent to block peoples' easy access to justiciable forums and their right to quick relief. The beneficiaries, clearly, would be polluting industries and such other environmental violators. Further, the manner in which environmental laws are employed to promote divisive political agendas of the Sangh Parivar, presents a highly disturbing scenario of the situation that is developing in the country. Meanwhile, there are efforts underway to amend the existing Coastal Zone Regulation Notification and replace them with a new version which promotes widespread development of ports and such as other infrastructure which has a substantial impact on coastal ecosystems and livelihoods of fisher peoples. The proposal is to allow major infrastructure even in highly ecologically sensitive CRZ I areas. This is notwithstanding the growing threats to India's coastline due to sea level rise and other extreme weather events caused by global warming.

In much the same way, the Modi administration is dealing with forests. The Draft National Forest Policy 2018 pitches a strong role for private sector entry into forestry operations, and this includes privatization of vast stretches of India's so-called 'degraded' forests. As a widely subscribed statement has argued, this policy "... has been developed by an undemocratic process, is fraught with procedural and statutory violations, promotes schemes, programmes and interventions that are opposed to public policy and the Constitution of India". The statement supported by a range of people's movements, forest workers union, academicians, researchers, etc. demands that such polices be withdrawn, which is indicative of deep mistrust in the Modi administration's environmental governance agendas. This is evident in the force of the language employed:

"Our forests are ours to keep and conserve. Forests are the sovereign property of the peoples of this country and we will not allow our forests to be forfeited. We will never allow them to be privatized. We will not allow ill-thought policies like this draft forest policy, motivated to exploit nature for private profit, to take root in this biologically diverse country. We will not allow the displacement of millions that will follow due to such myopic and ill-informed thinking by a few based in the nation's capital. We are deeply concerned that the draft policy promotes interventions which might exacerbate prevailing socio-economic distress, spread discontents and result in unprecedented destruction of our biodiversity. We will not allow this to happen."

There is also increasing concern over the Modi led Government's proposal to restrict access to information by placing various obstacles in exercising the Right to Information. This is being achieved by proposing multiple amendments to the operative parts of the law, often through clarificatory notes that are executive decisions. This is grossly and adversely affecting the right of impacted communities to access environmental information which is be critical

⁴⁹ See, Peoples Movements, Networks, Academicians, Researchers and Civil Society Organisations reject the Draft National Forest Policy 2018: Demand a fresh policy is evolved through a deeply democratic consultation mechanism and scientific process (Apr. 14, 2018), http://esgindia.org/campaigns/press/peoples-movements-networksacademicians-.html, (last accessed Mar. 28, 2018).

to safeguard environment, public health, and to tackle pollution.⁵⁰

All these instances suggest that promoting a deeply democratic, scientifically imbued and rational environmental decision- making framework is essentially not a focus of the Modi administration. This is not to suggest that previous administrations have been environmentally benign – that is certainly not true. What is true though is when previous administrations have most certainly advanced their share of environmentally disastrous decisions, the overall approach was one of promoting public policies whose explicit intention was safeguarding environment and human rights, and for the promotion of a welfare state, even if rhetorically and ritually.

In stark contrast, however, Prime Minister Narendra Modi's administration is actively working to dismantle decades of efforts invested in building a robust environmental jurisprudence. That this is the outcome of multiple peoples struggles, progressive judgments and the embracement of progressive international environmental agreements and treaties, appears to be hardly of any concern to the administration. The business first approach that is being aggressively promoted in fact perceives democratic environmental and social impact appraisals and clearance mechanisms as bottlenecks to economic growth. Critics of such weakening of environmental jurisprudence are harried with very strong reactions from the government, often by employing obfuscation of relevant facts to deflect substantive criticisms. Quite often this reaction also

⁵⁰ Poonam Agarwal, In The Name of Transparency, Govt Dilutes RTI Rules, THE QUINT, (May 6, 2018), https://www.thequint.com/news/india/exclusive-rti-rules-2017-dilutedin-name-of-transparency-by-government, (last accessed May 10, 2018).

constitutes attacking the fundamental freedoms of individuals and organisations to express their dissenting views.⁵¹ In effect, a climate of fear is being spread, thus causing many who would be critical to prefer silence to being punished for speaking out. This does not bode well at all for the state of India's environment, for human rights and for the critical necessity to safeguard the socio-economic and ecological security of present and future generations of this large, densely populated and diverse country.

⁵¹ Thatagata Bhattacharya, Environment Ministry enabling corporate takeover of India, NATIONAL HERALD, (Jun. 9, 2018), https://www.nationalheraldindia.com/opinion/environmentministry-enabling-corporate-takeover-of-india, (last accessed Mar. 28, 2018).

BREXIT AND IMPLICATIONS FOR ENVIRONMENTAL LAW

Dr Paul Stookes*

ABSTRACT

Britain's exit from the European Union, (Brexit) came in the wake of a referendum where 51.9% of those voting chose to leave. On 29 March 2017, the UK government invoked procedures under the Lisbon Treaty and began the formal process of withdrawing from the Union. The implications of Brexit will be profound; not least for the environment and society. The state of the environment and regulation in the UK has raised international concern. This paper explores some of the potential socio-environmental problems arising from Brexit, including how some of the current concerns may deteriorate further. The discussion is placed in the context of the fact that 80% of environmental legislation currently derives from the EU and where the European Commission acts as a de facto regulator of Member States, including the UK. The paper considers the likely implications of leaving the EU including the loss of a layer of governance and judicial review via the Court of Justice of the European Union. It discusses alternatives to EU regulation

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including whether public interest efforts and domestic legal procedures could adequately fill any regulatory gaps and, if not, whether international obligations could be relied upon as an effective form of environmental control and protection.

1. Introduction

On 23 June 2016, the UK held a referendum asking all citizens eligible to vote whether the country should remain within or leave the European Union (EU). The turnout was high: 72% of those eligible decided to vote (over 30 million people). 51.9% of those voting chose to leave. The UK then commenced procedures under the Treaty of the European Union (TEU)¹ and began the formal withdrawing from the Union. The term 'Brexit' has now formed part of common global language. By March 2017, an entry in the Oxford English Dictionary defined Brexit as: 'The (proposed) withdrawal of the United Kingdom from the European Union, and the political process associated with it.'²

The legal provisions for withdrawal found within the TEU are straightforward. Article 50(1) provides that any Member State may decide to withdraw from the Union in accordance with its own constitutional requirements.³ While Article 50(2) states that:

"A Member State which decides to withdraw shall notify the European Council of its intention. In the light of the guidelines

¹ Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, Dec. 13, 2007, 2007 O.J. (C 306) 1 [hereinafter Treaty of Lisbon].

² See Brexit in OXFORD ENGLISH DICTIONARY (2017) (Online) (last accessed Sept. 30, 2017).

³ Treaty of the European Union, art.50(1), 2010 O.J. C 83/01. [hereinafter TEU]

provided by the European Council, the Union shall negotiate and conclude an agreement with that State, setting out the arrangements for its withdrawal, taking account of the framework for its future relationship with the Union." That agreement shall be negotiated in accordance with Article 218(3) of the Treaty on the Functioning of the European Union (TFEU). It shall be concluded on behalf of the Union by the Council, acting by a qualified majority, after obtaining the consent of the European Parliament."⁴

Article 50(3) of the TEU explains that the fundamental EU treaties (e.g. the TEU itself and the TFEU) cease to apply to the withdrawing member state from the either, the date any withdrawal agreement enters into force or, failing agreement, two years after the notification referred to in Article 50(2). On 29 March 2017, the UK gave its intention to withdraw from the EU. Unless an extension is agreed, the UK will have left the EU by 29 March 2019.

In accordance with Article 50(1) of the TEU, the UK enacted the EU (Withdrawal) Act 2018 on 26 June 2018. This will repeal the European Communities Act 1972 which was passed in order to give legal effect to EU law to all: 'rights, powers, liabilities, obligations and restrictions arising by or under [EU Treaties] and all such remedies and procedures from time to time provided ...⁵.

The early signs are that the implications of Brexit will be profound. A key concern is the decline in financial activity for the

⁴ Consolidated Version of the Treaty on the Functioning of the European Union art. 50(2), May 9, 2008, 2008 O.J. (C 115) 47 [hereinafter TFEU].

⁵ The European Communities Act, § 2(1) (1972).

UK and the country's decreasing influence as an economic powerhouse. Ann Pettifor, the director of policy think-tank PRIME, notes in her concise article, *Brexit and Its Consequences* that the slowdown in financial 'flows' of funds to and from the City of London, already occurring before Brexit, is likely to be aggravated. She also expressed concern that it would result in: 'energizing the Far Right both in Britain and beyond and a break-up of the UK with the political dominance of a small tribe of conservative 'Little Englanders.'⁶

The implications for the environment and environmental law within the UK and beyond could also be significant. The consequences of Brexit are brought into focus by key environmental law concepts such as; the trans-boundary nature of pollution, the lack of polluter accountability and the lack of effective sanctions in international environmental law against private or public law organizations.

The deteriorating state of the UK environment and regulation has prompted international concern. A recent report by the Special Rapporteur to the United Nations Human Rights Council discussed potential problems arising from Brexit and its effect on legal and regulatory systems. He concluded that the systems were already under stress and noted in particular that:

"13. European Union regulations have undoubtedly strengthened human rights protections from various sources of

⁶ Ann Pettifor, Brexit and Its Consequences, 14 GLOBALIZATIONS 127, 132 (2017).

pollution and contamination in the United Kingdom, holding the country to legally binding targets and reporting requirements. With some of the highest environmental standards in the world, the European Union has played a major role in shaping the United Kingdom environmental policy and improving its approach towards the management of hazardous substances and wastes. For example, as a member of the European Union, the United Kingdom has succeeded in significantly lowering sulphur dioxide emissions, previously the highest in the European Union, and improving waste disposal and sewage treatment practices. ..."

This paper explores some of the key legal aspects of EU membership that will be affected by Brexit. It considers the impact on environmental law in the context of the common view that around 80% of UK environmental legislation derives from the EU⁷. The paper explores the implications of EU withdrawal and the loss of regulation currently provided by the European Commission (EC) and also the judicial supervision and guidance provided by the Court of Justice of the European Union (CJEU). It discusses alternatives to the EU regulatory controls, including whether public interest efforts and domestic legal procedures could adequately fill the regulatory gaps and whether international obligations may be relied upon as an effective form of environmental control and protection.

⁷ See for e.g. UK Government's Environmental Audit Committee report titled 'The Future of the Natural Environment after the EU Referendum' (HMSO, Dec 2016) and reference to evidence by the European Environment Bureau (AEP0054) (footnote 42).

2. The impact of Brexit on EU Governance and Judicial Scrutiny

One of the primary concerns of Brexit in the context of socio-environmental protection is the loss of a layer of governance and judicial scrutiny. Within the EU, the EC plays a critical role in proposing new laws and policies as well as monitoring their implementation and, alongside other main institutions of the European Parliament and Council of the European Union, it develops the overall strategy and political direction of the EU. Its function is to help Member States implement EU legislation and ensure that EU law is complied with. The EC performs a distinct role in environmental law and practice which is aligned to the concept of subsidiarity and that the central EU bodies should only perform functions which are not, for one reason or another, performed at a national, sub-national or local level. This is a critical EU law principle. The European Union's online home page expresses this in simple terms: '... like the other EU institutions, the Commission acts only when it can do so more effectively than local, regional or national authorities. Its actions are limited to what is necessary to achieve the objectives of the EU Treaties."

The reasons for EC intervention in environmental protection may be various. It will often be that a member state has failed to fulfil its obligations under a particular directive: see e.g. Case C-304/15

⁸ What the European Commission does, EUROPEAN COMMISSION, https://ec.europa.eu/info/role-european-commission_en (last accessed Nov. 6, 2017)

Commission v UK^{\circ} in which the CJEU declared that the UK failed to limit pollution emissions from Aberthaw Power Station in Wales contrary to Article 4(3) of Directive 2001/80/EC on the limitation of emissions of certain pollutants into the air from large combustion plants. It may occasionally be a question of irrational judgement by a decision-maker or regulator. Although irrationality as a ground for legal challenge presents difficulty for environmental protection where the view of one individual may often be the arbiter of whether environmental protection is sufficient. Challenging a decision on this basis draws upon a particular, perhaps personal perspective of how important the environment in a broad sense really is. Would, for instance, noise pollution from night flights be as much of a concern for, say, a regular jet-setter that enjoyed frequent transatlantic flights compared to someone who chose only to fly when absolutely necessary?

There are, of course, competing demands on natural and financial resources and there is an acknowledged margin of discretion afforded to environmental professionals. However, such discretion does not extend to acting outside the limits of EU law, even if a particular act or decision may be considered lawful in domestic law. An example of this is Petition 0198/2017 relating to an alleged breach of EU environmental legislation on air quality and environmental impact assessment (EIA) arising from the grant of planning permission to construct a cruise liner terminal in London. Petition No. 0198/2017 was submitted to the European Parliament

⁹ [2016] EU:C:2016:706; [2017] Env LR 6.

following the dismissal of judicial review proceedings in *R (oao PS)* v*Royal Borough of Greenwich*¹⁰ in which the court held that air pollution from cruise liners had been taken into account in granting permission for the terminal. The court added as *obiter* that, in any event, the cruise terminal could be completed under the 2012 permission and therefore the challenge was out of time under domestic law. However, the claimant alleged that the court's approach was insufficient in complying with EU law including the requirement to comply with Directive 2008/50/EC on ambient air quality and cleaner air for Europe¹¹. This was in circumstances in which there were proven (and acknowledged) significant emissions of Nitrogen Dioxide (NO₂) from the international cruise liners expected to dock in London in a locality already experiencing NO₂ levels that were above critical human health levels¹².

The European Parliament's Committee on Petitions determined in a Notice to Members of 29 September 2017 that Petition No. 0198/2017 was admissible and requested that the EC investigate various aspects of the problem. The Committee also felt it appropriate to refer the breach to the Committee on the Environment, Public Health and Food Safety for its information. The Committee on Petitions set out the EC's opinion in a letter of 14 December 2017:

¹⁰ [2016] EWHC 1967 (Admin); [2017] JPL 165.

¹¹ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on Ambient air quality and cleaner air for Europe 2008 O.J. (L 152) 1, 44.

¹² For an informal discussion of the dispute and concerns see Darryl Chamberlain, Greenwich cruise liner terminal: The night Greenwich councillors ignored air pollution – again, 853 LONDON, (Jul. 22, 2015), https://853london.com/2015/07/22/greenwich-cruise-liner-terminalthe-night-greenwich-councillors-ignored-air-pollution-again/, (last accessed Nov. 8, 2017)

"The European air quality legislation (Directives 2004/107/EC and Directives 2008/50/EC) are obligations of results rather than means. This means that they set limit values for the concentrations of pollutants in the ambient air, but it is up to Member States to decide which measures to take to meet these limit values. This includes the management of air quality management areas (AQMA) in the United Kingdom.

If the Member State grants permission to a project that would increase pollution beyond the limit values for ambient air quality, it would logically have to take compensating measures to ensure compliance with the limit values. In any case, in accordance with the principle of subsidiarity, the Commission enforces the compliance with the limit values, but does not interfere with a Member State's choice of measures to achieve compliance.

Since NO₂ exceedances still occur in many British cities, the Commission has moved along its infringement procedure against the United Kingdom addressing this issue. In February 2017, it followed up its letter of formal notice for February 2014 with a reasoned opinion. The Greater London, including Royal Borough of Greenwich, is one of the 16 air quality zones that are subject to this reasoned opinion. A reasoned opinion is the last step of an infringement procedure¹³ before a potential referral to the European Court of Justice, if the air quality situation does not improve sufficiently."

¹³ Infringement Procedure, EUROPEAN COMMISSION, https://ec.europa.eu/info/law/lawmaking-process/overview-law-making-process/applying-eu-law/monitoringimplementation-eu-directives/infringement-procedure_en, (last accessed Mar. 18, 2017).

The outcome of Petition No. 0198/2017 highlights that the EU is able, through the EC, to investigate alleged breaches of environmental law. It leaves the legal process or mechanism (the means) as to how EU law is to be met with each member state, but has the ability to ensure that the consequences (the outcomes or results) comply with EU standards.

The UK Government's approach to Brexit and environmental law is noted in its policy White Paper: *Legislating for the United Kingdom's withdrawal from the European Union*¹⁴ (the Brexit White Paper) which provided that:

"... The Great Repeal Bill will ensure that the whole body of existing EU environmental law continues to have effect in UK law. This will provide businesses and stakeholders with maximum certainty as we leave the EU. We will then have the opportunity, over time, to ensure our legislative framework is outcome driven and delivers on our overall commitment to improve the environment within a generation."

(page 17, the Brexit White Paper)

However, the policy commitment does not appear to extend to the type of concern raised by Petition No. 0198/2017 and the instances where government, and the courts, act beyond EU law where the application of EU law is inadequate. Thus, while the whole body of existing EU environmental law may continue to have 'effect', it may not be effective. The policy commitment gives rise to two key

¹⁴ HMSO, Legislating for the United Kingdom's withdrawal from the European Union (Mar. 2017), Cm 9446. (*hereinafter* the Brexit White Paper)

areas of discussion. First, how will the current legislation continue to have effect? Also, how can any interested party, including e.g. members of the public, community groups, NGOs and other countries ensure that the UK's multiple organs of government, including the judiciary, accord with EU environmental law such that it continues to be effective?

a) Will current EU legislation continue to have effect?

The Brexit White Paper explained that legislation, now the EU Withdrawal Act 2018, would ensure that EU legislation in force on Brexit day would continue to have effect through four key mechanisms¹⁵. First, s. 2 preserves all transposed laws in the UK to implement EU obligations (e.g. the Environmental Permitting Regulations 2016, No. 1154). Then, s.3 will convert directlyapplicable EU law (i.e. EU regulations) into UK law. s. 4 will ensure that the rights in the EU treaties that may be relied on directly in court will continue to be available, although s.5 provides that, while the supremacy of EU law applies up until Brexit day, it only continues to apply after that date so far as is relevant to the interpretation, dis-application or quashing of any enactment or rule of law passed or made before exit day. Finally, clause 6 provides for the interpretation of retained EU law and that historic case law in the CJEU will have the same precedent status in UK courts as decisions of the UK Supreme Court. Importantly, s.7(1) of the Act covers deficiencies in legislation arising from withdrawal and provides powers to Government Ministers to rely upon secondary legislation

¹⁵ Id. at ¶2.4-2.17.

to: 'prevent, remedy or mitigate (a) any failure of retained EU law to operate effectively, or (b) any other deficiency in retained EU law, arising from the withdrawal of the [UK] from the EU'. The provisions conferred by s.7 are powerful and controversial. They allow one Minister acting without the usual scrutiny of Parliament to amend primary legislation. Such powers are often referred to as 'Henry VIII clauses' because an early example of such was conferred on King Henry VIII in England by the Statute of Proclamations 1539: the power was later repealed; the name stuck.

The UK Environmental Law Association (UKELA) has undertaken extensive work on EU withdrawal since establishing its Brexit Task Force in September 2016.¹⁶ It has remained neutral on the EU referendum itself and not commented upon the various advantages and disadvantages of leaving the EU of whether, for instance, Brexit will be a good or bad thing for the environment and the law. In this context, UKELA has prepared a number of briefing papers on relevant aspects of environmental law. Page 3 of its paper: *Brexit, Henry VIII Clauses and Environmental Law*¹⁷ notes that the then clauses 7-9 of the EU Withdrawal Bill dealing with deficiencies, compliance with international obligations and the provision of

¹⁶ UKELA is the UK forum which aims to make the law work for a better environment and to improve understanding and awareness of environmental law. Its charitable objects include promoting, for the benefit of the public generally, the enhancement and conservation of the environment in the UK and advancing the education of the public in all matters relating to the development, teaching, application and practice of law relating to the environment. It encourages collaboration between those interested in environmental law, as well as advising and commenting on relevant issues; www.ukela.org (last accessed Apr. 13, 2018)

¹⁷ UKELA, BREXIT, HENRY VIII CLAUSES AND ENVIRONMENTAL LAW, 3 (2017).

domestic regulations for implementing withdrawal are all Henry VIII clauses. The paper also explains that:

"... it is clear from clause 7(1) that the power to use Henry VIII powers is related solely to deficiencies "arising from the withdrawal of the United Kingdom from the EU". To take an example, this implies that a Minister who wished to weaken the strict protection given by the EU Birds Directive and transposed in the Wildlife and Countryside Act 1981 could not use these powers to amend the 1981 legislation. These would not be deficiencies arising from UK withdrawal according to clause 7 and any such changes would have to be made by new primary legislation introduced in the normal way.

5. It may be that the criteria in clause 7 will be further tightened during legislative process. In any event, in this report we have deliberately adopted a restrictive interpretation, drawing on the examples of deficiencies contained in clause 7(2), and what we feel is the intended spirit behind the clause 7. We feel that as a matter of general principle the use of Henry VIII powers should be kept to the minimum necessary for the effective continuance of domestic legislation after Brexit, but that the debate on this use of these powers should be informed by an accurate view as to the extent to which these powers will actually be necessary.⁴⁸

The UKELA *Henry VIII* briefing paper goes on to analyze what it considers to be the core environmental primary legislation in England (around 59 Acts of Parliament) and concludes that 17 Acts

¹⁸ Id.

do not require any changes to legislation, 12 Acts will require changes to remedy 'deficiencies' and in a further 30 Acts it would be advisable.

It appears realistic to suggest that the Government's Brexit White Paper commitment to retaining the body of existing EU environmental law is feasible. Moreover, notwithstanding the underlying reasons for Brexit, EU environmental law as enacted will remain broadly in place on Brexit day and for a period thereafter until new legislative provisions are brought forward which should then have the scrutiny of parliament and should also reflect the will of the people. It is then, perhaps, that the environment and its supporters may have concern. It is then e.g. that the Tragedy of the Commons may come into play; whereas up until Brexit, the EU had restricted, to some extent, individual freedoms to use resources with selfinterest and without limit in a world where resources are finite¹⁹. Whether the elected and the electorate can be entrusted with strong environmental protection, remains to be seen.

b) The loss of EU governance and judicial scrutiny

As outlined above, the EU provides a distinct system of, often, collective government for its member states, which helps to ensure that environmental, social and economic aspects of civil society throughout the EU work are equal having regard to the

¹⁹ The Tragedy of the Commons derives from an essay by William Forster Lloyd (1833) who discussed the notion of unregulated grazing on common land in the UK, *see: Two lectures on the checks to population,* published by Oxford University; *See also,* Garret Hardin, *The Tragedy of the Commons,* 162 SCIENCE 1243, 1248 (1968); in which he considered the concept in the context of shared common environmental resources such as pollution and the notion of needs, rather than wants or freedoms.

uniqueness of the various individual member states. It may be considered an additional or over-arching layer of law and governance with critics stating that "EU law is likened to a ratchet, clicking only forwards. We are seeing a slow and invisible process of legal colonization, as the EU infiltrates just about every area of public policy".²⁰. Certainly, some of the main goals of the EU including promoting peace, its values and the well-being of its citizens, as well as pursuing sustainable development,²¹ appeared to be largely overlooked in the popular debate and discussion leading up to the UK's EU referendum and the prognosis for strong environmental protection may be uncertain. However, there are some positive signs. In January 2018, the Government published: *A Green Future: Our 25 Year Plan to Improve the Environment* in which it noted that when the UK leaves the EU:

"we will use this opportunity to strengthen and enhance the protections our countryside, rivers, coastline and wildlife habitats enjoy, and develop new methods of agricultural and fisheries support which put the environment first."²²

Moreover, section 16 of the EU Withdrawal Act 2018 introduces a set of environmental principles into UK law which reflect those currently within EU law and further provides for 'the

²⁰ See for example, Boris Johnson, There is only one way to get the change we want – vote to leave the EU, THE TELEGRAPH (Mar. 16, 2016), https://www.telegraph.co.uk/opinion/2016/03/16/boris-johnson-exclusive-there-is-only-one-way-to-get-the-change/, (last accessed Apr. 13, 2018).

²¹ See, The EU in Brief, EUROPEAN UNION, https://europa.eu/european-union/abouteu/eu-in-brief_en (last accessed Apr. 13, 2018).

²² HM GOVERNMENT, A GREEN FUTURE: OUR 25 YEAR PLAN TO IMPROVE THE ENVIRONMENT, 4 (2018).

establishment of an environmental enforcement body with the power to proportionate action against government where it considers that it is not complying with environmental law. How the principles and enforcement body may work needs to be set against the existing EU governance measures.

i) The role of the European Commission in environmental law

The EC's regulatory role derives from Article 258 of the TFEU which provides that:

"If the Commission considers that a Member State has failed to fulfil an obligation under the Treaties, it shall deliver a reasoned opinion on the matter after giving the State concerned the opportunity to submit its observations.

If the State concerned does not comply with the opinion within the period laid down by the Commission, the latter may bring the matter before the Court of Justice of the European Union."

The enforcement powers under Article 258 of publishing a reasoned opinion and then issuing a claim in the CJEU are significant and a crucial component of environmental law in the UK and other member states. The UKELA briefing paper: *Brexit and Environmental Law: Enforcement and Political Accountability Issues* (UKELA, July 2017) notes on pages 7-8 that:

"5 These enforcement powers of the Commission have applied to all areas of European Union law, but the Commission has been especially active in the environmental field – in 2015 the highest number of infringement actions were opened in the environmental field. There are good reasons for this. In many areas of European Union law (such as competition law, employment rights, internal market) there are individuals or bodies with clear legal and economic interests to protect and defend. The environment is in a different position. It may be unowned, and while environmental organisations are committed to promote the general interest of the environment they vary in strength and coverage, and cannot be expected to take on the role of systematic enforcement. The distinctive nature of the environment means that in most jurisdictions, including the UK, public bodies (government departments, local authorities, specialised agencies) have a particular responsibility for environmental protection - but it is often these same bodies that face conflicting policy priorities and financial constraints, making it all too easy for their environmental obligations to be compromised or underrated. The supervisory role of the Commission in ensuring that the obligations of these bodies under European environmental law are properly *implemented has, as a consequence, been especially important.*

6 The Commission does not have its own inspectorate in the environmental field. It has developed a citizens' complaint procedure under which anyone can alert the Commission of a potential breach without any cost again, for the reasons above, it is in the environmental field that most complaints are made. The Commission also relies upon implementation reports sent by Member States as well as its own studies and issues highlighted in MEPs' questions.

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7 The Commission is concerned not just with ensuring that national law fully reflects obligations under EU environmental law, but that it is applied in practice. Many of its infringement proceedings have been concerned with instances where the formal law is in place but has not been effectively implemented, and its focus is on the Member State – be it a government department, local authority or other public body. According to the Commission, the UK has had a very good record in formally transposing EU environmental law in a timely fashion, and most of its infringement proceedings concern the actual application of the laws adopted. Of 34 cases brought by DG Environment against the United Kingdom before the CJEU, 30 resulted in judgment against the UK in whole or in part. ..."

Examples of enforcement action highlight the EC environmental law governance role in the UK for both procedural rights and substantive environmental protection.

In C-530/11 *Commission v* UK^{23} the CJEU followed and developed its earlier findings in Case C-260/11 R (*oao Edwards*) v *Environment Agency*²⁴ in relation to an action under Article 258 of the TFEU for a failure to fulfil EU obligations in relation to access to justice in environmental matters. In the C-530/11 proceedings, the EC alleged, among other things, a failure to transpose the provisions in Article 10a of the EIA Directive 85/337/EEC and Article 15a of the IPPC Directive 96/61/EC to ensure that judicial review procedures brought by members of the public to challenge the

²³ [2014] 3 CMLR 6.

^{24 [2013]} CMLR 18.

legality of decisions subject to the public participation provisions in the Directives were not prohibitively expensive. The EC also alleged that the provisions relating to interim injunctive relief in the UK were unfair because of the courts' practice of requiring claimants to give cross-undertakings as a prerequisite for the grant of an injunction, resulting in potentially very high financial costs. According to the EC, that requirement meant that court fees and legal costs had to be reasonably predictable. It also considered that there was legal uncertainty. The CJEU held that the EC's concerns about legal costs and interim relief were well founded and that the UK had failed to fulfil its obligations under the Directive.

In Case C-304/15, *Commission v* UK^{25} relating to Aberthaw power station in Wales, the CJEU rejected the UK's reasons for failing to meet air quality emission targets, including that pollution control measures were too expensive concluding that:

"52 ... the United Kingdom's argument that it is principally due to economic constraints that arrangements have not been made to improve the environmental performance of that plant and to comply with the requirements of Note (3) must be rejected. It is clear from the Court's case-law that the United Kingdom cannot validly invoke, in the present case, reasons of a purely economic nature in order to dispute the failure of which it is accused (see, to that effect, judgments of 9 December 2007, Commission v France (C-265/95) EU:C:1997:595, at [62], and of 21 January 2016, Commission v Cyprus (C-515/14) EU:C:2016:30, at [53]."

²⁵ EU:C:2016:706; [2017] Env. L.R. 6.

Finally, Case C-502/15 *Commission v* UK^{26} illustrates the approach of the EC and the CJEU in seeking to improve water quality standards, by finding that the UK had failed to comply with Directive 91/271/EEC concerning urban waste-water treatment by not ensuring that the waters collected in a number of combined urban waste water systems in a number of agglomerations in the UK were either retained and conducted for treatment, or subject to stringent treatment due to the sensitivity of the locality and were in compliance with the directive; and, in relation to the Gibraltar agglomeration, to any treatment at all.

In the examples considered above, the EC had been found by the CJEU to have properly used pre-action procedures where the alleged breaches would have been explored. The UK government failed to address the concerns raised and proceedings were subsequently issued.

ii) The role of the Court of Justice of the European Union

In addition to responding to action taken by the Commission, the CJEU has a distinct role of quasi-governance, providing a supervisory role for a member state's legal justice system. National courts are under an obligation to ensure the effective application of EU law and this includes determining whether on whether EU legislation (primary and secondary) is implemented correctly. Article 267 of the TFEU provides that the CJEU shall have jurisdiction to give preliminary rulings concerning: (a) the interpretation of the

²⁶ [2017] ECLI:EU:C:2017:334, OJ C 213, 03/07/2017 at 9.

Treaties; and (b) the validity and interpretation of acts of the institutions, bodies, offices or agencies of the Union. It explains that any domestic court may, if it considers that a decision on the question is necessary to enable it to give judgment, request the Court to give a ruling thereon, refer a matter to the CJEU. Where a domestic court of final instance is considering a question of EU law it must refer the matter to the CJEU.

In Case C-283/81 CILFIT Srl v Ministero della Sanita²⁷, the CIEU gave guidance on how national courts of last resort should decide whether a question of EU law is sufficiently obvious (acte clair) so as to obviate the need for a reference and before concluding this the national court must be convinced that the matter is equally obvious to other member states. It explained that factors a national court should bear in mind in whether or not to make a reference included: that EU law uses terminology which is peculiar to it; that legal concepts do not necessarily have the same meaning in domestic law and community law; and that the domestic court should apply the law at issue in the light of provisions of EU law as a whole; regard being had to overriding EU objectives. Given the CILFIT criteria it is surprising that requests for preliminary rulings have not been more common. Often, instances of a reference have resulted in the need to change EU legislation. For instance, in Case C-75/08 R (oao Mellor) v Secretary of State for Communities and Local Government²⁸ the CIEU held that, if reasons were requested for a determination as to whether EIA was required for a particular project under Article 4 of the EIA

²⁷ EU:C:1982:335; [1982] E.C.R. 3415.

²⁸ EU:C:2009:279, [2010] PTSR 880.

Directive 85/337/EEC, then the determining authority was required to provide those reasons and/or the relevant information and documentation. A consequence of the ruling was that the UK transposing legislation, the EIA Regulations 1999, No. 293²⁹ had to be amended in order to comply with EU law.

Similarly, in Case C-404/13 R (*ClientEarth*) v Secretary of State for the Environment, Food and Rural Affairs³⁰, the CJEU was asked to provide a preliminary ruling concerning the interpretation of Art. 4 and 19 of the Lisbon Treaty and a number of provisions in the Ambient Air Quality Directive 2008/50/EC in circumstances where the UK was in breach of air pollution limit values relating to NO₂. The CJEU held, among other things, that where a member state had failed to comply with the Directive's limit value it was for the competent national court to take any necessary measure to ensure that the limit values were exceeded for as short as time as possible.

It can be seen that in *Mellor* the UK Government took legislative steps to address the non-compliance of EU law whereas in *ClientEarth* the CJEU directed that the UK courts should ensure compliance with limit values. Indeed, in the light of the UK Government's admissions of breaches the Supreme Court in *ClientEarth* had already made a declaration of non-compliance prior to referring to the CJEU and added that the way was open for

²⁹ The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations, SI 1999/293.

³⁰ EU:C:2014:2382; [2015] CMLR 55.

enforcement action at national or EU level: see e.g. R (*oao ClientEarth*) *v SSEFRA*³¹, para 37.

Occasionally, the UK courts make a finding of noncompliance on their own motion. In *R (oao Baker) v Bath* O North *East Somerset* DC^{52} , the High Court held that aspects relating to cumulative assessment within the EIA Regulations 1999 No. 293 did not adequately transpose the provisions of the EIA Directive 85/337/EEC and failed to provide members of the public with an adequate means of seeking EIA. As a consequence, the UK introduced revised secondary legislation.

3. BRIDGING THE ENFORCEMENT GAP AFTER BREXIT

In the light of the concerns regarding the loss of enforcement, guidance and governance by the EC and CJEU, it is helpful to consider the alternatives for the UK.

a) The UK position

Until recently, the UK Government was seeking to rely upon litigation by way of judicial review under Part 54 of the Civil Procedure Rules 1998 (hereinafter called Judicial Review)³³ to bridge the post-Brexit environmental enforcement gap. In response to a number of concerns raised in evidence to the House of Lords Select

³¹ [2013] 2 All ER 928.

³² [2010] P&CR 4.

³³ The author assumes that the associated provisions under Part 8 that enable, for instance, appeals under section 288 of the Town and Country Planning Act 1990 were included within the term judicial review.

Committee on the EU: *Brexit: Environment and Climate Change*³⁴, the Department for Environment, Food and Rural Affairs (Defra) noted that:

"The Committee raised concerns about available mechanisms for enforcement and oversight of environmental and climate change legislation. The Great Repeal Bill will end the supremacy of EU law and return power to the UK. The UK has always had a strong legal framework for environmental protections, and will continue to have a system of judicial review by UK judges after EU Exit. The judicial review mechanism enables any interested party to challenge the decisions of the Government of the day by taking action through the domestic courts."⁸⁵

However, unless there is a radical shift in the scope and remit of Judicial Review, this was unrealistic. That Judicial Review alone was not the answer to the enforcement gap appears to have prompted the environmental enforcement body to be put on a legislative basis in s. 16 of the EU Withdrawal Act 2018. There will be detailed discussion and deliberation as to the nature, scope and remit of the new environmental body, something prompted by the Defra consultation paper: *Environmental Principles and Governance after the United Kingdom leaves the European Union: Consultation on environmental*

³⁴ European Union committee, Brexit: Environment and Climate Change, Report 2016–17, HL-109 (uk).

³⁵ Department for Environment, Good & Rural Affairs, Government response to the house of lords EU Energy and Environment sub-committee Report into Brexit, Environment and Climate Change Policy 2017).

*principles and accountability for the environment.*³⁶ Indeed, the consultation paper suggests that the new body should have the power to serve an advisory notice of alleged non-compliance of environmental law on a government Minister³⁷. However, it is arguable that it should further functions such as the power to issue warning notices, compliance notices and enforcement notices. One thing appears to be settled which is that the new body will have the power to take legal proceedings: see e.g. s. 16(1)(d), and it is assumed that this will include for non-compliance of a formal notice. In this regard, it is important to consider what legal procedures may be appropriate.

First, the conventional understanding of Judicial Review in the UK is that it does not really apply to cases challenging the substance or the merits of any decision: see e.g. para 54.1.4 of Volume 1 of the White Book 2018 and that:

"in general, judicial review is concerned with reviewing not the merits of the decision in respect of which the application for judicial review is made, but the lawfulness of the decision-making process itself."³⁸

This view is not universally accepted see e.g. the Supreme Court decision in R (*Evans*) v Attorney General ³⁹ and also the Article 11

³⁶ Department For Environment, Food & Rural Affairs, Environmental Principles And Governance After The United Kingdom Leaves The European Union: Consultation On Environmental Principles And Accountability For The Environment (2018).

³⁷ Id. at 25.

³⁸ Civil Procedure Rules and Practice Directions Part 54 at ¶54.1.4 (1998) https://www.justice.gov.uk/courts/procedure-rules/civil/rules/part54#54.14, (last accessed Jul. 13, 2018).

³⁹ [2015] UKSC 21 [2015] A.C. 1787 at ¶105, *per* Lord Neuberger: "A domestic judicial review does not normally involve reconsideration of the competing arguments or merits. However, it seems to me clear that article 6(2), with its stipulation that the court should be able to review the acts and omissions of the public authority concerned, requires a full merits review."

provisions on access to justice in the EIA Directive 2014/52/EU⁴⁰. However, the conventional, 'no merits' approach tends to prevail in the lower courts: see e.g. *Smyth v Secretary of State for Communities & Local Government*⁴¹. As part of a common law system, Judicial Review is inherently susceptible to change in judicial perspective.

Judicial Review is also vulnerable to UK government policy change. Since 2010, government has been restricting access to Judicial Review by a series of legislative changes including; reducing limitation periods in land use planning matters from 3 months to 6 weeks;⁴² repeated increase in court fees;⁴³ the restriction of the application of international environmental rights of access to justice;⁴⁴ and the restriction of judicial discretion on permission applications;⁴⁵. The political basis for restricting Judicial Review is clear. In a speech by the then Prime Minister, Right Hon. David Cameron to the Confederation British Industry of 19.11.12 he explained that he was going to try to stop government being too slow by, among other things, cutting back on judicial review. In particular, he noted:

⁴⁰ See e.g. Article 11 of the EIA Directive 2014/52/EU and the obligation to ensure that the public concerned can challenge the 'substantive legality' of a decision.

⁴¹ [2015] EWCA Civ 174; [2015] P.T.S.R. 1417.

⁴² Civil Procedure Rules, Part 54.5(5), ; Ministry of Justice, *Judicial Review: proposals for reform* CP 25/2012 Cm 8515, Dec. 2012.

⁴³ Rising from £275 in fees before July 2013 to currently at least £928 since July 2016: see e.g. Administrative Court: bring a case to the court, UK GOVERNMENT, (Jul. 25, 2016) ttps://www.gov.uk/guidance/administrative-court-bring-a-case-to-the-court#pay-thecourt-fee, (last accessed Apr. 13, 2018).

⁴⁴ Civil Procedure (Amendment) Rules, Rule 8(5) (2017).

⁴⁵ See e.g. section 84 of the Criminal Justice and Courts Act 2015 and that the High Court (a) must refuse to grant relief on an application for judicial review, and (b) may not make an award under subsection (4) on such an application, if it appears to the court to be highly likely that the outcome for the applicant would not have been substantially different if the conduct complained of had not occurred.

"First, judicial reviews. This is a massive growth industry in Britain today. Back in 1998 there were four and a half thousand applications for review and that number almost tripled in a decade. Of course some are well-founded as we saw with the West Coast mainline decision. But let's face it: so many are completely pointless. Last year, an application was around 5 times more likely to be refused than granted. We urgently needed to get a grip on this. So here's what we're going to do. Reduce the time limit when people can bring cases. Charge more for reviews so people think twice about time-wasting. And instead of giving hopeless cases up to four bites of the cherry to appeal a decision, we will halve that to two."⁴⁶

Moreover, even when Judicial Review procedures have been invoked to challenge government decision-making, the UK has been reluctant to actually change its approach until the Commission intervenes. For instance, in C-530/11 *Commission v UK*⁴⁷ on access to justice and the ongoing infraction proceedings on breaches of ambient air quality, litigation had commenced in the UK domestic courts: see e.g. Case C-260/11 *Edwards v Environment Agency*⁴⁸ and Case C-404/13 *ClientEarth v SSEFRA*⁴⁹. Yet, necessary amendments to legislation were not enacted until the EC intervened with investigations and infringement proceedings based largely upon the same factual matrix. That is, it appeared to be the Commission's

⁴⁶ Theresa May, Prime Minister's speech to CBI (Nov.19, 2012), https://www.gov.uk/, (last accessed Apr. 13, 2018).

⁴⁷ EU:C:2014:67; [2014] Q.B. 988.

⁴⁸ EU:C:2013:221; [2013] 1 W.L.R. 2914.

⁴⁹ EU:C:2014:2382; [2015] 1 C.M.L.R. 55.

action and the CJEU findings, rather than the UK court rulings that prompted remedial action for breaches of EU law.

Regrettably, on environmental costs the UK has since either stepped back from action to remedy breaches or its response has been insufficient: see e.g. the recent litigation in $R \ v \ RSPB \Leftrightarrow others^{50}$ relating to access to justice and the multiple cases of *ClientEarth* v*SSEFRA*⁵¹ in which the UK's updated air quality plans were found to be inadequate and required revision and then further delaying in publishing further revised plans. Indeed, the subsequent problem of securing effective environmental action by the UK highlights the limited effectiveness of Judicial Review as an environmental enforcement mechanism. This much can be seen from the latest *ClientEarth* judgment⁵², in which Mr Justice Garnham outlines in his introduction the concern of lengthy domestic litigation.

"5 Proper and timely compliance with the law in this field matters. It matters, first, because the Government is as much subject of the law as any citizen or any other body in the UK. Accordingly, it is obliged to comply with the Directive and the Regulations and with the orders of the court. Second, it matters because, as is common ground between the parties to this litigation, a failure to comply with these legal requirements exposes the citizens of the UK to a real and persistent risk of significant harm. The 2017 Plan says that "poor air quality is the largest environmental risk to public health in the UK. It is known to have more severe effects on vulnerable groups, for

⁵⁰ [2017] EWHC 2309 (Admin); [2018] Env. L.R. 13.

⁵¹ R. (ClientEarth) v SSEFRA (No.3) [2018] EWHC 315 (Admin).

⁵² R (ClientEarth) v SSEFRA (No.3) [2018] EWHC 315 (Admin).

example the elderly, children and people already suffering from preexisting health conditions such as respiratory and cardiovascular conditions ". As I pointed out in the November 2016 judgment, DEFRA's own analysis has suggested that exposure to nitrogen dioxide (NO2) has an effect on mortality "equivalent to 23,500 deaths " every year. ..."

In conclusion, Garnham J said this:

"108. I end this judgment where I began, by considering the history and significance of this litigation. It is now eight years since compliance with the 2008 Directive should have been achieved. This is the third, unsuccessful, attempt the Government has made at devising an AQP which complies with the Directive and the domestic Regulations. Each successful challenge has been mounted by a small charity, for which the costs of such litigation constitute a significant challenge. In the meanwhile, UK citizens have been exposed to significant health risks.

109. It seems to me that the time has come for the Court to consider exercising a more flexible supervisory jurisdiction in this case than is commonplace. Such an application was made to me when the November 2016 judgment was handed down. I refused it on that occasion, opting for a more conventional form of order. Given present circumstances, however, I would invite submissions from all parties, both in writing and orally, as to whether it would be appropriate for the Court to grant a continuing liberty to apply, so that the Claimant can bring the matter back before the court, in the present proceedings, if there is evidence that either Defendant is falling short in its compliance with the terms of the order of the Court. ..."

In summary, the limited jurisdiction of Judicial Review in its current form, does not appear to provide an effective form of environmental stewardship. Also, it could limit the effectiveness of environmental enforcement under s. 16(1)(d) and a broader judicial function is likely to be required.

b) Alternatives to Judicial Review as part of enforcement

UKELA's briefing paper: *Enforcement and Political Accountability Issues* suggests that one option for filling the regulatory gap would be broadening the scope and strengthening the role of the First Tier (Environment) Tribunal, which currently operates in England and Wales and sits within the General Regulatory Chamber of the First-Tier Tribunal system. At present, the Environment Tribunal's remit is to consider appeals against civil sanctions such as a fine or a notice for an environmental offence (e.g. for pollution or dumping toxic waste) which may have been imposed by regulatory bodies such as the Environment Agency, Natural England and local authorities. The Environment Tribunal comprises judges and often lay members with specialist experience in a particular environmental area.⁵³ The UKELA briefing paper also suggests, perhaps additionally, the appointment of a Parliamentary Commissioner for the Environment or a specialised Environmental Ombudsman.⁵⁴

⁵³ See, Becoming a Tribunal Judge, COURTS AND TRIBUNALS JUDICIARY, https://www.judiciary.gov.uk./ (last accessed Jul. 13, 2018).

⁵⁴ UKELA, ENFORCEMENT AND POLITICAL ACCOUNTABILITY ISSUES, 10-13, (2017).

Increasing the scope and remit of the Environment Tribunal to cover a potential reference by the new environmental body and/or an appeal by public authority served with a compliance notice appears a logical and positive step. This could provide a relatively low cost judicial scrutiny role and one where Judicial Review could have a residual role of last resort if need be.

There have long been calls for a UK environmental court of wide scope and broad purpose and one that provides access to justice for third parties including community groups, NGOs and the public concerned⁵⁵. There have also been calls for the introduction of third party rights of appeal in land use planning.⁵⁶

In recent years, the proposals for increasing environmental justice in these forms have not been taken up, although one area of environmental law that has seen a material, positive shift towards environmental protection and enhancement in the last few years is the significant increase in fines imposed following the successful prosecution of pollution and waste offences. This has been prompted by the publication of the Sentencing Council's *Environmental offences: definitive guideline* (2014)⁵⁷ and which built upon statutory provisions that had, for some time, provided the potential for meaningful punitive measures to be taken against environmental offences.

⁵⁵ See e.g. Harry Woolf (then Lord Justice of Appeal), Are the judiciary environmentally myopic? 4 J. Env. L. 1, 1-14 (1992).

⁵⁶ CPRE & ORS, THIRD PARTY RIGHTS IN PLANNING (2001).

⁵⁷ SENTENCING COUNCIL, ENVIRONMENTAL OFFENCES: DEFINITIVE GUIDELINE (2014) (UK).

The increase in environmental sentencing followed a prolonged period of time where the sentencing court (usually the Crown Court) sought to apply high sentencing standards set in legislation but where the Court of Appeal repeatedly and significantly reduced those sentences: see e.g. R v Milford Haven Port Authority⁵⁸ in which the judge ordered a fine of £4 million reduced to £750,000 on appeal; and R v Anglian Water Services Ltd⁵⁹ in which the Crown Court fine of £200,000 was reduced to £60,000 on appeal. By contrast, and in the first case to be considered on appeal after the definitive guideline had been applied the Court of Appeal in R. v Thames Water Utilities Ltd⁶⁰ noted the purpose of the much higher sentence and regarded a £250,000 fine as 'lenient' and where the Court of Appeal would have no hesitation in upholding a very substantially higher fine.

The practical consequence has been much greater fines: see e.g. R v United Utilities (unreported) in which the Crown Court ordered United Utilities to pay a fine of £666,000 plus costs after it pleaded guilty to the negligent leak of untreated sewage into the River Medlock, Manchester in 2014. On sentencing Judge Potter noted that 'by far the most serious feature of the case is the defendant company's dreadful record or previous offending' and consistent with the new definitive guidelines he explained that the company's size and annual turnover of £1 billion left it liable to a higher band of sentencing. The relevance of this is that it appears that certainly

^{58 [2000] 2} Cr App R (S) 423.

⁵⁹ [2003] EWCA Crim 2243.

⁶⁰ [2015] EWCA Crim 960; [2016] 3 All E.R. 919.

fundamental environmental concepts such as the polluter pays principle (if not the preventative principle) are have legal effect where, until recently, this is arguably not been the case.

With a continuing crisis in funding and the need for governance and regulation more apparent than ever, it is perhaps the case that the environmental regulation role could fall more explicitly to community groups, NGOs and members of the public: 'the concerned public' as well as new enforcement body. This was recognised by Elias LJ in Austin v Miller Argent (South Wales) Ltd something that appeared quite clear to the Special Rapporteur to the Human Rights Council⁶¹. This is not a radical view. There is the Public Defender's Office in New South Wales, which is a body of salaried barristers independent of the government who appear in serious criminal matters for clients who have been granted legal aid and who appear in, among other things, the Land & Environment Court. There are also some statutory provisions in the United States that help promote environmental justice by providing the equivalent of qualified one-way costs shifting (QUOCS), where the basic costs rules of 'each party pays their own costs' apply but with the opportunity for claimants to obtain costs for legal fees when successful in some, limited cases. This helps ensure environmental

⁶¹ [2014] EWCA Civ 1012; [2015] 2 All ER per Elias LJ "... It seems to us unrealistic to believe that the powers conferred upon public authorities will suffice to achieve the Aarhus Convention's objectives. Public bodies are often under staffed and under resourced and do not have the same direct concerns to uphold environmental standards as do members of the public. As the passage in the implementation guide referred to at [15], above, makes clear, action by individuals will be a valuable additional method of ensuring that high environmental standards are maintained. We do not see why in an appropriate case a private nuisance claim should not be treated as one of the judicial procedures referred to in art 9(3)."

conservation organizations can pursue environmental litigation without costs becoming prohibitively expensive.⁶² There are some, comparable provisions in UK legislation that afford some notion of public interest environmental costs protection e.g. the pursuit of statutory nuisance under section 82 of the Environmental Protection Act 1990. However, these provisions have limitations that generally support the polluter rather than the polluted such as the defense of best practicable means, the lack of compensation payable under the Act and an exhaustive, limited set of circumstances as to what amounts to a statutory nuisance.⁶³

Finally, there needs be recognition that land use planning is, in reality, just one of the environmental regulatory systems (albeit an important one) and that seeking to compartmentalize planning as a discrete regime distinct and detached from the environment is artificial: see e.g. the notion of sustainable development that is now central to land use planning in most legislative and policy provisions in the UK⁶⁴.

Drawing some of the domestic provisions together it does appear that consistent with the criminal law aspect of environmental law appearing quite stable and reasonably robust, such that Brexit will

⁶² See, e.g, 42 U.S. Code, para 7607(f) (providing authority for costs awards to environmental claimants under the Clean Air Act); 33 U.S. Code § 1365(d) (similar provision in the Clean Water Act); 42 U.S. Code § 6972(e) (similar provision in the Solid Waste Disposal Act).

⁶³ For more detailed discussion of this see e.g. the final reports on Communications ACCC/C/2013/85 & 86 from the Aarhus Convention Compliance Committee: www.unece.org and also further discussion of Elias LJ in *Austin v Miller Argent (South Wales)* Ltd.

⁶⁴ See e.g. the National Planning Policy Framework in England; see also Planning Policy Wales, Chapter 4: Planning for Sustainability and the Well-being of Future Generations (Wales) Act (2015).

have minimal adverse effect, the civil side may need some review, but perhaps not too much.

Having regard to the financial constraints that are likely to continue in the UK, a very practical but effective way forward would be to expand the role of the Environment Tribunal to hear a wide range of environment cases, including those being brought by the 'public concerned'. This would provide an affordable method of access to justice, in circumstances where the general costs rule in the First Tier Tribunal is that 'each party pays their own costs'. It appears that many of the current concerns in environmental law such as, access to justice and the 'overuse' of Judicial Review, as well as the loss of the EU governance and guidance on Brexit, could be resolved without too much cost or complications.

c) International obligations for environmental control and protection

There is an argument that the removal of EU law and governance simply means that the international law which underpins much of the EU environmental law can be referred to and relied upon. There is some merit in this view. For instance, the EU provisions on the marine environment including e.g. Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive)⁶⁵ refers to paragraph 7 of the preamble to the World Summit on Sustainable Development 1992 and the Convention on

⁶⁵ Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy, 2008 O.J. (L 164/19).

Biological Diversity 1992 (CBD 1992). In particular, Article 27 of CBD 1992 provides for the settlement of disputes between contracting parties of the convention and that they should first seek to resolve matters by negotiation, and if agreement cannot be reached, the disputing parties may then refer the matter to arbitration as laid down in Part 1, Annex 2 of the Convention or refer matters to the International Court of Justice (ICJ).⁶⁶ As the UK is a party to the CBD 1992, there is no fundamental difficulty in applying the provisions of the Convention.

Similarly, in terms of environmental rights the provisions of Directive 2003/4/EC on public access to environmental information⁶⁷ transpose in very similar terms, the text of the Convention on access to information, public participation in decision-making and access to justice in environmental matters 1998 (Aarhus Convention 1998). The Aarhus Convention derives from the fundamental principles and commitments made in the Rio Declaration 1992.⁶⁸

Many international environmental disputes arise from trade matters where one state has imposed trade restrictions to protect the environment. To hear disputes the World Trade Organization has established three bodies: the Dispute Settlement Body, *ad hoc* panels, and the Appellate Body. As with the UNCLOS Tribunal, many

⁶⁶ Convention on Biological Diversity, art. 27 & Annex 2, 1760 UNTS 79; 31 ILM 818 (1992).

⁶⁷ Directive 2003/4/EC on public access to environmental information, 2003 O.J. (L 41/26).

⁶⁸ U.N. Conference on Environment and Development, Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Principle 10 (Aug. 12, 1992).

agreements provide a dispute settlement mechanism. For instance, Article 10 of the Cartagena Protocol on Biosafety 2000 sets up a Biosafety Clearing House and also the ability under Article 27 to secure liability and redress for damage resulting from trans-boundary movements of living modified organisms. And while this is arguably a public law mechanism in that the Clearing House is carrying on a public law function, the procedures do not enable third party public or government intervention. In similar fashion, the UN Convention on the Law of the Sea 1982 (UNCLOS 1982) provides its own compulsory dispute procedure by establishing the International Tribunal for the Law of the Sea that hears disputes relating to marine activities such as fishing rights, exploration, and exploitation and seabed disputes⁶⁹.

Thus, there are a number of dispute resolution mechanisms in international law although compared with the development of legislation over the last few decades, litigation has played a relatively minor role in international environmental law. The ICJ can hear cases between two or more states (as noted above in relation to the CBD 1992), but not private individuals or organizations. It can also be asked to provide an advisory opinion on a question of law. However, to refer a matter to the ICJ requires the consent of the parties to the dispute: see e.g. the recent article: *Why do we need a new International Environmental Court?* in which Stephen Hockman QC advocates for an International Court for the Environment that would be able to "... adjudicate between states and non-state actors, including NGOs and

⁶⁹ United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 397. (*see*, Annex VI: Statute of the International Tribunal for the Law of the Sea)

corporations, an institution which could apply international environmental law or domestic environmental law when appropriate ..." and which would "... develop the principles underlying the law more proactively" than say the ICJ⁷⁰.

However, one of the critical limitations to the use and direction application of international environmental is that the UK courts are often reluctant to intervene with the concept of parliamentary sovereignty and that UK is not bound by international agreements even where an international convention has been ratified by the UK. This point was underlined in *Secretary of State for Communities & Local Government v Venn*⁷¹ in which the Court of Appeal found that, although the environmental rights conferred by Aarhus Convention 1998 applied and that the UK had been found to be non-compliant with the Court was unlawful. Lord Justice Sullivan explained his reasoning:

"32 I have not found this an easy case to resolve. The arguments are finely balanced. Mr Eadie fairly conceded that if, as I have concluded (see para 18 above), the claimant's section 288 application does fall within article 9(3) of Aarhus, there will on the judge's findings (which are not challenged) as to the claimant's means, be a breach of Aarhus if the discretion is not exercised so as to grant her a PCO. He also accepted that whether costs protection

⁷⁰ Stephen Hockman QC, Why do we need a new International Environmental Court? 105 UKELA E-LAW pages 17, 18 (2018), https://static1.squarespace.com/static/55914fd1e4b01fb0b851a814/t/5ad0f60b2b6a28 b7eabba844/1523643917276/e_law_105.pdf, (last accessed Jul. 13, 2018).

⁷¹ [2015] 1 WLR 2328.

was available under CPR r 45.41 for environmental challenges falling within article 9(3) would, in many cases, depend solely on the identity of the decision-taker. He recognised that there was no principled basis for that distinction if the object of the costs protection regime was to secure compliance with the UK's obligations under Aarhus.

33. Notwithstanding these implications of the Secretary of State's case, I have been persuaded that his appeal must be allowed. The coming into effect of CPR r 45.41 is the sole basis on which the claimant submits that "the goal posts have moved" (my expression) to such an extent that this court is no longer bound to apply Corner House principles to applications for PCOs in environmental cases falling within article 9(3). Once it is accepted that the exclusion of statutory appeals and applications from CPR r 45.41 was not an oversight, but was a deliberate expression of a legislative intent, it necessarily follows that it would not be appropriate to exercise a judicial discretion so as to side-step the limitation (to applications for judicial review) that has been deliberately imposed by secondary legislation. It would be doubly inappropriate to exercise the discretion for the purpose of giving effect under domestic law to the requirements of an international Convention which, while it is an integral part of the legal order of the EU, is not directly effective (see the Brown Bear case [2012] QB 606), and which has not been incorporated into UK domestic law: see Morgan [2009] Env LR 629.

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34. For these reasons I would allow the appeal. I do so with reluctance. In the light of my conclusion on article 9(3), and the decisions of the Aarhus Compliance Committee and the CJEU in Commission v UK [2014] QB 988 referred to in para 24 above, it is now clear that the costs protection regime introduced by CPR r 45.41 is not Aarhus-compliant in so far as it is confined to applications for judicial review, and excludes statutory appeals and applications. A costs regime for environmental cases falling within Aarhus under which costs protection depends not on the nature of the environmental decision or the legal principles on which it may be challenged, but on the identity of the decision-taker, is systemically flawed in terms of Aarhus compliance.

35. This court is not able to remedy that flaw by the exercise of a judicial discretion. If the flaw is to be remedied action by the legislature is necessary. We were told that the Government is reviewing the current costs regime in environmental cases, and that as part of that review the Government will consider whether the current costs regime for Aarhus claims should make provision for statutory review proceedings dealing with environmental matters: see the speech of Lord Faulks in the House of Lords Committee stage of the Criminal Justice and Courts Bill: Hansard (HL Debates), 30 July 2014, col 1655. That review will be able to take our conclusions in this appeal, including our conclusion as to the scope of article 9(3), into account in the formulation of a costs regime that is Aarhus-compliant."

The UK Government chose not to commit to Lord Faulks proposed review and has since taken a series of backward steps that restrict, rather than facilitate environmental rights and fail to address the systemic flaws in the UK legal justice system contrary to Article 9(5) of the Aarhus Convention. see e.g. $R v RSPB \Leftrightarrow others$ (above).⁷²

The non-binding nature of international conventions and treaties is consistent with its approach to domestic conventions. In Miller & another v Secretary of State for Exiting the European Union⁷³ the UK Supreme Court discussed the application of political conventions when the claimants challenged the failure by the UK to proceed lawfully with Brexit and to serve Notice on the EU without first being authorized to do so by an Act of Parliament. A point at issue was whether the UK could pursue and legislate for Brexit without agreement of the devolved legislature of Scotland, Wales and Northern Ireland. This was a principle founded in the Sewel was embodied in Convention, which a Memorandum of Understanding between the UK government and the devolved governments in December 2001 (Cm 5240) and later referred to in primary legislation e.g. the Scotland Act 1998. The majority judgment in Miller discussed the Sewel Convention at paragraphs 136-151 and explained at 146 that:

⁷² See also, Decision VI/8k of the Meeting of the Parties to the Convention Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Sixth Session 11-13.9.17 (published 10.1.18, UN, ECE/MP.PP/2017/2/Add.1) in which the UK's continuing non-compliance with the Aarhus Convention was presented and approved by the Meeting of the Parties.

⁷³ [2017] UKSC 5.

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"... Judges therefore are neither the parents nor the guardians of political conventions; they are merely observers. As such, they can recognise the operation of a political convention in the context of deciding a legal question (as in the Crossman diaries case - Attorney General v Jonathan Cape Ltd [1976] 1 QB 752), but they cannot give legal rulings on its operation or scope, because those matters are determined within the political world. As Professor Colin Munro has stated, "the validity of conventions cannot be the subject of proceedings in a court of law" - (1975) 91 LQR 218, 228."

The judgment concluded:

"151 ... we do not underestimate the importance of constitutional conventions, some of which play a fundamental role in the operation of our constitution. The Sewel Convention has an important role in facilitating harmonious relationships between the UK Parliament and the devolved legislatures. But the policing of its scope and the manner of its operation does not lie within the constitutional remit of the judiciary, which is to protect the rule of law."

In summary, whether it is international conventions and treaties or domestic conventions the UK approach appears to be the same: they appear to have an important role to play but cannot otherwise be relied upon to enforce the law that they make. Unless there is a fundamental shift to the constitutional basis to the UK and the concept of parliamentary sovereignty is restricted for the sake of environmental law and practice, it is unlikely that much reliance can be placed upon international obligations for effective environmental control and protection.

4. Conclusion

This paper has focused on the implications of Brexit for environmental law. There are likely to be as many concerns arising in the areas of employment, housing, welfare, trade, free movement of people and goods. There have been some important environmental gains for the UK since joining the EU in 1972, particularly in relation to improvements in the quality of the marine environment, coastal bathing water and river basin management under the implementation of, among others, Directive 2000/60/EC establishing a framework for Community action in the field of water policy (the Water Framework Directive). There have also been considerable advances in environmental impact assessment under the EIA Directive 2014/52/EU⁷⁴ and its predecessors, as well as improvements to procedural aspects of access to environmental information and access to justice under the transposition of the Aarhus Convention 1998 via EU legislation.

However, other aspects of the environment have fared less well. Urban air pollution remains a significant problem. The Committee on the Medical Effects of Air Pollutant (COMEAP) estimated in its 1998 report that, in urban areas of Great Britain, 8,100 deaths were brought forward by short-term exposure to particulate matter (PM).⁷⁵ Some 18 years later, the Royal College of Physicians reported that "... each year in the UK, around 40,000

⁷⁴ Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment 2014 O.J. (L 124/1).

⁷⁵ DEPARTMENT OF HEALTH, COMMITTEE ON THE MEDICAL EFFECTS OF AIR POLLUTANTS, QUANTIFICATION OF THE EFFECTS OF AIR POLLUTION ON HEALTH IN THE UNITED KINGDOM, REPORT 1998 (UK).

deaths are attributable to exposure to outdoor air pollution, with more linked also to exposure to indoor pollutants."⁷⁶

Nature and wildlife has suffered disproportionately since joining the EU. *The State of Nature Report 2016* published by a large partnership of wildlife organizations highlighted that over 56% of UK species have declined since 1970, with 15% of species thought to be extinct or threatened with extinction. Average species abundance or occupancy (a measure similar to abundance for species too tricky to count) has fallen by 16% since 1970. The report's key findings were that there continues to be considerable species loss in the UK with over 40% of species showing strong and moderate declines. It noted that the UK is one of the most nature-depleted countries in the world and that of the 8,000 species assessed as high risk, 15% of these threatened species (those listed on the international red list of endangered species) are either extinct or threatened with extinction from Great Britain⁷⁷.

In considering the implications of Brexit, it is fair to ask whether it is a good thing or bad thing for the environment and the law. The UK Government has recently committed to make this the first generation to leave the natural environment in a better state than it found it⁷⁸. It has its work cut out. If, post-Brexit, it does little or nothing in terms of environmental law there is likely to be a much

⁷⁶ Royal College of Physicians. Every breath we take: the lifelong impact of air pollution. Report of a working party. London: RCP, 2016.

⁷⁷ Hayhow DB et al (2016) State of Nature 2016. The State of Nature partnership.

⁷⁸ Theresa May, Prime Minister, United Kingdom, Prime Minister's speech on the environment: 11 January 2018, (Jan. 11, 2018), https://www.gov.uk/government/speeches/primeministers-speech-on-the-environment-11-january-2017, (last accessed Jul. 11, 2017).

weaker regulatory system and it is unrealistic to suggest that Judicial Review can plug the gaps that will appear with the loss of governance of the EC and the CJEU; the tragedy of the commons is likely to prevail. However, there are alternatives; with an expansion of the scope and remit of the Environment Tribunal being a very practical, efficient and cost -effective alternative to address many of the concerns relating to loss of governance and supervision. This is one that could materially support the role of the new environmental enforcement body.

At an event organized by the Green 10 (a group of environmental NGOs) on 12 April 2018, the EU's top Brexit negotiator, Michel Barnier, told MEPs that the EU-UK post-Brexit relationship deal should include a special clause to ensure there is no watering down of environmental standards. In response Patrick ten Brink, EU Policy Director at the European Environmental Bureau (EEB), noted that was "... in the UK government's interests to be as environmentally ambitious as possible after Brexit" and that it should "raise the bar and lead a 'race to the top' – not the bottom."⁷⁹ In contrast, Michael Bloomberg the media billionaire and former mayor of New York has referred to Brexit as the 'single stupidest thing any country has ever done.'⁸⁰ Certainly, there may be few other decisions as profound for generations.

⁷⁹ Emily Macintosh, *Time for "race to the top" on green standards post-brexit*, META, (Apr. 12, 2018), https://metamag.org/2018/04/12/time-for-race-to-the-top-on-green-standards-post-brexit/, (last accessed Apr. 12, 2018).

⁸⁰ Graham Ruddick, Michael Bloomberg: BREXIT is stupidest thing any country has done besides Trump, THE GUARDIAN, (Oct. 24, 2017), https://www.theguardian.com/politics/2017/oct/24/michael-bloomberg-brexit-isstupidest-thing-any-country-has-done-besides-trump, (last accessed Jul. 12, 2018).

For environmental law, Brexit could yet provide uncertainty: something perhaps inevitable from a referendum decision whose primary purpose was to remove the certainty of EU sovereignty. That may be regarded as a good thing for lawyers employed to advise and litigate on how post-Brexit environmental law applies. It could also be considered a good thing if the UK commits to its promises of leaving the environment in a better state than the previous generation. However, Brexit would be a bad thing for environmental law if the UK did not take the opportunity of maintaining and enhancing its environmental standards but instead allowed modern neo-liberalism with free markets and economic growth to be pursued; something that would be incompatible with the concept of genuine sustainable development that had regard for future generations.

There is some emerging evidence that the UK is putting its environmental commitments into action: on 23 March 2018, the Secretary of State for Housing, Community and Local Government refused permission to develop a large opencast coal mine adjacent to Druridge Bay, Northumberland. He disagreed with his Inspector's recommendation found that the considerable adverse impact to the landscape character of the area and the very considerable negative impact from greenhouse gas emissions were unjustified and that the proposal would not represent sustainable development⁸¹.

⁸¹ Land at Highthorn, Widdrington, Northumberland NE61 5EE (23.3.18), APP/P2935/V/16/3158266,: https://www.gov.uk/search?q=Highthorn. This decision is subject to a High Court appeal in: Banks v Secretary of State for Housing, Communities & Local Government, CO/1731/2018, (a final hearing listed for 17-18.10.18).

It appears that there is a very real opportunity for the UK to assert itself as a world environmental leader with a legal system that has strong regulation and strong protection measures. In truth, the approach to criminal environmental law in terms of legislation, sentencing and enforcement suggests that the UK is already wellplaced in this regard. Moreover, the structure of the civil legal justice system is already in fair shape to put in place a comprehensive, effective and inclusive regime of environmental protection. There will, of course, remain areas of clarification and it is likely that those practicing in environmental law will be busy in the post-Brexit months and years. There is no reason to suggest that common cause, rather than self-interest, should not be the dominant principle moving forward and that environmental law and justice can be an aspect of Brexit that others around the world, including the EU, may regard as a beacon best practice. That will be good for nature, the environment and for civil society

THE 2017 ERITREAN ENVIRONMENTAL LEGISLATIONS: ISSUES AND IMPLEMENTATION CHALLENGES

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ABSTRACT

In mid-2017, the Government of Eritrea issued Proclamation No. 179/2017 (The Eritrean Environmental Protection, Management and Rehabilitation Framework) and Legal Notice No. 127/2017 (Environmental Protection and Management Regulations) for the purpose of protecting, administering and restoring the environment in Eritrea. In a total of 59 Articles, these two long-awaited laws provide for the principles and means of managing the environment in Eritrea, the institutions of environmental governance, pollution control, waste management and environmental impact assessment. This Article attempts to critically discuss some substantive issues and highlight the challenges of implementing these two laws.

1. INTRODUCTION: LAYOUT OF THE LAWS

After many years in the drafting process, the Eritrean umbrella environmental legislation was issued in mid-2017, titled 'Proclamation No. 179/2017 (The Eritrean Environmental

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Protection, Management and Rehabilitation Framework)'.¹ A No. complimentary legislation, 'Legal Notice 127/2017 (Environmental Protection and Management Regulations)'² was also issued on the same day. Both laws are geared towards protecting, administering and restoring the environment in Eritrea. They provide for the principles and means of managing the environment in Eritrea, establish the institutions of environmental governance and contain rules for pollution control, waste management and environmental impact assessment. The Proclamation, prepared after modifying two earlier drafts (of 1996 and 2002), comprises 7 Chapters and 42 Articles: Chapter 1 (general provisions); Chapter 2 (objectives and governing principles of the management and protection of the environment); Chapter 3 (administrative arrangement); Chapter 4 (National Environmental Council); Chapter 5 (basic environmental management tools); Chapter 6 (pollution control and waste management) and Chapter 7 (miscellaneous). The Legal Notice comprises 4 Chapters and 17 Articles: Chapter 1 (general); Chapter 2 (environmental impact assessment and environmental permit); Chapter 3 (environmental permit, monitoring and inspection); and Chapter 4 (pollution control).

1.1. The Proclamation

Chapter 1 of the Proclamation (Articles 1-3) gives title to the Proclamation and provides for definitions of key terms such as

¹ Proclamation No. 179/2017 (I'he Eritrean Environmental Protection, Management and Rehabilitation Framework)', 2017.

² Legal Notice No. 127/2017 (Environmental Protection and Management Regulations), 2017.

'biological diversity', 'bio safety', 'chemical', 'environment', 'environmental impact assessment', 'pollution', 'sustainable development' and 'waste'. Specifying the scope of application of the Proclamation, Article 3³ provides that unless otherwise provided, the mandatory provisions of the Proclamation shall apply to all environmental matters in Eritrea and that the Proclamation prevails over any law whose provisions are inconsistent to the provisions of the Proclamation.

Chapter 2 (Articles 4 and 5) contains the objectives⁴ of the Proclamation and the principles of environmental management in Eritrea. Eleven principles have been identified: (1) integrated management approach; (2) streamlining environmental protection into sustainable development planning; (3) human wellbeing; (4) the sovereign right of the state to exploit natural resources; (5) fairness and equity; (6) environmental rights and duties of persons; (7) sustainable use of natural resources; (8) preventive and precautionary approach; (9) the polluter pays; (10) public participation; and (11) international obligations.

Chapter 3 (Articles 6-12) details the administrative arrangement for the purpose of implementing the Proclamation. The Ministry of

³ The Proclamation, *supra* note 1 at Article 3.

⁴ Article 4 provides for an enumerative list of objectives including:

 ⁽a) establishing the foundation of environmental management and protection laws and provide the institutions and legal instruments for their implementation and enforcement;

⁽b) advancing an environmental policy framework consistent with sustainable development;

⁽c) guaranteeing and promote maximum public and community participation in the conservation, protection and enhancement of the environment; and

⁽d) setting up the basis for Eritrea's effective contribution to and benefit from international co-operation in the global efforts for environmental protection.

Land, Water and Environment ('MLWE'), through the office of its Minister, and the Department of Environment (through its Director General) have been given the overall responsibility, respectively, of implementing the Proclamation and its day to day administration. Moreover, branch offices responsible for the environment and related affairs are sought to be established in each of Eritrea's six administrative regions ('Zobas'). Among other tasks, the Zoba branches strive to identify areas which are at risk of environmental degradation within their jurisdiction and notify the relevant Ministry for proper intervention. Environment-centric units within Government ministries whose functions include, or are related to, the environment also are directed abide by this Proclamation without breaching their already existing legal obligations. At a more personal level, the Proclamation requires all persons, public or private, to fulfil their respective responsibilities and obligations to protect the environment and cooperate in supplying relevant information at their disposal.⁵ Furthermore, every production enterprise and service provider is further mandated to have internal procedures and systems of monitoring that their activities do not cause damage to the environment.f

Chapter 4 (Articles 13-16) establishes the National Environmental Council ('NEC') out of the Director Generals of eight ministries whose mandates include, or are related to, the

⁵ Ministry of Information, Eritrean Government issues proclamation for Environmental protection, www.shabait.com/news/local-news/24109-eritrean-government-issues-proclamationfor-environmental-protection (last accessed Feb. 21, 2018).

environment.⁶ The NEC endeavors to identify national environmental priority goals and objectives, co-ordinates the environment-related functions of the ministries and review the respective progresses and reports in the environmental field and recommend incentives for protection of the environment.

Chapter 5⁷ (Articles 17-30) provides for basic environmental management tools for Eritrea. The Chapter provides for the:

- establishment of a National Environmental Management Plan (NEMP) by the MLWE;
- preparation, in conformity with the NEMP, of environmental plans of action by line ministries, Zoba administrations and other relevant government agencies;
- mandatory issuance of an environmental clearance permit for any development activity;
- mandatory application of National Environmental Assessment Procedures and Guidelines (NEAPG) for proposed projects and activities that are likely to have a significant adverse social and environmental impact;

⁶ These are:

⁽a) the Ministry of Agriculture;

⁽b) the Ministry of Health;

⁽c) the Ministry of Energy and Mines;

⁽d) the Ministry of Land, Water and Environment;

⁽e) the Ministry of Marine Resources;

⁽f) the Ministry of Public Works;

⁽g) the Ministry of Trade and Industry; and

⁽h) the Ministry of Transport and Communications.

⁷ The Proclamation, *supra* note 1 at Chapter 5.

- possibility of an environmental audit, to check compliance with the Proclamation, of all activities of any person involved in economic and social development;
- putting in place by the MLWE of an early warning system for environmental disaster and contingency plan for avoiding and/or reacting to mitigate the effects of environmental emergencies;
- establishment of a National Environment Fund to be used for projects designed to protect, conserve, restore and enhance the environment, including to develop human and institutional capacity needed for the proper management of the environment;
- right of all persons to access any environmental data and information related to implementation of the Proclamation and responsibility of concerned entities to conduct public awareness campaigns;
- support of research on the maintenance of the integrity of the Eritrean eco-system;
- the development of environmental quality criteria, standards and guidelines for handling toxic and hazardous substances;
- respective designation by any appropriate authority or Zoba Administrations/village community councils of any area as a national protected area or enclosure for the purpose of their preservation and better management;
- promotion of measures aimed at maintaining the safety and enhancement of the national bio-diversity through strict

regulation and after ethical acceptance of the introduction of genetically modified organisms and alien species to the country; and

use of economic incentives/disincentives as policy instruments in protecting the environment.

Chapter 6⁸ (Articles 31-36) provides for the means of controlling pollution and managing of waste.

- All persons have the duty to prevent or control pollution and shall not discharge or emit, or allow the discharge or emission of, any effluent, gases, or solid waste in amounts that would harm the environment. Pollution in excess of standards set by the Proclamation or international instruments results in the duty to clean-up, remove or dispose of the pollutant to the satisfaction of the authorities and pay the cost to compensate for all the damages caused by the pollution.
- The importation of hazardous and toxic substances is allowed only with the written permit of the relevant authority.
- Every person, whose activities generate waste, shall have the duty to responsibly manage the waste and apply necessary measures to minimize it. The collection, recycling, treatment and disposal of waste without a legal permit shall be prohibited. Import and export of any waste is prohibited and a special permit is required for the import or export of recyclable materials.

⁸ The Proclamation, *supra* note 1 at Chapter 6.

- Government office shall be responsible for inspection, enforcement and monitoring of compliance with environmental quality standards and the conduct of environmental audit in their respective sectors.
- All developers or owners of projects have the duty to keep records of and continuously monitor environmental impacts and consequences of their works at all stages of their works or projects.

Chapter 7⁹ contains miscellaneous provisions.

- The Chapter provides that any person who violates provisions of the Proclamation and laws or directives issued under it shall, in addition to penalties under other laws, be guilty of an offence and be liable, upon conviction, to punishment under the provisions of the Penal Code.
- Moreover, any person and community shall, irrespective of demonstrating a vested interest, have a right to bring a civil action against a person whose activity or omission is causing or is likely to cause harm to human health or the environment.
- Furthermore, the principle of "the commonly shared but differentiated historical responsibilities and socio-economic conditions and capabilities of nations" shall determine Eritrea's participation in and contribution to global and regional partnership for the conservation, protection and restoration of the invaluable health and integrity of the Earth's ecosystems.

⁹ The Proclamation, *supra* note 1 at Chapter 7.

1.2. The legal notice

Chapter 1¹⁰ of the Legal Notice (Articles 1-2) provides for the title of the Legal Notice and maintains the definitions of the Proclamation for its purpose.

Chapter 2¹¹ (Articles 3-7) provides for environmental impact assessment ('EIA') and environmental permits. A NEAPG is sought to be prepared to assess the environmental impact of development activities and projects which may impact the environment. After receipt of an EIA report by a developer or proponent of a project and an application to obtain an environmental permit, the Director General of the Department of Environment may grant or reject an environmental clearance or require the applicant to redesign the project or make necessary amendments. Any aggrieved person may appeal first to the Director general and then to the Minister of the MLWE whose decision shall be final on the matter. The submission of an updated EIA may also be required.

Chapter 3¹² deals with environmental permit, monitoring and inspection. The environmental permit mandates the grantee to execute the development activity or project in accordance with the NEAPG. Moreover, any project activity or its premises shall be accessible and subjected to environmental monitoring and inspection with the view of assessing and determining their immediate and longterm effects on the environment. Duly authorized inspectors have

¹⁰ The Legal Notice, *supra* note 2 at Chapter 1.

¹¹ Id. at Chapter 2.

¹² Id. at Chapter 3.

been given a list of powers to ensure the execution of the development activities or projects under the NEAPG. Any wrong shall be remedied by the owner or developer to the satisfaction of the Department of Environment.

Chapter 4¹³ governs pollution control.

- Every urban and rural administrative authority must establish efficient waste management systems and safe dumping sites in their locality.
- No person shall carry out any project or activity, which is likely to discharge effluents or emissions to the environment in excess of acceptable amounts.
- Radioactive materials or other sources of dangerous radiation shall not, without license, be imported, processed, mined, exported, possessed, transported, used or disposed of. Illegally held radioactive substances shall be seized, impounded, destroyed or disposed by the competent authority in such a manner that precludes environmental damage.
- The Department of Environment shall cooperate with pertinent government agencies in developing standards or criteria for the classification of different types of hazardous wastes.¹⁴ Import or export of hazardous wastes shall not be

- iii. carcinogenic waste;
- iv. inflammable waste;
- v. persistent inorganic waste;
- vi. toxic waste;
- vii. explosive waste;

¹³ *Id.* at Chapter 4.

¹⁴ The categories include:

i. extremely hazardous waste;

ii. corrosive waste;

allowed without valid license. Moreover, the Department may issue an environmental restoration notice or a similar order to any person whose activities continue to harm the environment.

 An environmental permit may be suspended or revoked where the holder of the permit fails to comply with the conditions specified in the licence.

2. POSITIVE ASPECTS OF THE LAWS

Despite the longevity of the wait for issuance of the twin legislations, a number of positive aspects can be identified from the provisions of the two legislations.

Firstly, the Proclamation can now serve as the umbrella legislation to guide all previous and future environment-related laws in Eritrea. It is true that issuance of the Proclamation, as the preeminent environmental law in the country, should have proceeded the issuance of a number of environment-related laws enacted before it and this may be representative of a 'cart before the horse' situation. Nevertheless, since laws are often issued to be amended in light, at least, of subsequent laws, any inconsistency of these laws with the 2017 umbrella legislation will have to be amended in due course. Some previously issued laws include:

Proclamation No. 104/1998 (The Fisheries Proclamation);

viii. radioactive waste; or

ix. any other category of waste which the Department and other pertinent authority may consider necessary.

- Legal Notice No. 63/2002 (Regulations to Prohibit the Production, Importation, Sale or Distribution of Plastic Bags in Eritrea) as amended by Legal Notice No. 99/2004;
- Legal Notice No. 41/1998: (The Fishery Product Hazard Analysis Critical Control Points Regulation);
- Legal Notice No. 42/1998 (The Potable Water Regulation);
- Legal Notice No. 64/2003 (The Aquaculture Products Regulation);
- Legal Notice No. 65/2003 (The Additives Regulations);
- Legal Notice No. 66/2003 (The Heavy Metals Regulations);
- Legal Notice No. 114/2006 (Regulations For Importation, Handling, Use, Storage and Disposal of Pesticides);
- Proclamation No. 155/2006 (Forestry and Wildlife Conservation and Development Proclamation);
- Proclamation 156/2006 (Plant Quarantine Proclamation);
- Legal Notice No. 111/2006 (Regulations for the Issuance of Forestry Permits);
- Legal Notice No. 112/2006 (Regulations for the Issuance of Wildlife Permits);
- Legal Notice No. 117/2010 (Regulations for the Issuance of Permit for the Importation or exportation of Ozone Depleting Substances and Ozone Depleting Substances Based Equipment or Products);
- Proclamation No.162/2010 (The Eritrean Water Proclamation); and

 Legal Notice No.212/2010 (Regulations for the Issuance of Permit for the Importation or Exportation of Ozone Depleting Substances (ODSs) and ODS-based Equipment or Products).

A number of key legislations also remain in draft form, some for nearly two decades, awaiting official enactment and their revision in light of the 2017 Proclamation. These include:

- National Biodiversity Proclamation;
- National Bio-safety Proclamation;
- A Proclamation to Regulate Pesticides;
- Regulations for Pesticide Dealers, Storage, Registration as well as Packing and Labelling; and
- Seeds Proclamation; and
- Integrated Marine and Coastal Zone Management Proclamation.

Secondly, the listing of eleven clear and specific environmental principles as are contained in standard international environmental instruments is a commendable element of the Proclamation. These principles will henceforth serve as guiding posts for any environmental law, policy, measure or directive to be issued in Eritrea and will ensure their consistency with internationally accepted standards.

Thirdly, the expansion of the environmental mandate beyond the MLWE and its Department of Environment to line ministries, Zoba administrations, village communities, project developers and owners of development activities, down to the individual can be identified as a significant step towards comprehensive participation in protecting and managing the environment.

Fourthly, through a series of provisions, the Proclamation attempts to maintain pace with international environmental laws and standards without risking national interest. This is commendable in light of the fact that Eritrea is party to a number of international environmental treaties.¹⁵ One of the objectives of the Proclamation is to 'set up the basis for Eritrea's effective contribution to and benefit from international co-operation in the global efforts for environmental protection' [Article 4(a)].¹⁶ The eleventh environmental adopted by Article 5 of the Proclamation, entitled 'international obligations' states that '[t]he State shall undertake global and regional environmental responsibility in a manner that

¹⁵ Eritrea has ratified or acceded to the following treaties:

^{1.} Convention on Biological Diversity;

^{2.} Cartagena Protocol on Bio-safety to the Convention of Biodiversity;

^{3.} United Nations Convention to Combat Desertification in those countries Experiencing Serious Drought and/or Desertification, Particularly in Africa;

^{4.} Convention on International Trade in Endangered Species of Wild Fauna and Flora;

^{5.} Convention on the Conservation of Migratory Species of Wild Animals;

^{6.} The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;

^{7.} United Nations Framework Convention on Climate Change;

^{8.} Kyoto Protocol on Climate Change;

^{9.} Rotterdam Convention on Prior Informed Consent;

^{10.} Vienna Convention for the Protection of the Ozone Layer;

^{11.} The Montreal Protocol on Substance that Deplete Ozone Layer;

^{12.} The London Amendment to the Montreal Protocol;

^{13.} The Copenhagen Amendment to the Montreal Protocol;

^{14.} The Montreal Amendment to the Montreal Protocol;

^{15.} The Beijing Amendment to the Montreal Protocol;

^{16.} Stockholm Convention on the Persistent Organic Pollutants;

^{17.} International Treaty on Plant Genetic Resources for Food and Agriculture;

^{18.} The Convention concerning the Protection of the World Cultural and Natural Heritage;

^{19.} Convention for the Safeguarding of Intangible Cultural Heritage; and

^{20.} Convention on the Protection of Cultural Property in the Event of Armed Conflict.

¹⁶ The Proclamation, *supra* note 1 at Article 4(a).

*will not cross the national interest.*¹⁷ On environmental quality criteria and standards, Article 26(3) provides that these shall be '*based on current scientific knowledge and generally accepted international environmental management practices and practical considerations specific to the particular socio-economic conditions and technological capacities of the country.*¹⁸ Article 31(2) also provides that an individual's liability for polluting the environment shall arise if the pollution exceeds '*any standards and guidelines established under this Proclamation or applicable international standards*¹⁹ As a catch-all provision, Article 40, titled '*international cooperation*' provides that:

Eritrea's participation in and contribution to global and regional partnership for the conservation, protection and restoration of the invaluable health and integrity of the Earth's ecosystems, shall be determined on the basis of "the principle of the commonly shared but differentiated historical responsibilities and socioeconomic conditions and capabilities of nations.²⁰

Fifthly, the Proclamation gives ample room for the private and public participation of people. For instance, the declaration in Article $24(1)^{21}$ of the right of any person to access any information relating to the implementation of the Proclamation and to any other law relating to the management of the environment is laudable from the human rights perspective. Article 27(2) also allows councils of village communities to designate enclosures for purposes of protecting

¹⁷ Id. at Article 5.

¹⁸ *Id.* at Article 26(3).

¹⁹ Id. at Article 31(2).

²⁰ *Id.* at Article 40.

²¹ Id. at Article 24(1).

degradation of land and marine resources, preserving vegetation cover and for the sustainable use of the same.²² More interesting and, to the best knowledge of the author, the first of its kind in Eritrean laws is Article 39, which enshrines the right to case a civil case. Article 39 provides:

'Any person and community shall have, irrespective of demonstrating a vested interest, a right to bring a civil action against a person whose activity or omission is causing or is likely to cause harm to human health or the environment. The action may:

- (a) seek prevention or discontinuance of the activity or omission, which is causing or is likely to cause harm to human health or the environment;
- (b) request that the on-going activity be subjected to an environmental inspection or audit;
- (c) request that measures to protect the environment or human health be taken by the person whose activity or omission is causing or is likely to cause harm to human health or the environment.²³

In fact, community participation is one of the key concepts contained in the preamble to the Proclamation: *...environmental awareness and community involvement is critical for the effective protection and sustainable management and rehabilitation of the environment...*²⁴ Moreover, Article 4(c) states that one of the objectives of the Proclamation is to

²² Id. at Article 27(2).

²³ *Id.* at Article 39.

²⁴ Id. at Preamble.

'guarantee and promote maximum public and community participation in the conservation, protection and enhancement of the environment.' ²⁵

Finally, the Proclamation provides for a number of options for its proper enforcement. These include:

- the continuous monitoring of development activities and projects by the environmental inspectors;
- authorization of ministries, Zoba administrations, village communities and other authorities to enforce environmentrelated guidelines and instructions that they issue;
- the possibility for the initiation of civil claims for injunction, compensation or any other related purpose – by any interested person against those who violate provisions of the Proclamation;
- the possibility to institute a criminal case against those who violate provisions of the Proclamation.

3. Some remaining issues and implementation challenges

Like any other law, the Proclamation and its Legal Notice are far from attaining perfection. A number of issues have been left unaddressed and implementation challenges may soon emerge. This Section of the Article attempts to discuss the above.

²⁵ Id. at Article 4(c).

3.1 Issues

The following three issues may be identified in relation to the scope and substance of the Proclamation and the Legal Notice:

One of the notable absences in these two environmental legislations is the concept of customary environmental laws and practices. Eritrea's oral and written customary laws are abound with rules for the protection of the environment within the jurisdiction of the respective customary law. These provisions include grazing seasons and procedures, rules for the cutting of trees (including listing of trees that can never be cut), use and protection of communal wells, ponds and streams and care for trees and domestic animals. Over and above these customary laws, there are numerous customary practices which positively impact the environment. These include seeding and cross-fertilization practices, animal breeding practices, quarantine practices, fallowing and land rotation for purposes of cultivation as well as indigenous tilling and terracing techniques. From the perspective of the Convention on Biological Diversity²⁶ which mandates States to foster the preservation and development of traditional knowledge and practices, the Proclamation should have allowed for the sustainable continuance of traditional environmental practices as far as they are in tune with the objectives of the Proclamation.

The *second* issue is related to the scope of the application of international environmental conventions in Eritrea. The words,

²⁶ Convention on Biological Diversity, 1992.

terms, phrases or sentences in the Proclamation referring to international legal instruments and practices established by them (see Section 2 above) are not clear enough to understand the extent to which the country is willing to abide by the environmental treaties it is a party to. For instance, the eleventh environmental principle in Article 5 of the Proclamation states that '[t] he State shall undertake global and regional environmental responsibility in a manner that will not cross the national interest.²⁷ Does this mean that the Proclamation requires the government to implement all its responsibilities under the environmental treaties? If so – absent a constitutional provision or consistent practice in Eritrea in this regard²⁸ – could this stipulation

²⁷ The Proclamation, *supra* note 2 at Article 5.

At is stands, Eritrea does not at the moment have a functioning Constitution where the issue of domestication of international treaties could have been provided for. In a recent assignment from the government, the author identified four common elements in the trends of incorporating/transforming the more than one hundred continental and international legal instruments (treaties, conventions or charters) that Eritrea has signed, accepted, ratified, acceded to, adhered to or subscribed to since 28

May 1993: None of the practices identifies treaties and conventions as superior, equal or inferior

to the relevant Eritrean law;None of the Eritrean laws has yet copied and pasted an entire treaty or convention for application in Eritrea;

Most references to respective international instruments are in defining key terms used in the legislation, in the inclusion of key principles it contains and in the inclusion of annexed tables and standards; and

No express provisions exist as to the applicability or relevance of parts of the respective treaties left uncovered in the Eritrean legislations.

The six notable trends which the author observed on the practice of domesticating treaties into Eritrean law are:

^{1.} There are some Eritrean laws which make explicit reference to relevant international instruments and give a hint to the intent, among others, to honour Eritrea's commitments under said instruments.

^{2.} A rather unique experience is reference by some laws to be bound by international treaties or conventions that Eritrea has not become a party to.

^{3.} There are legislations which incorporate relevant treaties without explicitly referring to the latter. In these laws, there is no direct reference to a treaty/convention, but a textual comparison of the Eritrean legislation and the respective treaty/convention easily shows reliance of the domestic legislation on the international instrument.

be considered as the legal provision for the incorporation into the Eritrean domestic legal system of environmental treaties that the country is a party to? Or may it be read as authorizing a 'selective' implementation of international environmental responsibility?

A *third* issue may be raised regarding the right to petition the decision of the Director General of the Department of the Environment regarding the application for environmental clearance. Paragraphs 3-5 of Article 5 of the Legal Notice provide that any aggrieved person may appeal first to the Director general and then to the Minister of the MLWE whose decision shall be final on the matter. From the perspectives of due process and contemporary administrative law, the inability of the petitioner to bring the case to a final 'neutral' arbiter (that is, the court) could be criticized. In fact, this Legal Notice is one of the very few Eritrean legislations that do not allow an appeal from an executive office to the judiciary (usually the regional or high courts).

A *fourth* issue is related to the criminal prosecution under the Eritrean Penal Code, 2015²⁹ of the violation of the Proclamation and laws issued under it (Article 38).³⁰ The Eritrean Penal Code, essentially an adoption of the 1957 Ethiopian Penal Code³¹,

^{4.} There are Eritrean laws and regulations (some in force and some in draft form) which incorporated significant amounts of the respective international treaties, conventions or standards.

^{5.} Some Eritrean legislations copy (almost verbatim) key provisions of relevant international instruments which Eritrea is not a member of.

^{6.} Practice of standards set by international instruments without any specific domestic legislation governing the matter.

²⁹ Penal Code of the State of Eritrea, 2015.

³⁰ The Proclamation, *supra* note 1 at Article 38.

³¹ The Penal Code of Ethiopia, 1957.

understandably does not have a section dedicated to specific environmental crimes. There are some relevant offices contained in the Penal Code such as the offences against public health and hygiene (Articles 503-520 and 785-792) which primarily focus on spreading of diseases, contamination of water and pastureland, as well as the use of dangerous substances. In the absence of a greater number of provisions, the only avenue available for the prosecution of crimes for violating the provisions of the Proclamation and laws issued under it will be the catch-all provision in Article 733 of the Penal Code which reads:

Art. 733. - General Clause:

Whosoever, save in the cases specially provided in this Title, contravenes the regulations, orders, rules or measures lawfully issued by the appropriate authority with a view to... or, generally, in regard to ... food, health, forestry or policy matters,

shall, if his act is not punishable under a specific provision of the Penal Code or of special legislation, be punishable with fine or arrest to be determined in accordance with the rules laid down herein before.³²

Article 733 is part of the Penal Code which provides for '*petty* offences' and hence most environmental crimes have been grouped as petty offences in Eritrea. Under Article 703 of the Penal Code the duration of arrest shall be 'of one day at least and of three months at most, subject to cases of recidivism ... and cases where the law provides a higher

³² Penal Code of Eritrea, *supra* note 29 at Article 733.

*maximum.*³³ According to Article 708, the fine extends between one and three hundred Eritrean Nakfas (that, 0.06 USD to 20 USD). In grave cases, it may amount to 500 Nakfas (33.3 USD) where the offender acted for gain and may go even higher in cases of recidivism and where the law provides a higher maximum.³⁴ Thus, unless a given violation of the Proclamation and laws issued under it falls under another offence, greater in severity, identified by the Penal Code, the by-default provision will be Article 733 of the Penal Code, the penalty under which is completely incongruent with the purposes of the Proclamation and the type of offences it aims to prevent. It will be obvious when the Proclamation is begun to be implemented in full, that an amendment providing for specific (and more severe) penalties for different classes of environmental crimes will be needed. As it stands now, the Penal Code does not the serve the purposes of the Proclamation.

3.2 Implementation challenges

Further, a number of implementation challenges could potentially arise, and this Section of the Article attempts to identify those challenges, as the Proclamation is put into practice.

3.2.1 Preparation of Documents and Establishment of Offices

It is indeed true that the MLWE has for many years utilized the 'draft' NEMP (1995) and NEAPG (1999) in the absence of an over-arching national environmental legislation. It will now be easier to update these hitherto functional documents in tune with the

³³ Id. at Article 703.

³⁴ *Id.* at Article 708.

Proclamation. A 25-year report prepared by the Ministry³⁵ indicates that numerous policy and operational instruments have been prepared, reports issued and research carried out by the Ministry in order to meet its mandate. With the coming of the Proclamation, the Ministry is yet to revise the 1995 NEMP, the 1999 NEAPG, prepare environmental audit instruments, prepare an early warning and disaster preparedness scheme, and conduct a host of other related activities the Ministry has promised to carry out between 2017 and 2021.

On the date of the writing of this article, the NEC has not begun functioning according to the working procedures set by the Proclamation. The National Environmental Fund is also yet to be realized. Zoba environmental units are also awaiting establishment.

3.2.2 Human Resource

All of the above mentioned yet-to-be-conducted activities will require significant human resource potential. It is admitted that Eritrean laws are issued with the full knowledge of the dearth of professional wealth in the country that hampers the implementation of national objectives. In the case of this Proclamation, the Ministry has a host of implementation assignments which require the engagement of professionals working in an environment and related fields. An additional layer of professionals will also be required to work on the continued implementation of Eritrea's obligations under international environmental treaties.

³⁵ Copy with author.

3.2.3 Coordination with Other Laws and Institutions

Proliferation of laws carries with it the risk of a given area being regulated under the authority of different organs under different laws. Environment is one of these areas.

Take the preservation of natural heritage or archaeological sites as an example. The Proclamation allows appropriate authorities to designate by regulation any area as a national protected area and also authorizes Zoba administrations and councils of village communities to designate enclosures for purposes of protecting degradation of land and marine resources, preserving vegetation cover and for the sustainable use of the same. Another provision gives the MLWE the general authority to conserve any area at risk (inclusive of archaeological sites). On the other hand, from the heritage point of view, Proclamation 177/2017 (the National and Cultural Heritage Proclamation)³⁶ has provided the Ministry of Education (not represented in the NEC) the authority to declare a given site a Protected Site and prepare conservation plans for the same. From the point of view of mining regulation, the various mining and petroleum operations laws give the Ministry of Energy and Mines regulatory oversight in relation to protection of archaeological and paleontological spots found within mining or petroleum operation sites. A highly coordinated plan is, therefore, needed for the conservation, management and economic use of heritage sites.

³⁶ Proclamation 177/2017 (the National and Cultural Heritage Proclamation), 2017.

Another example is the conservation of oral folklore or traditional knowledge which, by definition, falls within the circumference of this Proclamation³⁷. The Ministry of Education also is required, under Proclamation 177/2015³⁸, to conserve and regulate the development of oral folklore or traditional knowledge as a subject of heritage. The Commission of Culture and Sports (not in the NEC) is further mandated to govern them as items of culture.

4. CONCLUSIONS AND RECOMMENDATIONS

The enactment of Proclamation No. 179/2017 and Legal Notice No. 127/2017 (Environmental Protection and Management Regulations) is a noteworthy step in the process of preserving and managing the environment in Eritrea and in establishing its positive role in the global endeavors on the environment. Assurances have been provided to balance government monitoring with the right of individuals and communities to participate in protecting the environment and petition wrongs committed by the authorities in the process of implementing the laws. The desire to live up to international commitments has been given legal effect through a number of provisions in these two laws.

Some of the infirmities of these two laws (for instance, the issues of customary laws and practices and implementation of international treaties) could be addressed through positive

³⁷ The proclamation defines environment as "the physical factors of the surroundings of human beings, including land, water, atmosphere, climate, sound, odour, taste, biological factors as well as the social factors of aesthetics that includes both natural and human built cultural, historical and economic objects (emphasis added)"

³⁸ Proclamation 177/2015, Cultural and Natural Heritage Proclamation, 2015.

interpretation of the laws and through a refined process of implementation. Other issues (such as the case of appeal and environmental crimes) would be best addressed through amending the Proclamation. Finally, the implementation challenges could be adequately tackled through funding, training and effective coordination with relevant organs.

THE TIMELINESS OF THE LAW OF TRANSBOUNDARY AQUIFERS

Dr. Theodore Okonkwo*

ABSTRACT

In 2008, the International Law Commission has recommended a draft of the Law of Transboundary Aquifers to the United Nations General Assembly. The General Assembly subsequently published a resolution adopting the law and attaching it to the said resolution. Transboundary aquifers are networks of rock formation beneath the ground that contain water and straddle more than two countries. Recent research has identified the existence of hundreds of transboundary aquifers straddling countries in many continents all over the world. As underground water is a very important source of freshwater universally, the potential of conflicts and related issues that may arise in the wake of research and studies as to how underground waters are linked to other systems of water is very possible. Even today, problems involving transboundary aquifers are already in existence as illustrated in the cases of the United States and Mexico, and more importantly, between Israel and Palestine – two countries whose history has been conflict-ridden. The Law of Transboundary Aquifers is, therefore, a very timely document that can ease tensions as well as serve as guidelines to states saddled with the problem of sharing underground water resources. Nonetheless, the law in issue is merely a recommendatory document, unless an

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international convention is undertaken not only to make it more binding, but to further elaborate and expand its provisions.

1. INTRODUCTION

A. Background: The Law of Transboundary Aquifers

Transboundary aquifers can be found in every continent. According to research conducted by the International Groundwater Resources Assessment Centre, there are about 250 to 270 transboundary aquifers in the world today, which is about as many as the number of transboundary rivers.¹ A more definitive number was given by IGRAC in 2015 at 592, which has been the identified transboundary aquifers so far. These transboundary aquifers are straddled between and among countries in South America, North America, Africa, the Middle East, South and Southeast Asia, and even in countries located in different continents and regions of the world.²

The International Law Commission (ILC) recommended that the General Assembly of the United Nations take note of the Draft Articles of the Law on Transboundary Aquifers in its Report on the Work of the 60th Session in 2008. It further advised that the General Assembly recommend to Member states to enter agreements with other states, either on a bilateral or on a regional basis, for the joint

¹ David Brooks, Governance of Transboundary Aquifers: New Challenges and New Opportunities, Global Water Forum, (2013), www.globalwaterforum.org/2013/06/24/governance-oftransboundary, (last accessed Jul. 13, 2017).

² IGRAC, Transboundary Aquifers of the World: Special Edition for the 7 World Water Forum 2015, International Groundwater Resources Assessment Centre, (2015), https://www.un-igrac.org/sites/default/ files/resources/files/ TBAmap_2015.pdf, (last accessed Jul.12, 2017).

management of their respective aquifers anchoring such agreements on principles laid down by the Draft Articles, and to call for an international convention in the future, which would expound on the issues taken by the Draft Articles. These recommendations can be found in Chapter IV of the Report under the subtitle "*Shared Natural Resources*."³ On 15 January 2009, the General Assembly published the adoption of the Law of Transboundary Aquifers during its 63rd session in 2008 as an annex to its resolution, now denominated as United Nations General Assembly Resolution 63/124 or UNGA 63/124.⁴

Since the adoption of the aforesaid Resolution, several events relevant to transboundary aquifers have transpired. These include the Agreement on the Guarani Aquifer in 2010 entered into by Argentina, Brazil, Paraguay and Uruguay, and the development of the Model Provisions on Transboundary Groundwaters developed and supported by the Parties to the Water Convention.⁵ Moreover, in September 2015 world leaders adopted the 2030 Sustainable Agenda at the UN Summit, the agenda of which, came into force on January 1, 2016. A provision of that agenda relevant to the Law of Transboundary Aquifers is goal number six, which states "*Ensure*

⁴ UNGA, Resolution Adopted by the General Assembly on 11 December 2008, United Nations General Assembly, (2009), http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/63/124,(last accessed Jul. 12, 2017).

³ ILC, Annual Reports: Report on the Work of the Sixtieth Session, International Law Commission, 19 (2008), http://legal.un.org/ilc/reports/2008/, (last accessed Jul. 12, 2017).

⁵ UNGA, Seventy-First Session: The Law of Transboundaries Aquifer, General Assembly of the United Nations, (2016), http://www.un.org/en/ga/sixth/71/transboundary_aquifers.shtml, (last accessed Jul. 12, 2017).

availability and sustainable management of water and sanitation for all." ⁶ In acknowledging the emergence of these new developments since the adoption of UNGA Resolution 63/124, the UN once again passed a resolution AC/671/L22, noting these new developments and attaching once again the Draft Articles of the Law of Transboundary Aquifers.⁷

The Law of Transboundary Aquifers is divided into three main parts and 19 articles. The chief divisions are Introduction, General Principles and Protection, Preservation & Management. Some of the salient provisions of the law include Article 1, which validates and reinforces the sovereignty of each state over the portion of the aquifer that is within the boundaries of its territory. Article 6 imposes upon each state sharing aquifers with other states the duty to act in a way that would not cause harm to the aquifers of other states in the course of exploiting the resources of the aquifer located within its boundaries. Article 7 imposes upon each state sharing aquifers with other states the duty to cooperate with such other states in managing and preserving such transboundary aquifer. Other significant articles are: Article 17 on emergency situations and Article 18 on protection during armed conflicts.⁸

⁷ UNGA, Seventy-First Session: The Law of Transboundaries Aquifers, General Assembly of the United Nations, (2016), http://www.un.org/en/ga/sixth/71/transboundary_aquifers.shtml. (last accessed Jul.

⁶ UN, The Sustainable Development Agenda, United Nations Sustainable Development Goals, United Nations (2017), http://www.un.org/sustainabledevelopment/development-agenda/, (last accessed Jul. 11, 2017).

<sup>11, 2017).
&</sup>lt;sup>8</sup> UN, The Law of Transboundaries Aquifers, United Nations (2008), http://legal.un.org/docs/?path=../ilc/texts/ instruments/english/draft_articles/8_5_2008.pdf&dang=EF, (last accessed Jul. 12,

instruments/english/draft_articles/8_5_2008.pdf&lang=EF, (last accessed Jul. 12, 2017).

B. Relevance of the Law in the International Sphere

There have been many conventions and treaties already adopted by various international bodies in the past to regulate the use and management of international waters. One of these is the Use of Transboundary Watercourses Protection and and International Lakes also known as the Water Convention, which was adopted in Helsinki in 1992 and sponsored by the United Nations Economic Commission for Europe.9 Another relevant international treaty is the Convention on the Law of the Non-Navigational Uses of International Watercourses that was adopted by the UN in 1997, which recently came into force.¹⁰ Other related treaties, conventions and laws are the following: Convention Relating to the Development of Hydraulic Power Affecting more than one State and Protocol of Signature signed in Geneva in 1923 and, the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa adopted in 1994.¹¹

The question that needs to be asked at this point, therefore, is regarding the relevance of the Law of Transboundary Aquifers in the presence of numerous water laws that have been adopted by the UN and other international bodies. In addition, what role does the law

⁹ UNECE, Introduction: About the UNECE Water Convention, United Nations Economic Commission for Europe, (2017), http://www.unece.org/env/water/text/text.html, (last accessed Jul. 13, 2017).

¹⁰ Stephen McCaffrey, *Convention on the Law of the Non-Navigational Uses of International Watercourses*, United Nations Audiovisual Library of International Law, (2017), http://legal.un.org/avl/ha/clnuiw/clnuiw.html, (last accessed Jun. 15, 2017).

¹¹ IWLP Staff, *Internal Documents*, International Water Law Project, (2017), http://www.internationalwaterlaw.org/documents/intldocs/,(last accessed Jun. 17, 2017).

play when parties concerned with transboundary aquifers may enter into their own bilateral or multilateral agreements to govern their respective actions? Finally, considering that the law is merely a part of a UN resolution, is there a need for an international convention to be adopted, to ensure the formal adoption of the law, and also to expand and further elaborate the existing framework in order to make it more relevant and binding?

II. MATERIALS AND METHODS

In resolving the aforementioned issues, this article examines international treaties and the various conventions affecting international waters, particularly those where water sources are being shared by two or more states to identify the applicability of these conventions to the issues underpinning transboundary aquifers. Prior to this, however, the term 'transboundary aquifer' is established with certainty by looking at various definitions propounded by scholars and the United Nations itself. This is undertaken to have a good grasp of the term and understand exactly how past and present laws on international waters can be made applicable to and whether there is a need for a new convention to elaborate the law and officially adopt it as recommended by the ILC itself. Moreover, specific cases of transboundary aquifers, such as those between the United States and Mexico, and those involving Israel and Palestine are also looked into to determine how the parties have resolved their respective situations and whether gaps exist in the agreements that could be filled by the application of the Law of Transboundary Aquifers. If it cannot, there needs to be an elaborated and expounded version that can be established in an international convention called for that purpose to give more teeth to the law.

III. RESULTS

A. Definitions of Transboundary Aquifers

According to the Water Resources Research Center, "Transboundary aquifers are sources of groundwater that defy our political boundaries and often lead to intense conversation about what should be done in order to give everyone a fair share".¹² Transboundary aquifer elsewhere has been defined to mean "an aquifer or aquifer system, parts of which are situated in different states".¹³ The definition canvassed by the Draft Articles apply to every transboundary aquifer irrespective of 'whether they are hydraulically linked to any other water body'.

It therefore means that an aquifer is part of that "system of surface waters and ground waters". In effect, it speaks of "an interrelationship" with a multiple dimension. It must however be stated that it is still not easy to "assess transboundary aquifers due to the absence of valid data".

¹² Water Resources Research Center, Transboundary Aquifers: Water Wars or Cooperative Conservation? College of Agriculture and Life Sciences Cooperative Extension (2011), https://www.wrrc.arizone.edu, (last accessed Jun. 19, 2017).

¹³ Text adopted by the International Law Commission on its Sixtieth Session in 2008, and submitted to the General Assembly as part of the Commission's report covering the work of that Session. The report, which contains commentaries on the draft articles appears in *Official Records of the General Assembly, Sixty – Third Session, Supplement* No. 10 (A/63/10).

In his work Eckstein¹⁴ stated that "the development of international law as it applies to ground water resources..." must be "clear, logical and science based". Perhaps, Eckstein feared that if not properly articulated the law might not serve its purpose of filling the "gap in the sound management, allocation, and protection of such resources", thus, defeating the objective of preventing "future disputes over transboundary aquifers..."

Aquifers are underground layers of rocks that bear water as illustrated in Fig. 1. The water that aquifers hold can be drawn through the construction of wells that would access such resources. When aquifers cover thousands of kilometers shared by more than one territory or state, these aquifers are called transboundary aquifers. Barberis, in 1991¹⁵, expanded the ways in which transboundary aquifers can be situated: first, a confined aquifer that is not connected to other groundwater system or to surface system, but its boundaries intersect with another or other states; second, even if an aquifer is encompassed only within the boundaries of one state, but is dependent or connected with an international river; third, although an aquifer is entirely located within the boundaries of one state, but is recharged in another state, but has connection with the waters of another aquifer located in another state.¹⁶

¹⁴ Eckstein Y., Eckstein G. E., Transboundary Aquifers: Conceptual Models for Development of International Law, 43 GROUND WATER (5) 679-90, (2005).

¹⁵ Barberis, J., *International Ground Water Resources law*, 40 FOOD AND AGRICULTURAL ORGANIZATION LEGISLATIVE STUDY, No. 36, 3 (1991).

¹⁶ Fadia Daibes-Murad, A New Legal Framework for Managing the World's Shared Groundwaters, 3-4 (2005).

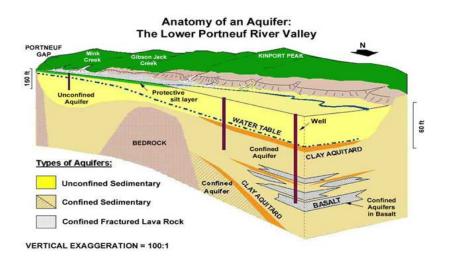


Fig. 1 Aquifer in the Lower Portneuf River Valley, Idaho, USA¹⁷

B. Applicability of Existing International Laws, Treaties and Conventions to Transboundary Aquifers

1. The Water Convention

The Water Convention, also known as Protection and Use of Transboundary Watercourses and International Lakes, which was adopted in Helsinki in 1992, specifically mentions "*transboundary watercourse and international lakes*" in its Preamble, but does not specifically cite transboundary aquifer. Under Article 1 on 'definitions,' only "*transboundary waters*" is defined as "*any surface or ground waters which mark, cross or are located on boundaries between two or more States*."¹⁸

¹⁷ Idaho Museum of National History, *What is an Aquifer?*, Idaho State University, (2017), http://imnh.isu.edu/digitalatlas/hydr/concepts/gwater/imgs/5comp.jpg, (last accessed Jun. 19, 2017).

¹⁸ UNECE, Convention on the Protection and Use of Transboundary Watercourses and International Lakes, United Nations Economic Commission for Europe, (1992), https://www.unece.org/fileadmin/DAM/env/ water/pdf/watercon.pdf, (last accessed Jun. 19, 2017).

2. Convention on the Law of the Non-navigational Uses of International Watercourses

Adopted in 1997 and came into force in 2014, this law is chiefly focused on the regulation and management of international watercourses. It defines a watercourse as both encompassing surface and ground waters that flows into the same final point.¹⁹

3. Other International Treaties and Conventions Related to Water

The law on Convention Relating to the Development of Hydraulic Power Affecting more than one State and Protocol of Signature signed in Geneva in 1923 is also concerned with the involvement of two or more states in a common endeavor using the same natural resources. However, it encompasses only the use of a network of pipes from one state to another to utilize a natural resource for power, which may include water.²⁰ On the other hand, the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa is also concerned with water conservation,

¹⁹ UN Office of Legal Affairs, Convention on the Law of the Non-navigational Uses of International Watercourses, Office of Legal Affairs, (1997), http://legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf, (last accessed Jun. 19, 2017).

²⁰ Foreign & Commonwealth Office, United Kingdom, Convention Relating to the Development of Hydraulic Power Affecting more than one State and Protocol of Signature, Foreign & Commonwealth Office, (1925) http://treaties.fco.gov.uk/doc s/fullnames/pdf/1925/TS0026%20(1925)%20CMD-2421%201923%209%20DEC,%20GENEVA%3B%20CONVENTION%20RELATIV E%20TO%20DEVELOPMENT%20OF%20HYDRAULIC%20POWER%20AFFECT ING%20MORE%20THAN%20ONE%20STATE.pdf> (last accessed Jun. 19, 2017).

among others, to combat aridity, but has no transboundary significance.²¹

C. Existing Transboundary Aquifers Cases

1. US-Mexico

The US and Mexico shared a number of aquifers – eleven of them identified as of 2015.²² Although a water treaty had already been entered between the two parties since 1944, the emergence of a salinity crisis in 1961-1971 forced them to consider separate agreements on underground water thereafter.²³ This resulted in the addendum called Minute 242 to the original treaty. Minute 242 simply acknowledged the necessity of undertaking an extensive agreement on transboundary aquifers.²⁴ In 2006, the U.S. – Mexico Transboundary Aquifer Assessment Act or TAAP, for short, was passed. This law, however, merely authorized the Secretary of Interior to undertake certain research to know the extent of problems in some of the transboundary aquifers it shares with Mexico.²⁵

²¹ International Federation of Red Cross, General Assembly: A/AC.241/27, (1994) http://www.ifrc.org/ docs/idrl/I223EN.pdf, (last accessed Jun. 19, 2017).

²² IGRAC, Supra, note 13.

²³ Aaron Wolf and Joshua Newton, Case Study Transboundary Dispute Resolution: U.S./Mexico Shared Aquifers, Oregon State University,(2017), http://www.transboundarywaters.orst.edu/.../case.../US_Mexico_aquifers.pdf, (last accessed Jun. 19, 2017).

²⁴ Stephen Mumme, Minute 242 and Beyond: Challenges and Opportunities for Managing Transboundary Groundwater on the Mexico-U. S. Border, 40 NATURAL RESOURCES JOURNAL, 341 (2000).

²⁵ William Alley, Five-Year Interim Report of the United States – Mexico Transboundary Aquifer Assessment Program: 2007 – 2012, US Department of the Interior, (2013), https://pubs.usgs.gov/of/2013/1059/pdf/ofr2013-1059.pdf, (last accessed Jun. 19, 2017).

2. Egypt-Israel-Palestinian Territory and Israel-Palestinian Territory

As of 2015, two transboundary aquifers have been identified that show the involvement of Egypt, Israel and Palestine. These are the Western Aquifer Basin and the Coastal Aquifer Basin. On the other hand, Israel and the Palestinian Territory are straddled by the Northeastern Aquifer.²⁶ The Western Aquifer passes the West Bank from the west and through most parts of Israel and then to the Sinai Peninsula²⁷ where Egypt partially embraces²⁸as shown in Fig. 2. As of present, Israel extracts water from this aquifer by 94%, Palestine by only 6% and Egypt rarely uses it. There is evidence that the aquifer is drying up because water extraction is more than the average recharge per year.²⁹ On the other hand, the Coastal Aquifer encompasses the Mediterranean Coast starting from the northern part of the Sinai Peninsula in Egypt up to the Gaza Strip, which is occupied by Palestine as shown in Fig. 2 and finally upward to Israel. Israel extracts 66% of its resources, Palestine 23% and Egypt by 11%. The Gaza strip relies mostly on this aquifer for its water needs.³⁰ Finally, the Northeastern Aquifer Basin shared by Israel and Palestine flows from the West Bank, which is a Palestine-occupied territory and then

²⁶ IGRAC,Supra, note 13.

²⁷ Inventory of Shared Water Resources in Western Asia, Western Aquifer Basin, United Nations Economic and Social Commission for Western Asia, https://waterinventory.org/groundwater/western-aquifer-basin, (last accessed Jun. 19, 2017).

²⁸ World Atlas, Where is the Sinai Peninsula?, (2017), http://www.worldatlas.com/articles/where-is-the-sinai-peninsula.html, (last accessed Jun. 19, 2017).

²⁹ Inventory of Shared Water, Supra, note 25.

³⁰ United Nations Economic and Social Commission for Western Asia Inventory of Shared Water Resources in Western Asia, *Coastal Aquifer Basin*, Water Inventory, (2017), https://waterinventory.org/groundwater/coastal-aquifer-basin, (last accessed Jun. 19, 2017).

traverses north to northeast into Israeli territory. Israel draws 75% of its resources, while Palestinians use up to 25% of its resources.³¹



Fig. 2 Egypt, Israel and Palestinian Territory³²

IV. DISCUSSION

A. The Importance of Aquifers

The necessity of an effective and relevant law that takes into account transboundary aquifers is tied to the importance of aquifers to almost all countries in the world. There are some regions in the

³¹ M. El-Fadel, R. Qubaía, N. El-Hougeiri, Z. Hashisho and D. Jamali, *The Israeli Palestinian Mountain Aquifer: A Case Study in Ground Water Conflict Resolution*, 30 JOURNAL OF NATURAL RESOURCES, LIFE SCIENCE AND EDUCATION 50-61(2001).

³² World Atlas, *Israel*, (2017), http://www.worldatlas.com/webimage/countrys/asia/il.htm, (last accessed 14 July 2017).

world where reliance on water coming from groundwater is almost total. In the United States, for example, groundwater provides 98% of its freshwater for domestic use, but only 17% of its industrial use.³³ Many European countries are dependent on underground water, rather than surface water, to supply their needs: Denmark, 98%; Portugal, 94%; Germany, 89%; Italy, 88%; Switzerland, 87%; Belgium, 67%; Netherlands, 67% and, Luxembourg, 66%.³⁴Russia, on the other hand, relies on up to 80% on groundwater for its water needs.35If European countries rely this much on groundwater as source for their water needs, the rate of reliance on underground water by countries in arid and hot countries, such as in Africa and the Middle East, can be expected to be even much bigger. Africa alone, which has a population of about 300 million, is chiefly dependent on groundwater for drinking and also in agriculture as the continent is now increasingly employing irrigation.³⁶In the Mexico-US borders, the Middle East and in many countries in Africa, transboundary aquifers provides the chief and even in some cases the only sources of freshwater.37Since many transboundary aquifers are now being identified to be straddling countries in almost all parts of the globe

³³ USGS, Water Questions & Answers How important is groundwater?, United States Geological Survey, https://water.usgs.gov/edu/mqanda.html, (last accessed Jun. 19, 2017).

³⁴ UNESCO/UNEP/WHO, J Chilton, Chapter 9: Groundwater, Water Quality Assessments - A Guide to Use of Biota, Sediments and Water in Environmental Monitoring, United National Environmental Programme (1993), http://www.who.int/water_sanitation_health/resourcesquality/wqachapter9.pdf,(last accessed Jun. 19, 2017).

³⁵ Amy Jones, Sustaining Groundwater Resources: A Critical Element in the Global Water Crisis, 2,(2011) 2.

³⁶ A. M. MacDonald, H.C. Bonsor, BEO Dochartaigh and RG Taylor, *Quantitative Maps of Groundwater Resources in Africa*, 7(2) ENVIRONMENTAL RESEARCH LETTERS (2012).

³⁷ Gabriel Eckstein and Francesco Sindico, *The Law of Transboundary Aquifers: Many Ways of Going Forward, but Only One Way of Standing Still* 23 REVIEW OF EUROPEAN, COMPARATIVE AND INTERNATIONAL LAW 1, 32 (2014).

and in almost all continents and regions of the world, there is a necessity for a law that should govern how these aquifers are to be utilized and managed jointly taking into account the principles of sustainability.

B. The Sufficiency of Existing International Conventions in Transboundary Aquifers Cases

As earlier presented, existing laws on transboundary waters, whether surface or ground are shown to be inadequate in dealing with potential conflicts regarding transboundary aquifers. The Water Convention lacks specificity of language and detail to really be effective in binding countries as to how parties to transboundary aquifers should jointly utilize and manage their shared natural resources. The treaty is more suited to surface water than underground water. On the other hand, the Law of the Nonnavigational Uses of International Watercourses is only applicable to transboundary watercourses that have the same final point. This definition, however, is too specific and may conflict with the definition of transboundary aquifer. The definition of transboundary aquifer is too broad and may extend even to those shared underground rock networks whose water system may not be even connected to any ground or surface system and may have several points of recharge and discharge zones.³⁸ Other conventions and treaties on international waters have no direct connection to transboundary aquifers as well. The implication here is that a law of

³⁸ IMNH, Supra, note 14.

transboundary aquifers needs to be adopted by countries of the world and it should have a binding effect.

C. Lack of Precedence

Concern for transboundary aquifers only grew as science began to uncover and understand the relationship between surface and underground waters. Treaties and agreements prior to this discovery only covered surface or ground water, as earlier discussed. Although states can enter into bilateral or multilateral agreements regarding their conduct in utilizing and managing transboundary aquifers, there is simply no law or rule that can guide them, much less bind them in such agreements. It is important to have a rule to guide countries in the regime of transboundary aquifers in order to avoid conflicts among nations given the role that they play in international water regime. It is suggested that when such rules are between two countries, it should be left to them to fashion out the nature of such rules in terms of a binding simple agreement. As knowledge about these underground structures is relatively new, aquifers only began to be included in water agreements in early 20th century as secondary issues. Examples of these treaties are the Ramba Well agreement between Italy and Egypt in 1925, the Convention and Protocol on Frontier Water entered into by the USSR and Turkey in 1927 and the use of springs in the Commune of Gorizia and vicinity by Italy and Yugoslavia entered into by the Allies and Italy immediately after the cessation of WWII.³⁹ As the knowledge about transboundary aquifers

³⁹ Yoram Eckstein and Gabriel Eckstein, Transboundary Aquifers: Conceptual Models for Development of International Law, 43 GROUND WATER 5, 679-690 (2005).

is relatively new, there is a need to establish universal rules that should encompass present issues involving them and anticipate issues that could crop as a result of two or more states sharing interests in the same aquifers. Since among international organizations, the UN commands the membership of almost all countries in the world, it is only right that it initiates the move in this aspect.

Due to the relatively new knowledge about transboundary aquifers, the most common international water agreements today are those involving transboundary surface water. These agreements can be altered or tweaked to apply to transboundary aquifers as well, but they have limitations. One such limitation is that surface water can be seen and, therefore, the effectiveness or compliance with an agreement can be easily checked to find out whether the parties have not violated the agreement. Another limitation of such an agreement when applied to transboundary aquifers is that once aquifers become polluted unlike surface water they are difficult to clean up. ⁴⁰ There is, therefore, a need to establish a separate law of transboundary aquifers rather than lump it together with a general law on transboundary water systems.

D. The Need for a Joint Approach in Using and Managing Underground Water Resources

A universal law on transboundary aquifers is important not only because underground water is one of the world's main source for freshwater, but also because of the domino effect it can bring

⁴⁰ Brooks, Supra, note 12.

about in the event of destruction of the structure at one point. In transboundary aquifers, the activities of one state in the process of sourcing underground water or even other activities that impact such water sources can also impact the underground water sources of other states. If pumping is extensively done in one state, the underground water resources of other states sharing the same aquifers may also be adversely affected. Due to this, there is a need to establish a common approach or management of the shared aquifers based on scientific data. This common approach should take into account the general hydrological network of structures of the aquifer involved encompassing all the states sharing the same aquifer.⁴¹

In many cases, states do not enter into any agreement as to how transboundary aquifers should be used and managed because of the absence of clear guidance and perhaps because of binding laws that could serve as the basis for their agreements. The US-Mexico transboundary aquifers, for example, number almost a dozen as of 2015.⁴²As of today, both parties are still to outline the specific terms of their agreement on transboundary aquifers. As a result, many of these aquifers are slowly depleting because of unrestricted utilization. In the Hueco-Bolson aquifer, the level of water fell by 76 feet between 1952 and 2007. In 2001, both extractions from the US and Mexican sides totaled 312 cubic meter, but recharge amount was only

⁴¹ Planet Earth, Groundwater – Reservoir for a Thirsty Planet, Earth Sciences for Society Foundation, (2003) http://yearofplanetearth.org/content/downloads/Groundwater.pdf, (last accessed Jun. 19, 2017).

⁴² IGRAC, Supra, note 13.

9.6 MCM.⁴³ If the present Law of Transboundary Aquifers could be expanded and elaborated, it could help countries like the US and Mexico iron out the specifics of their treaty on the matter.

E. Preventing the Aggravation of Present Conflicts and Preventing Potential Ones

A law that governs how transboundary aquifers should be utilized and managed is important because it could help reduce incidences of conflict, particularly in areas already plagued by nonwater related conflicts. It is also important to allay fears of potential conflicts. The conflict between Israel and Palestine is public knowledge, but one of the issues that aggravate this conflict is the existence of transboundary aquifers between these two states. As already presented these parties are connected by three aquifers that run underneath their jurisdictions. As shown in previous discussions, there is an uneven utilization of groundwater by Israel, Egypt and Palestine. However, because of the historical enmity between Israel and Palestine, the threat of the conflicts getting more severe is more possible. The unequal access to water is largely blamed on inadequate infrastructures and waste water management.44 The transboundary aquifers between Israel and Palestine is not only a source of potential conflict but can exacerbate an already conflict. These aquifers are the

⁴³ Gabriel Eckstein, Buried Treasure or Buried Hope? The Status of Mexico-U.S. Transboundary Aquifers under International Law, 13 INTERNATIONAL COMMUNITY LAW REVIEW, 277 (2011).

⁴⁴ Elena Lazarou, Water in the Israeli-Palestinian Conflict, European Parliamentary Service, (January 2016) http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573916/EPRS_BRI(201

http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/5/3916/EPRS_BRI 6)573916_EN.pdf,(last accessed Jun. 19, 2017).

only source of freshwater for Palestine.⁴⁵ A binding international treaty that would detail the rules that the parties should follow could ease existing conflicts and help the emergence of potential conflicts.

V. CONCLUSION

Despite the existence of several transboundary laws about water and watercourses, there is a need for a law that specifically tackles transboundary aquifers. The issue of transboundary aquifers is a complicated one because the structures are found beneath the surface of the earth and are not visible to the human eye. Existing international laws are not enough to deal with the complications of the subject. Although parties sharing underground water resources may very well enter into bilateral or multilateral agreements, as the case may be, it is difficult for them to do so because of the lack of guidance and precedence due to the absence of an elaborate and exhaustive law on the matter that takes into account potential complications involved in the issue. This is illustrated in the case of the US and Mexico which share almost a dozen of aquifers and which until now are unable to enter into a meaningful agreement as to how to jointly deal with such resources. This is distressing because without proper management of transboundary aquifers, there is a possibility of the misuse and even ultimate destruction of these valuable natural resources. A law that is binding on transboundary aquifers can also prevent potential conflict and even ease existing ones as in the case of Israel and Palestine.

⁴⁵ El-Fadel et al, Supra, note 29.

The need for an effective law on transboundary aquifers is dictated by the importance of aquifers to the world. As research continues to unravel truths about the link between waters of the world and identify more transboundary aquifers, the importance of a law that clearly delineates the duties and obligations of parties is vital not only to water security but world peace. Accessing aquifers in many countries in distressed continents, such as Africa is hard enough, but when aquifers from which underground water can be sourced from are shared by more than one state, complications such as conflicts can arise. With the world population growing by the day, it can be expected that dependence on underground water may also exponentially rise in the years and decades to come.

LOW COST AIR QUALITY MONITORING SYSTEMS: THE NEED OF THE HOUR FOR INDIA'S WORSENING AIR QUALITY

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ABSTRACT

This essay seeks to highlight the importance of air quality monitoring ('AQM') and data dissemination in India. Further, it looks at the relevance of AQM data in the setting of judicial precedents. Subsequently, the essay also touches upon the status of current AQM stations in India and whether the number of such stations is adequate, given the rise in incidence of air pollution. It goes on to incorporate an analysis of the National Air Quality Index programme of the CPCB with respect to the number of AQM stations. The central enquiry however strives to address the change in technology regarding AQM over a period of time and analyze its efficacy in the Indian scenario. The essay also deliberates on the current policy framework with respect to AQM in India and debates the need to re-evaluate it in light of the latest technological developments and policy developments in other nations.

I. INTRODUCTION

The menace of air pollution is one which has existed in India for decades now and is far from being a recent phenomenon, as if often believed. An understanding of air pollution could be gleaned from a definition of air pollution adopted by The Expert Committee of The Central Pollution Control Board ('CPCB') defines 'air

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pollution' as "the presence in the outer atmosphere of one or more contaminants such as dust, fumes, gas mist odor, smoke or vapor in quantities, characteristics and of duration, such as to be injurious to human, plants or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property."¹

However, the issue of air pollution has in the recent past become a raging issue with the adverse effects of air pollution being visible first hand. Air pollution has reached that stage of severity where it is now visible from outer space.² Only recently was New Delhi enveloped in a thick blanket of smoke in the aftermath of Diwali and the crop burning from neighboring states, bringing to the fore once again the issue of rising air pollution in India.³ The aforementioned phenomena led the people living in the National Capital Region ('NCR') region to complain of headaches, nausea, burning eyes and breathlessness. The city was caught off-guard with no clear mechanism in place for such a catastrophic event, which only added to the extant chaos. The NCR is not alone in this 'pollution predicament' and a number of Tier II cities such as Ghaziabad, Allahabad, Bareli in Uttar Pradesh; Faridabad in Haryana; Alwar in Rajasthan; Ranchi, Kusunda, Jharia and Bastacola in Jharkhand; Kanpur in Uttar Pradesh; and Patna in Bihar, among

¹ UPADHYAY S. & UPADHYAY V, HANDBOOK ON ENVIRONMENTAL LAW: WATER LAWS, AIR WILDLIFE LAWS AND THE ENVIRONMENT (VOL II), 2002.

² Seasons of Indian Air Quality ,(NASA, 2014), https://visibleearth.nasa.gov/view.php?id=84731 (last accessed April 30, 2017)

³ Delhi shrouded under blanket of smoke, (The Times of India, Nov. 2, 2016), http://timesofindia.indiatimes.com/city/delhi/Delhi-shrouded-under-blanket-ofsmog/articleshow/55199777.cms (last accessed, April 29,2017); Diwali fireworks choke Delhi, angering Indians, (BBC, Oct. 31, 2016), http://www.bbc.com/news/world-asiaindia-37819843 (last accessed April 29, 2017).

others are gradually catching up in terms of the density of harmful Particulate Matter (PM) in the air.⁴

This issue of air pollution has been litigated in the Supreme Court of India over the past four decades. Numerous Orders such as ban on sale of firecrackers in Delhi⁵, conversion of buses in Delhi to operate on Compressed Natural Gas ('CNG')⁶ have been passed by the Supreme Court to mitigate the incidence and adverse effects of air pollution. The establishment of the National Green Tribunal ('NGT') has also galvanized the battle against air pollution, especially in the NCR, through its celebrated judgment in *Vardhman Kaushik v. Union of India.*⁷ The NGT, in the said case took harsh steps to curb and check rising levels of air pollution in the NCR. Such steps included banning of the plying of diesel vehicles more than 10 years old and petrol vehicles more than 15 years old.⁸

The rising air pollution in NCR has also prompted the Supreme Court to order the primary pollution watchdog of India, the CPCB, to prepare a Graded Response Action Plan to combat such contingencies which may arise in the future.⁹ The CPCB thereafter notified an Action Plan, with inputs from the public and experts to look into the issue at hand.¹⁰

⁴ Sunil Dahiya et al, Airpocalypse:Assessment of Air Pollution in Indian Cities, Greenpeace (January 2017), https://secured-static.greenpeace.org/india/Global/india/Airpoclypse--Not-just-Delhi--Air-in-most-Indian-cities-hazardous--Greenpeace-report.pdf (last accessed April 29, 2017).

⁵ Arjun Gopal v. Union of India & Ors, (2017) 1 SCC 412.

⁶ MC Mehta v Union of India & Ors, 1987 SCR (1) 819.

⁷ Vardhman Kaushik v. Union of India, M.A. No. 284 of 2015.

⁸ Id.

⁹ MC Mehta v. Union of India, supra note 6.

¹⁰ Vide Notification S.O. No. 118 (E) dated Jan. 12, 2017.

Following the NCR being shrouded in smog during the winter of 2016, citizens throughout India proactively voiced their concern against the rising levels of air pollution, citing the need to be informed of whether the quality of air they were breathing was within safe limits. As on date, the only useful and available source of data for the public is the website of the CPCB and that of the System of Air Quality and Weather Forecasting and Research ('SAFAR'). A perusal of the available data on each website however did not yield meaningful results, for either the data for certain areas was missing, or contradictory to the other website, thus bringing to us the relevance of air pollution monitoring in India.

The requirement of continuously monitor air pollution levels was recognized by the Supreme Court in 1998.¹¹ Unfortunately, while the years have passed, the situation only deteriorated. The CPCB, which is the nodal agency under the Ministry of Environment, Forest and Climate Change ('MoEF&CC') for air quality monitoring (AQM), has not been able to install the required infrastructure to monitor air quality, despite numerous Court Orders. Consequently, delays in pin pointing the problematic areas and further delays in implementing air pollution control measures in specific areas have arisen.

However, before policies are formulated to curb air pollution and improve air quality, it is imperative that we strengthen the existing policy framework to ensure the establishment of more AQM stations throughout the nation. This would ultimately result in greater

¹¹ MC Mehta v. Union of India, (1998) 9 SCC 381.

access to data on air quality and an increase in the knowledge of the composition of the air we breathe. Such information would lead to identification of places with maximum levels of pollution and accordingly, region specific policies in that direction could also developed. With this in mind, it would be helpful if we first understand the extant regulatory framework on air pollution and creation of air quality standards in India.

II. AMBIENT AIR QUALITY STANDARDS AND ROLE OF THE CPCB

The Water (Prevention and Control of Pollution) Act, 1974 mandated the Central Government to form the CPCB and the State Pollution Control Boards (SPCB).¹²The CPCB was constituted on September, 1974 and was delegated powers and functions under the aforesaid Act.¹³ Similarly, the Air (Prevention and Control of Pollution) Act, 1981 entrusted the CPCB with further powers and functions.¹⁴ The over-arching function of the CPCB is to improve the quality of air and to prevent, control or abate air pollution in the country and perform other activities in pursuance of the aforesaid.¹⁵ The CPCB is also bestowed with the power to lay down the standards for the quality of air,¹⁶ following which the CPCB publishes notifications in the official gazette stating the Air Quality Standards with the safe limits for various parameters and pollutants defined therein. The first such notification was published by the CPCB in

¹² The Water (Prevention and Control of Pollution) Act, 197, Section 3 & Section 4.

¹³ *Id.* at Section 16.

¹⁴ The Air (Prevention and Control of Pollution) Act, 1981, Section 16.

¹⁵ *Id.* at Section 16 (1).

¹⁶ Id. at Section 2 (h).

1994¹⁷ which was later superseded by another notification in the year 1998¹⁸ and the latest one which is still in force was published in the year 2009¹⁹ where the current National Ambient Air Quality (AAQ) Standards were laid down. The march of industrialization has contributed to a rise in the number of machines which only exacerbate extant levels of air pollution²⁰. The increase in the levels of air pollution has pushed the CPCB to change the parameters of pollutants as defined in the aforesaid notifications from time to time.

A. The National Air Quality Monitoring Programme (NAMP)

A nation-wide programme of ambient AQM known as National Air Quality Monitoring Programme (NAMP) is currently being executed by the CPCB. The network consists of 683 operating stations covering 300 cities/towns in 29 States and 6 Union Territories across the country.²¹ (It would be worthwhile to point out that there are discrepancies regarding the total number of operating stations, in the Government data itself) Be that as it may, this essay explores the need for nation-wide AQM stations and inquires whether a policy change with respect to the AQM stations is needed, in order to not only increase the number of stations but also recognize the need to develop a common platform/programme to disseminate AAQ data.

¹⁷ Vide Notification No. S.O. 384 (E), dated April 11, 1994.

¹⁸ *Vide* Notification No. S.O. 935 (E), dated Oct. 14, 1998.

¹⁹ Vide Notification No. S.O. B-29016/20/90/PCI-I dated Nov. 18, 2009.

²⁰ DIVYA DUTTA & SHILPA NISCHAL, LOOKING BACK TO CHANGE TRACK, TERI, 23 (2010).

²¹ National Air Quality Monitoring Programme, (CPCB), http://www.cpcb.nic.in/air.php (last accessed Aug. 8, 2017)

The objectives of the NAMP are as follows:

- "To determine status and trends of ambient air quality;
- To ascertain whether the prescribed ambient air quality standards are violated;
- To Identify Non-attainment Cities;
- To obtain the knowledge and understanding necessary for developing preventive and corrective measures; and
- To understand the natural cleansing process undergoing in the environment through pollution dilution, dispersion, wind based movement, dry deposition, precipitation and chemical transformation of pollutants generate.²²

B. The Significance and Criticisms of the National Air Quality Index (NAQI)

Further, the Government launched the National Air Quality Index (NAQI) in October, 2014²³. The NAQI is essentially a color coded system, which, on the basis of the concentration of certain air pollutants displays the quality of the air, which could range from good to severe.²⁴ The colors range from green (which implies that the air quality will have minimal impact on human health) to maroon (which implies that the air quality is severe and affects healthy people, apart from drastically impacting those with existing diseases). This

²² National Air Quality Monitoring Programme, (CPCB), http://cpcbenvis.nic.in/airpollution/objective.htm (last accessed May 1, 2017).

²³ Press Information Bureau, National Air Quality Index (AQI) launched by the Environment Minister AQI is a huge initiative under Swachh Bharat, http://pib.nic.in/newsite/PrintRelease.aspx?relid=110654 (last accessed May 1, 2017)

²⁴ For the color coding table *see*. National Air Quality Index, http://164.100.160.234:9000/ (last accessed April 23, 2017).

initiative was implemented by the MoEF & CC, to facilitate the common man's understanding of the nation's air quality levels.

Similar to the NAQI, a color coded programme known as the System of Air Quality and Weather Forecasting and Research (SAFAR) was launched by the Ministry of Earth Sciences during the Commonwealth Games, 2010. The said programme was developed by Indian Institute of Tropical Meteorology, Pune with assistance from the India Meteorological Department and National Centre for Medium Range Weather Forecasting. The objective of the SAFAR was to disseminate to the public of Delhi, AAQ data in real time in the form of color codes. However, SAFAR now monitors data in the four cities of Delhi, Pune, Mumbai and Ahmedabad. The color coding used in SAFAR was similar to that of NAQI; the only minute difference between the color code depicting good and satisfactory air quality is a single color whereas in NAQI it is represented by two different colors.²⁵

However, the NAQI has always been a subject of widespread criticism.²⁶ *First,* one of the major criticisms faced by the NAQI is that it does not depict the exact picture of the levels of air pollution in reality. The deficit in the number of AQM stations, which provides

²⁵ For the color coding table see: SAFAR, http://safar.tropmet.res.in/AQI-47-12-Details (last accessed April 23, 2017).

²⁶ Shirin Bithal, National Air Quality Index: A solution with too many problems, (Down To Earth, Nov. 30, 2015), http://www.downtoearth.org.in/blog/national-air-quality-index-asolution-with-too-many-problems-49465 last accessed on 14.08.2017 (last accessed Nov. 11, 2017)

the base for the color coding of air quality, is a primary reason behind this shortcoming.

Second, a brief perusal of the website of the Air Quality Index (AQI) shows that the AQI is limited to only a few areas in the nation. For instance, in the city of Ahmedabad in Gujarat, the AQI is shown for only a particular region of Maninagar. However, there exist a wide number of industries in the outskirts of Ahmedabad itself and in the older part of the city where air pollution could pose an issue of greater alarm.²⁷

Third, it would be pertinent to note the discrepancy in data published as part of the NAQI and that of other programmes such as SAFAR. For instance, as mentioned above, the NAQI website shows the presence of only one AQM station in Ahmedabad, while the website of the SAFAR shows presence of 10 AQM stations in and around Ahmedabad. Such inconsistencies between the Government AAQ monitoring programmes could lead to confusion amongst the people, thereby derogating from the objective and purpose for which the said programmes were conceptualized. This is indicative of a similar situation with many states all over the country, with the air pollution data and the AQI showing only a part of the picture.

Such an incomplete and inaccurate picture could lead to the Government enacting policies and guidelines for areas that might not be prone to air pollution (on a relative scale) and thereby causing an economic loss to the nation. On the other hand, highly polluted areas

²⁷ Chintan Pathak et al, Comparative Study of Ambient Air Quality Status of Abmedabad and Gandhinagar City in Gujarat, India, 4 CHEMICAL SCIENCE TRANSACTIONS 1, 90 (2015).

that have not come under the radar would get unintentionally left out on account of an information deficit. The situation faced by our nation today, did not arise overnight but was a result of years of unplanned and unsustainable development. The problem would not have reached alarming proportions had the number of AQM monitoring stations been adequate in the first half of the 21st century. What we should learn from this experience is that India needs more data, not only for the people to be aware of the dangers of the situation at hand, but also to enable the Government to frame effective policies to curb and reduce air pollution. As mentioned above, the judiciary (especially the Supreme Court and the NGT) has adopted an activist stance, prompting the Government to take necessary action in this context.

III. THE IMPORTANCE OF AIR POLLUTION MONITORING VIS-A-VIS JUDICIAL PRECEDENT

In *Vardhaman Kaushik v. Union of India*²⁸ it was an individual, equipped with information on the deteriorating air quality who approached the Courts which in turn, led to the drastic measures taken by the judiciary. The NGT examined the issue of air pollution in this case in 2014, when it was brought to light, that the air quality of Delhi and NCR was beyond the existing prescribed standards. This revelation was the tipping point for the plethora of path breaking directions such as the banning of 10 year and older diesel vehicles, ban on registration of new diesel cars, temporary ban on constructions amongst others. During the proceedings of the

²⁸ Vardhman Kaushik, *supra* note 7.

aforementioned case it was made known that it is not only Delhi that is handicapped with the issue of air quality, but also other states such as Rajasthan, Uttar Pradesh and Bihar. to name a few.

Thereafter, the NGT ordered for comprehensive monitoring and data collection regarding the air quality in NCR region. In pursuance to this direction, the requisite data was produced and the unsafe air quality of our states was highlighted. The data clearly showed that the air quality was way beyond the safe parameters as notified by the CPCB in 2009.29 This comprehensive data assisted the Tribunal in pin pointing the major causes of pollution such as construction, dust, vehicular pollution and accordingly appropriate directions were issued. This case, apart from highlighting the inferior air quality, also pointed out the inadequate AQM technology in India. For instance, the State of Rajasthan on 10th November, 2016 in the aforementioned case in NGT³⁰ stated in the Tribunal that they do not have the requisite instruments to measure PM. This submission by the State of Rajasthan highlights the much needed technological advancement for AQM stations in India. Such problems were one of the factors that led to the formation of Central and State Monitoring Committees by the NGT on the same date. The Central Monitoring Committee also in their first meeting held on the 17th November, 2016 highlighted the importance of AQM stations which was echoed and addressed by the Graded Action Plan³¹.

²⁹ Notification No. S.O. B-29016/20/90/PCI-I, supra note 19.

³⁰ Vardhman Kaushik, *supra* 7.

³¹ Notification S.O. No. 118 (E), *supra* note 10.

Further on, the Supreme Court, in the ongoing *MC Mehta v. Union of India*³²*vide* Orders as recent as 10th November 2016, 2nd December 2016 and 6th January 2017 have reiterated their concern regarding the AQM stations in India. Moreover, on 6th February 2017, when CPCB requested the Supreme Court for funds out of the Environment Protection Charge³³ for setting up of AQM stations and upgrading existing ones, the Court readily released more than the asked amount, without any objections from any parties. In fact, Senior Advocate Mr. Harish Salve the *Amicus Curiae* in this case, went on to state that CPCB should make use of the latest available technology for the monitoring stations. Even the recently released Graded Action Plan by the CPCB in pursuance to the Orders of the SC in MC Mehta case reiterates the need for dissemination of information regarding the air quality.

The number of AQM stations in India have increased in the recent past however, it cannot be denied that there is still much left to be done. However, it is imperative to understand the reasons as to the failure on the part of the authorities to install the requisite number AQM stations in India in an expeditious manner.

IV. REASONS BEHIND THE FAILURE TO ESTABLISH ADEQUATE AQM STATIONS

There are two types of AQM stations namely the Manual Stations and Real Time Monitoring Stations (RTMS). The data from

³² MC Mehta v. Union of India, supra note 6.

³³ This fund was set up by the Supreme Court through earlier Orders in the same case for collection of the 1 % Environment cess towards registration of new diesel vehicles of more than 2000 cc in the NCR.

the RTMSs are comparatively more accurate than the manual monitoring stations as it is less dependent on manual interference and collation. The dissemination of air quality data in the real time monitoring station is done with the help of complex software, machines and huge power back-ups.³⁴

However, it is imperative to understand that setting up an AQM station is capital intensive. There are numerous factors that one has to consider before setting up an AQM station and also numerous fixed and operational costs incurred during establishing such stations. Such costs include costs for machines, operation and maintenance of machines, batteries and so on. Further, the RTMS is established in a permanent structure with minimum two air conditioners, computers, software and a huge battery back-up which only adds upon the cost of operating such stations.³⁵For setting up an RTMS it takes approximately Rs. 1.5 crore for the stations and Rs. 8 lakh for the annual operation and maintenance station. Further, for setting up a manual monitoring station, around Rs. 5 lakh is required and Rs. 3.5 lakh for annual operation and maintenance is required.³⁶

The AQM Stations in use currently by the CPCB have undergone technological advancements over a period of time. However, the costs have not gone down drastically which can be seen by comparing the earlier guidelines of the CPCB relating to

³⁴ Anumita Roychowdhury *et al*, *Reinventing Air Quality Monitoring*, (Centre for Science and Environment, 2016), http://www.cseindia.org/reinventing-air-quality-monitoring-7792 (last accessed 30 April 2017).

³⁵ Station (Real Time), (CPCB), http://cpcb.nic.in/TECHNICAL_SPECIFICATIONS _FOR_CAAQMS_modified_by_air_Lab_final(1).pdf (last accessed April 30, 2017).

³⁶ ANUMITA ROYCHOWDHURY, *supra* note 34 at 13.

AQM(2003)³⁷to the new guidelines of (2011)³⁸. On analysis of these two guidelines, it can be noted that the qualified manpower that was earlier required for operating the monitoring stations have been replaced by software and computers. Such advancement reduces the salary to be spent on manpower. However, the cost of software, computers and electricity could more or less offset the same.

Such huge costs are an impeding factor to the establishment of AQM stations all across the nation. The authorities are in a Catch 22 situation wherein they are forced to establish more AQM Stations with the latest technology across the nation but, the cost of establishing and maintaining them is extremely high which disallows them from going ahead.

V. DEVELOPMENT OF LOW COST AQM SYSTEMS

The effective solution to this problem is not to delay the deployment of AQM stations or not install enough AQM stations but, frame policies and guidelines to encourage research and development in low cost AQM systems. Low cost AQM systems are one of the only solutions available to a developing nation like India. Such systems are also being encouraged and developed by International agencies like the United Nations Environment

³⁷ The CPCB Guidelines for ambient air quality monitoring mentions the fixed and operational costs attached to air quality monitoring stations; *Guidelines for Ambient Air Quality Monitoring*, (CPCB, 2003), http://www.cpcb.nic.in/newitems/7.pdf (last accessed April 30, 2017).

³⁸ Guidelines for the Measurement of Ambient Air Pollutants, Guidelines for Real Time Sampling & Analyses, VOLUME-II, CPCB, May 2011, http://cpcb.nic.in/openpdffile.php?id=UmVwb3J0RmlsZXMvMjhfMTQ1ODExMDU 4NV9OZXdJdGVtXzE5N19OQUFRTVNfVm9sdW1lLUlJLnBkZg== (last accessed April 24, 2017).

Programme in Africa.³⁹ There are cities all over the world which have started adopting low cost AQM, realizing the need for more number of air quality stations.⁴⁰

The Environment Protection Agency of the United States has also acknowledged the upcoming technology of the low cost AQM⁴¹ and the Agency has already developed a dedicated web page for the developers, scientists and public, wherein they are disseminating the data validation from the low cost air quality sensors available in the market to the data from their capital intensive monitoring stations. They are not only conducting their own research and development for low cost AQM stations but, also encouraging public participation in low cost AQM.⁴²

However, on the other hand in India there is a clear gap in such a pro-active approach on part of the government and the authorities. The CPCB had come out with Guidelines for measurement of Ambient Air pollutants for real time stations⁴³ and manual monitoring stations⁴⁴ back in 2011 in light of the National AAQ Standards, 2009. There is no mention by the government or

³⁹Low-Cost Device Can Revolutionize Air Quality Monitoring And Help Countries Prevent Deaths From Outdoor Pollution, (UNEP, 2015), http://www.rona.unep.org/news/2015/low-costdevice-can-revolutionize-air-quality-monitoring-and-help-countries-prevent-deaths (last accessed April 30, 2017).

⁴⁰P. Kumar et al, The rise of low cost sensing for managing air pollution in cities, ENVIRONMENT INTERNATIONAL, 199-205, (2015).

⁴¹Robert Judge & Richard Wayland, Regulatory Considerations of Lower Cost Air Pollution Sensor Data Performance (Air and Waste Management Association, 2014), https://www.epa.gov/sites/production/files/2015-07/documents/regulatoryconsiderationslowercostairpollutionsensordataperformance.pdf (last accessed April 20, 2017).

⁴² Air Sensor Toolbox for Citizen Scientists, Researchers and Developers, (US EPA), https://www.epa.gov/air-sensor-toolbox (last accessed April 30, 2017).

 ⁴³GUIDELINES FOR THE MEASUREMENT OF AMBIENT AIR POLLUTANTS, *supra* note 38.
 ⁴⁴ Id.

the authorities in the direction of research and development of low cost AQM systems or encouraging developers in the recent times. A few news reports have suggested that the CPCB officials have shown their reluctance, to rely on the data by low cost AQM stations.⁴⁵However, before coming to any conclusion regarding the accuracy of data from low cost AQM stations, it is necessary that data validation exercises are conducted over a period of time by the CPCB or other competent authorities for such low cost AQM devices. When nations across the world are acknowledging and adopting low cost AQM systems, India as of now does not have a policy or guideline with respect to low cost AQM systems.

VI. CONCLUDING REMARKS AND RECOMMENDATIONS

Being exposed to polluted air implies being exposed to air that exceeds the safety parameters as laid down in 2009 by the CPCB. People are often forced to live in ignorance of the fact that the air they are breathing could be much more harmful than the prescribed safe parameters. Such an information deficit could lead to a slow death, without even realizing the same. The Supreme Court of India has included the Right to a Clean Environment under the ambit of Right to Life under Article 21 of the Constitution of India.⁴⁶ This Right to Life must include within its ambit, the 'Right to Know the Quality of Air we Breathe.' In light of the need to improve the

⁴⁵ Jayashree Nandi, *What's ailing India's air? The nation doesn't know enough*, (The Times of India, April 23, 2017), http://timesofindia.indiatimes.com/city/delhi/whats-ailingindias-air-the-nation-doesnt-know-enough/articleshow/58321016.cms (last accessed April 27, 2017).

⁴⁶ Bandhua Mukti Morcha v. Union of India & Ors (1984) 3 SCC 161.

regulatory framework on air quality standards, given below are a few recommendations the Government could consider:

- It is of utmost importance that the Government develops a policy framework and issues guidelines for a large-scale data validation exercise of the existing low cost AQM devices to the current expensive machines which are in use.
- The Government should, on a pilot basis, install low cost AQM devices, in addition to their expensive machines for effective data validation.
- The Government should disseminate the AAQ data collected through the various programmes, through a common platform.
- The Government should invest in research and development to ensure that better low cost AQM devices are developed.
- The Government should encourage the citizens through capacity building programmes to participate in developing better low cost AQM devices.
- The Government, through the CPCB, SPCBs and other allied Government departments should conduct workshops and conferences in engineering colleges of the nation to encourage the youth to assist in the development of low cost AQM stations.
- The CPCB/SPCBs should incorporate a designated department to aid any developer in validating his/her data with the existing machines.

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WILDLIFE TRAFFICKING CRIMES – ISSUES WITH ENFORCEMENT

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ABSTRACT

The illicit trade in wildlife has witnessed as exponential increase in the past few decades and is now ranked amongst human and drug trafficking crimes, in terms of both its severity and the monetary proceeds generated therefrom. Owing to its transnational character, these crimes are now especially at the forefront of international debates and conferences. The primary issue that emerges here is the dearth of strong enforcement mechanisms, coupled with incongruous efforts by nations. At this juncture, it thus becomes crucial that states cooperate so as to effect a uniform policy in this regard. Related issues, such as corruption and the formation of syndicates, also require specific attention while addressing the core problem. This paper attempts to trace the trends and legal developments that have emerged both in India as well as globally. This will be done in two parts. First, by observing the development of the hard and soft law in international law. This will involve a study of the several conventions, their interpretations, and the possibility of a customary obligation to prosecute the offenders of such crimes. The second prong, will review the legislative and judicial advancements that have taken place in India, especially in relation to the ivory and tigerproducts trade that is most prevalent. Finally, this paper will highlight the inadequacies of the present regime and propose

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measures to fill in the loopholes and lacunae so as to make enforcement of such crimes more effective.

1. INTRODUCTION

Wildlife trafficking crimes have recently witnessed a drastic increase, and are now ranked amongst trafficking in drugs, human being and arms in terms of the economic profit generated by them.¹As is true with other trafficking related offences, these crimes are also both organised and transnational in nature. Law and enforcement of such crimes, unfortunately, has consistently proved to be ineffective in addressing the concerns that have arisen. This requires that greater attention be paid to the various causes that have contributed to the weakening of such structures and steps taken to ensure adequate and realistic remedies to the ensuing crisis.

In this paper, the present legal scenario concerning transboundary wildlife trafficking crimes will be studied and critiqued from both a comparative perspective as well as in connection to the specific nuances of the Indian position. For this purpose, the paper contains six parts so as to comprehensively discuss the various issues surrounding the weak implementation and enforcement of these laws. Part II will provide a brief background explaining the increase in these crimes, and the key problems that plague both the international and Indian community in combating them. Part III shall then elaborate on the international conventions, customary law,

¹ Press Release, Wildlife crime worth USD 8-10 billion annually, ranking it alongside human trafficking, arms and drug dealing in terms of profits: UNODC Chief, Vienna, (May 13, 2014), http://www.unodc.org/unodc/en/press/releases/2014/May/wildlife-crime-worth-8-10-billion-annually.html (last accessed Feb. 6, 2016).

organisations, and conferences that attempt to address and repel the heightened increase in these crimes. Next, the Indian position on this topic and a critique of the law and enforcement agencies in this regard will be discussed in Part IV. Having understood the nuances of the issues and the existing scenario, Part V will conclude by proposing a few recommendations on the means of tackling these crimes more effectively.

2. CONTEXTUALIZING THE PREDICAMENT

The growth of wildlife trafficking crimes has been such that these are now organised and global. This is further perpetuated by the combination of corruption within States, and a poor enforcement mechanism – more so in the developing countries where resources are limited. This also holds true for India, where several endangered and highly trafficked species, such as rhinoceroses, tigers, and pangolins, among many others are found.

The transnational character of these crimes has resulted in both international conventions against wildlife trafficking, and strong domestic legal systems become crucial requirements to successfully tackle the issue. In the field of international law, the foremost step was first taken in 1973 when the Convention on International Trade in Endangered Species of Wild Flora and Fauna² was opened for signatures. This Convention was conceived to effect greater international cooperation - it provided for certain parameters to regulate trade in species among Member States, garner international

² Convention on International Trade in Endangered Species of Wild Flora and Fauna, Mar. 3, 1973, 993 U.N.T.S. 243 [CITES].

cooperation, and further and more importantly to penalize illegal trade.3 This stands as the primary international convention that categorically addresses this issue of illegal wildlife trade. Apart from this, Treaties such as the Convention on Conservation of Migratory Species of Wild Animals,⁴ the International Tropical Timber Agreement, and the Convention on Biological Diversity (CBD)⁵ are a few others that address these concerns, though not as emphatically. However, read with the United Nations Convention Against Corruption⁶ and the United Nations Convention against Transnational Organized Crime⁷ these together appear to provide a more forceful and effective solution to the poor enforcement of these crimes and the categorical issues

India herself is home to several species that are heavily trafficked globally. Post-independence, access to hunting increased, and hunting soon turned into a lucrative alternative for many.⁸ The low detection probability, fewer convictions and weak penalties have led to the wildlife trafficking industry expanding over the years in India.⁹ Although India enacted the Wildlife Protection Act in 1972, and ratified the CITES in 1976, the effective implementation thereof continues to remain a concern. India, like many other developing

³ What is CITES?, Convention on International Trade in Endangered Species of Wild Flora and Fauna, https://cites.org/eng/disc/what.php

⁴ The Convention on Conservation of Migratory Species of Wild Animals, June 23, 1979, 1651 UNTS 333 [CMS].

⁵ Convention on Biological Diversity, June 5, 1992, 1760 UNTS 79 [CBD].

⁶ United Nations Convention Against Corruption, Dec 8, 2005, 2349 UNTS 41 [UNCAC].

⁷ United Nations Convention against Transnational Organized Crime, Jan 8 2001, UN Doc.A//55/25 [UNTOC].

⁸ Id.

⁹ Id.

countries, unfortunately lacks the necessary resources to secure its wildlife parks' perimeters. Corruption at the ground level exacerbates this factor, and the proceeds from such smuggling bear high returns. This also raises the question concerning the determination of the margin of appreciation to be accorded to India, especially noting its status as a developing country.

3. Position in International Law

In recent times, there has been an increased awareness among the international community regarding the gravity of the offences committed. In this section, the various conventions, customary international law, and soft law that have emerged through progressive development of environmental crimes will be studied.

(a) International Conventions

The CITES was adopted with the specific intention of regulating the trade in endangered species of wildlife. Article VIII(1)(a) of this Convention categorically calls for the penalization of any trade in or possession of specimens that are done in violation of the Convention.¹⁰The CITES Secretariat has also reiterated 'the proper implementation and enforcement of legislation' as one of its prime objectives.¹¹These obligations must be considered as the very keystone of the Convention since there is no deterrence of crime

¹⁰ Convention on International Trade in Endangered Species of Wild Flora and Fauna, Art. VIII (1)(a), Mar. 3, 1973, 993 U.N.T.S. 243 [CITES].

¹¹ CITES Secretariat, Notification to the Parties, No. 951 (29 January 1997).

without the enforcement of effective penalties.¹² However, although this provision explicitly states that Member States must 'penalise', there remains certain ambiguity regarding the extent and scope of this obligation. The CITES being a framework convention, it merely lays down a basic structure of the domestic legislation that Member States must enact. According to Gillespie, a framework convention differs from a binding-treaty to the extent that it accords a wide amount of discretion to the States in the discharge of their obligations.¹³ This becomes problematic here, since it results in States imposing varying parameters and penalties. Further observing how the illegal smuggling of wildlife is transnational, this aspect of non-uniformity poses a barrier to implementation of the law. For example, in Country X, where the smuggling originates, wildlife trafficking may be treated as a more serious offence than in the destination, Country Y. This creates a weak international enforcement mechanism, thereby propagating the illegal wildlife trade industry.

Recognising the dramatic jump in the statistics of this trade, Member States to the Convention have taken a firmer stance on this issue. At the 17th Conference of Parties (CoP)¹⁴ the focus of the discussion was on combatting illegal wildlife trade. In this regard, it was observed that the present enforcement mechanism of the CITES

¹² IUCN Council, *Guidelines for Legislation to Implement CITES*, available at https://portals.iucn.org/library/efiles/documents/EPLP-026.pdf (last accessed July 24, 2015).

¹³ Alexander Gillespie, Conservation, Biodiversity And International Law (2011).

¹⁴ The Parties (member States) to CITES are collectively referred to as the Conference of the Parties. Every two to three years, the Conference of the Parties meets to review the implementation of the Convention. These meetings last for about two weeks and are usually hosted by one of the Parties. The meetings are often referred to as 'CoPs'.

Regime has not been comprehensive enough, and thus the CoP covered everything from capacity building, enforcement, measures to combat illegal trade and reduce demand for wildlife products, and the engagement of local communities.¹⁵

One of the Resolutions passed here also recognizes the connection of this trade to the increased level of involvement of organized criminal syndicates operating in contravention of the CITES.¹⁶ Rampant corruption amongst officials from both high and low levels has further perpetuated wildlife trafficking and obstructed the enforcement of laws.¹⁷ The CITES National Legislation Project urges Parties to hold officials accountable for breaching the Conventions or the domestic legislation, as well as amending the national law to criminalize bribery and related offences.¹⁸

Following this, other resolutions such as the United Nations Environment Assembly on *Illegal Trade In Wildlife¹⁹*, the Doha Declaration²⁰ and the London Conference²¹ have also commented on the nexus between the CITES, the UNCAC and the UNTOC in eliminating wildlife trafficking crimes. The latter two also impose an obligation upon Member States to prosecute those persons acting in

¹⁵ Conference of the Parties to the CITES, Johannesburg, South Africa, Sept. 24 – Oct. 4, 2016, Prohibiting, preventing, detecting and countering corruption which facilitates activities conducted in violation of the Convention, CoP17 Doc. No. 25 (2016).

¹⁶ *Id*, *see* Preamble.

¹⁷ *Id*, *see* Preamble.

¹⁸ *Id*, *see* Preamble.

¹⁹ United Nations Environment Assembly on Illegal Trade In Wildlife, Res. AMCEN/15/Ref/3

²⁰ Doha Declaration on Integrating Crime Prevention and Criminal Justice, "Future we Want," A/CONF.222/L.6.

²¹ London Conference on The Illegal Wildlife Trade, Declaration, ¶15, Feb. 2014, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data /file/ 281289/london-wildlife-conference-declaration-140213.pdf, last accessed (Jan. 17, 2018).

violation of the conventions.²² These documents have categorised wildlife trafficking offences as 'serious crimes' whose gravity must be recognised while imposing penalties.²³ This is crucial as it helps create a standard to consider while meting out punishment for these offences. This in turn will help create a deterrent effect, and thus eliminate the trade.

The Conventions therefore provide a legal foundation, based on which the States must carry out their obligations. Support from international bodies such as TRAFFIC²⁴ and the International Consortium of Combatting Wildlife Crime (ICCWC)²⁵ has also been particularly useful to developing countries that require assistance in the form of resources to ease enforcement.

Thus, while efforts from the international community have been forthcoming and are gaining traction, it becomes the prerogative of each State to develop a more serious attitude towards combatting such crimes. Since enforcement and penalisation are sovereign functions, intervention by States on the failure to take appropriate action also becomes challenging. Further, the language

²² United Nations Convention Against Corruption, art. 30, 31, 14 December 2005, 2349 UNTS 41 [hereinafter UNCAC]; United Nations Convention against Transnational Organized Crime, preamble, art. 11(1), 8 January 2001, G.A. Res.A/RES/55/25 [hereinafter UNTOC].

²³ *Supra* note 21.

²⁴ TRAFFIC, the wildlife trade-monitoring network, is a joint program of WWF and IUCN – the International Union for Conservation of Nature. TRAFFIC works to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

²⁵ ICCWC is the collaborative effort of five inter-governmental organizations working to bring coordinated support to the national wildlife law enforcement agencies and to the sub-regional and regional networks that, on a daily basis, act in defense of natural resources. The ICCWC partners are the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, INTERPOL, the United Nations Office on Drugs and Crime, the World Bank and the World Customs Organization.

contained in the Conventions and Resolutions – which use words such as 'urges',²⁶ 'recommends',²⁷ 'encourages'²⁸ and 'shall endeavour'²⁹ – reflect the inherent weakness of the enforcement mechanism. This unfortunately continues to be one of the major drawbacks of the existing structure that requires further attention.

(b) Customary International Law

The literature on whether the obligation to penalise offenders of wildlife trafficking crimes under customary international law is presently limited. However, various conferences and resolutions have discussed the connection of this obligation to the environmental law principle of sustainable development.³⁰ The scope of this obligation was extensively discussed by Justice Weeramantary in his Separate Opinion in the *Gabcikovo-Nagymoros Dispute* between Hungary and Slovakia.³¹ The case pertained to the equitable use of the construction of dams on the Danube River. He stated that while in the particular facts of the case it was an inter-se matter, there may be cases wherein

²⁶ Supra note 15, Principle 5.

²⁷ Supra note 15, Principle 3.

²⁸ UNTOC, Art. 9.

²⁹ UNCAC, Art. 31.

³⁰ CITES, Trade in Elephant Specimens, Res. Conf. 10.10 (Rev. CoP12); United Nations Environment Assembly, *Illegal Trade In Wildlife*, Res. AMCEN/15/Ref/3; Strengthening the United Nations Crime Prevention and Criminal Justice Programme, in particular its Technical Cooperation Capacity, G.A. Res. 68/193, U.N. Doc. A/RES/68/193/Annex (2013); ECOSOC Res. 2013/40, U.N. DOC. E/RES/2013/40 (Oct 17, 2013) [hereinafter ECOSOC Res].

³¹ Gabcikovo-Nagymaros Project (Hungary v. Slovakia), 1997 I.C.J. 7, ¶75, (September 25) (Weeramantry J, Separate Opinion); See also Case Concerning Pulp Mills on the River Uruguay (Argentina v Uruguay), 2006 I.C.J. 113 (July 13) (Merits); Advisory Opinion on the Legality of the Use by a State of Nuclear Weapons in Armed Conflict (Request for Advisory Opinion by the World Health Organization), 1996 I.C.J. 226, ¶438 (July 8); United States Import Prohibition of Certain Shrimp and Shrimp Products (India v US), 1999 WT/DS58/AB/R (WTO Appellate Body Report); P. Sands, International Law in the Field of Sustainable Development: Emerging Legal Principles, in W. Lang (ed.), Sustainable Development and International Law (1994) 53.

the obligation extends to nations at large. In this regard he referred to the *erga omnes* obligations that States have in environmental law with respect to Sustainable Development.³²

Bearing in mind this context, Yury Fedotov, Executive Director of the UNODC stated at the eve of the Doha Conference that "the rate of poaching is such, that a number of iconic species risk being wiped out over the next decade - and we will all bear responsibility for those losses."⁶³ At this Conference, and again at the London Conference,³⁴ the point of sustainable development or use was raised in connection to the drastic increase in wildlife trafficking crimes. Here it was held that prosecution of such offenders acts as deterrence and must be employed while fulfilling their obligations under this principle.³⁵

There is also an argument that serious wildlife crimes might fall within the scope of the customary international law obligation of *aut dedere aut judicare* which is the obligation upon States to prosecute or extradite offenders of serious crimes.³⁶ To ascertain what kind of offences this applies to, the progressive development in this regard

³² Id.

³³ Joint Statement of UNODC Executive Director Yury Fedotov and the Secretary-General of CITES John Scanlon on corruption as an enabler of wildlife and forest crime, (2015), http://www.unodc.org/unodc/en/press/releases/2015/November/jointstatement-of-the-executive-director-yury-fedotov-of-unodc-and-the-secretary-general-ofcites-john-scanlon-on-corruption-as-an-enabler-of-wildlife-and-forest-crime.html (last accessed Feb. 6, 2016).

³⁴ *Supra* note 21.

³⁵ Supra note 21.

³⁶ Rep. of the Int'l law Comm'n, 66th sess, May 5-June 6, July 7- August 8, 2014, U.N Doc. A/69/10 [hereinafter ILC Final Report]; Rep. of the Int'l law Comm'n, 56th sess., *Preliminary Remarks*, 3 May-4 June and 5 July-6 August 2004, U.N. Doc. A/59/10 Case Concerning Questions of Interpretation and Application of the 1971 Montreal Convention Arising From the Aerial Incident at Lockerbie (Libyan Arab Jamahiriya v. United Kingdom), 161 I.C.J. Reports 1999 (Weeramantry J., Dissenting); M CHERIF BASSIOUNI& EDWARD M WISE, AUT DEDERE AUT JUDICARE: THE DUTY TO PROSECUTE OR EXTRADITE IN INTERNATIONAL LAW 3 (1995).

needs to be assessed.³⁷ To evince progressive development, the two elements of widely accepted state practice among the relevant countries and *opinio juris* of the international community must be established.³⁸ State Practice is reflected through the international acts of a State.³⁹ The prosecution of individuals for wildlife trafficking crimes, especially those concerning elephants and rhinoceros, is now widely practiced by States, as is evidenced through the vast number arrests for the same.⁴⁰ Further, the increase in the quantity of legislations enacted by countries reflects the categorisation of such offences as being serious in nature.⁴¹ Moreover, the *'aut dedere aut judicare'* principle is embodied in both the UNCAC⁴² and the

³⁷ BASSIOUNI, Supra note 36, at 23; See also ILC Final Report, supra note 36, at 17.

³⁸ BASSIOUNI, *Supra* note 36, at 23; *See also* ILC Final Report, *supra* note 36, at 17.

³⁹ MALCOLM N. SHAW, PUBLIC INTERNATIONAL LAW 82 (2008); SANDS & PEEL, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 112 (2012)

⁴⁰ Lusaka Agreement Task Force, Operation Cobra II Evaluation Report 8 (2014), available at http://lusakaagreement.org/wp-content/uploads/2015/04/OPERATION-COBRA-II-EVALUATION-REPORT_Final_dist.pdf<last accessed: 11th October 2015>; UNODC, Successful operation highlights growing international cooperation to combat wildlife crime, Jun. 18, 2015, https://www.unodc.org/unodc/en/frontpage/2015/June/ successful-operatio-highlights-growing-international-cooperation-to-combat-wildlifecrime.html, Environment and Natural Resources Division, U.S. Dep't of Justice, The Fight Against Wildlife Trafficking, available athttp://www.justice.gov/enrd/wildlifetrafficking; CITES, China Increases Prosecutions In Response To Illegal Trade In Elephant Ivory, Nov. 29 2013, available at https://www.cites.org/eng/news/sundry/2013/20131128 _china_ivory_prosecutions.php.

⁴¹ I.C.R.C., Customary IHL Database, https://www.icrc.org/customaryihl/eng/docs/v2_rul_rule45 <last accessed July 24, 2015>;ROSALIND REEVE, POLICING INTERNATIONAL TRADE IN ENDANGERED SPECIES – THE CITES TREATY AND COMPLIANCE 134 (2002)

⁴² UNCAC LEGISLATIVE GUIDE, *supra* note 19, at 163; UNTOC TECHNICAL GUIDE, *supra* note 24 at 183.

UNTOC⁴³; and has been extensively discussed in relation to wildlife trafficking crimes.⁴⁴

There is also sufficient evidence of *opinion juris* in this regard. International resolutions, signing of treaties and declarations are forms of *opinio juris*.⁴⁵ Multiple resolutions⁴⁶ and declarations⁴⁷ call upon states to implement efficient legislative and enforcement mechanisms to combat and deter trade in threatened species.⁴⁸ These resolutions, as well as bodies such as the UNODC, have categorically defined such crimes as being *'serious crimes'* in international law.⁴⁹ In particular, the correlation between transnational wildlife trafficking crimes and corruption has been noted as a grave threat to endangered species.⁵⁰ Most recently, the Hanoi Conference on Illegal Trade in Wildlife, the third after the Kasane and London Conferences, has

⁴³ UNITED NATIONS OFFICE ON DRUGS AND CRIME, TRAVAUX PRÉPARATOIRES OF THE NEGOTIATIONS FOR THE ELABORATION OF THE UNITED NATIONS CONVENTION AGAINST TRANSNATIONAL ORGANIZED CRIME AND THE PROTOCOLS THERETO 163 (2006)

⁴⁴ U.N.O.D.C., Global Programme for Combating Wildlife and Forest Crime Annual Report 3 (2014), *available at* https://www.unodc.org/documents/Wildlife/ WLFC_Annual_Report_2014.pdf.

⁴⁵ Case Concerning Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.), 1986 I.C.J. 14, ¶188– 91 (June 27) Legality of the Threat or the Use of Nuclear Weapons, 1996 I.C.J. 226, 251, 70 (July 8); SHAW, *supra* note 39.

⁴⁶ CITES, Trade in Elephant Specimens, Res. Conf. 10.10 (Rev. CoP12); United Nations Environment Assembly, *Illegal Trade In Wildlife*, Res. AMCEN/15/Ref/3; Strengthening the United Nations Crime Prevention and Criminal Justice Programme, in particular its Technical Cooperation Capacity, G.A. Res. 68/193, U.N. Doc. A/RES/68/193/Annex (2013); ECOSOC Res. 2013/40, U.N. DOC. E/RES/2013/40 (Oct 17, 2013) [hereinafter ECOSOC Res].

⁴⁷ London Conference on The Illegal Wildlife Trade, Declaration, ¶15, Feb. 2014, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/ 281289/london-wildlife-conference-declaration-140213.pdf.

⁴⁸ Council Decision (EU) 2015/451 of 6 March 2015 Concerning the Accession of the European Union to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

⁴⁹ ECOSOC Res, *supra* note 63 Commission on Crime Prevention and Criminal Justice (CCPCJ) Res 23/1 (2014).

⁵⁰ Doha Declaration, *supra* note 30; *See also* London Conference, *Supra* note 44.

reiterated the importance of increasing penalties and prosecuting offenders.⁵¹

In addition to this, the draft Code on Crimes against the Peace and Security of Mankind from the year 1996 categorically included environmental crimes within its scope.⁵² Paragraph 53 of the final report, ⁵³however, suggests that question of the customary status of this principle remains a grey area.

Further, as per Article 2 of the Articles of State Responsibility for Internationally Wrongful Acts⁵⁴, a State has responsibility when *one* the act or omission in question is attributable to the State and *two* it constitutes a breach of an international obligation. The duty to prosecute rests on the on the State, and an omission of the State to take sufficient actions in this regard would be counted as a breach of its international obligations. A case in point to evince this would be the *Tehran Hostages Case*⁵⁵ where the State's failure to address the hostage situation at the American Embassy was declared as amounting to a breach of its international obligations under the Vienna Conventions of 1961 and 1963.⁵⁶

⁵¹ Hanoi Conference on The Illegal Wildlife Trade, Hanoi Statement, (2016), http://iwthanoi.vn/wp-content/themes/cites/template/statement/Hanoi% 20Statement%20on%20Illegal%20Wildlife%20Trade%20(English).pdf (last accessed Feb. 7, 2017).

⁵² Rep. of the Int'l law Comm'n, 48th sess, May 6-July 26, 1996, U.N Doc. A/CN.4/SER.A/1996/Add.l (Part 2).

⁵³ *Supra* note 36.

⁵⁴ Articles on the Responsibility of States for Internationally Wrongful Acts, G.A. Res. 56/83, U.N. GAOR, 56th Sess., Supp. No. 49, U.N. Doc. A/RES/56/83.

⁵⁵ United States Diplomatic and Consular Staff in Tehran, (U.S. v Iran), 1980 ICJ 3 (May 24).

⁵⁶ Id.

Thus, if the proposition were accepted that this obligation to prosecute or extradite applies to wildlife trafficking offences, the failure of a State to effectively enforce these laws would attach to it responsibility and accountability under international law.

4. WILDLIFE LAW IN INDIA: DISSONANCE AT THE ENFORCEMENT LEVEL

Both the Indian legislature and judiciary has made constant efforts to address the illegal trade in India. In this section, the developments in both regards will be traced.

(a) Legislative Framework

India has in place an effective legislative framework that regulates illegal wildlife trade and accords protection to endangered species. The Wildlife Protection Act, 1972 was enacted with this as the objective in mind. However it was amended first in 1986, as it was failing in this regard. As per the pre-amended legislation, the trade and commerce in wildlife, its articles and trophies was permissible within the country.⁵⁷ The consequence of this was that traders would easily smuggle animal skins, animal articles and trophies across the Indian borders in return for massive profits.⁵⁸ Thus, prohibition and criminalization of such trade was deemed to be crucial. Consequently, the 1986 Amendment was passed and it disallowed persons from carrying on trade in the wildlife specified in Schedules I and II of the Act. Furthermore, the Amendment also had

⁵⁷ Wildlife Protection Act, 1972.

⁵⁸ SHYAM Shyam DIVAN, & ARMIN ROSENCRANZ, ENVIRONMENTAL LAW AND POLICY IN INDIA 328-329 (1989).

a retrospective effect, and the subsisting licenses for the domestic trade of animals and animal articles were rescinded.⁵⁹

Again, in 1991 a second amendment was brought to the Act. This was founded on the recommendations made by the Indian Wildlife Board and Ministry of Environment and Forest. It was suggested that in light of the surge in poaching and illegal trade in endangered wildlife, the animal population in India was precipitously declining. Thus, this Amendment imposed an absolute prohibition on hunting of all wild animals except vermin. The constitutional validity of this Amendment was challenged in Indian Handicrafts Emporium vs. Union of India60 as an unfair restriction on trade and violative of Article 19(1)(g)⁶¹. The appellants argued that the Wildlife Protection Act is a 'colourable legislation' as it has the indirect effect of taking away the fundamental right to carry on any trade or business, which is not permissible if done directly. The Apex Court upheld the constitutionality under Article 19(6), stating that a trade that is dangerous to the biodiversity and ecology should be regulated or completely prohibited, as the case may be. The restriction was held to be reasonable, and in furtherance of the social and public interest of preserving wildlife and maintaining ecological balance.

⁵⁹ Id.

^{60 (2003) 7} SCC 589.

⁶¹ Constitution of India, Art. 19(1)(g), (1950): "All citizens shall have the right -

⁽a) to freedom of speech and expression;

⁽b) to assemble peaceably and without arms;

⁽c) to form associations or unions;

⁽d) to move freely throughout the territory of India;

⁽e) to reside and settle in any part of the territory of India; and

⁽f) omitted

⁽g) to practise any profession, or to carry on any occupation, trade or business"

However, an exception was carved for when the purpose of such trade and poaching was in furtherance of objectives concerning the protection of life and property, research, education, captive breeding and scientific management, and hunting of wild animals. In *Chief Forest Conservator (Wildlife) v. Nisar Khan*⁶² it was held that if any animal (even those in Schedule I) turns into a threat to property, then it may be hunted. Further, an animal in Schedule I may also be hunted if the Chief Wild Life Warden grants the permission in writing.

Among other changes, the very definition of sanctuary was amended and broadened so as to include territorial waters within its scope.⁶³ This meant that marine life – in particular sea horses and sea cucumbers⁶⁴ - and trafficking thereof too could be regulated by the Act. The penalties too were revised and can now extend to a maximum imprisonment of up to seven years and a fine of ten thousand rupees.⁶⁵However, while it is true that these are definite improvements, the more fundamental infirmities rest with the ineffective institutional structure within which the Act operates. The

⁶² Chief Forest Conservator (Wildlife) v.Nisar Khan, AIR 2003 SC 1867.

⁶³ Wildlife Protection Act, §18 (1973): "Declaration of sanctuary.-

⁽¹⁾ The State Government may, by notification, declare its intention to constitute any area comprised within any reserve forest or the territorial waters as a sanctuary if it considers that such area is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance, for the purpose of protecting, propagating or developing wild life or its environment.

⁽²⁾ The notification referred to in sub-section (1) shall specify, as nearly as possible, the situation and limits of such area.

Explanation-For the purposes of this section it shall be sufficient to describe the area by roads, rivers, ridges or other well-known intelligible boundaries."

⁶⁴ Akash Vashishtha, Illegal Trade of Marine Species on a Sharp Rise, (Apr. 27, 2014), INDIA TODAY, http://indiatoday.intoday.in/story/illegal-trade-marine-species-sea-horsescucumber-biodiversity/1/357792.html (last accessed Jul. 23, 2017).

⁶⁵ Section 51, The Wildlife Protection Act, 1972.

Wildlife Crime Control Bureau was constituted in 2008⁶⁶ with the aim of refining this very structure. Unfortunately, it consists of merely 109 sanctioned posts all over the country, of which only 78 are occupied.⁶⁷ This reflects the extremely limited personnel and resources that have been devoted to addressing the issue of wildlife trafficking crimes. Similar is the case with the Pollution Control Boards over the country. While they were constituted initially under the Water (Prevention and Control of Pollution) Act, 1974, the duties of these boards now extend to matters falling within the ambit of both air and noise pollution, with an increased number of technical and administrative work, and insufficient work force.⁶⁸Thus, subsequent amendments must lay down more specific guidelines and duties for the bodies so constituted.

Presently, the Wildlife Protection (Amendment) Bill, 2013⁶⁹ is pending in the Rajya Sabha for approval. Among other changes, it proposes to also increase the penalties contained in Section 51 of the Act to fines now up to Rupees 5 lakhs. It also seeks to amend its schedules and other provisions to maintain conformity with CITES and the recent resolutions that have been passed that increase regulation of such illegal trade. Again, it fails to address the structural concerns that were earlier raised, and even if it is passed, the changes it would bring appear to merely superficial and not substantial

⁶⁶ Government of India, Ministry of Environment, Forests, and Climate Change, Order No. S.O. 918 (E), Jun. 6, 2007.

⁶⁷ Government of India, Ministry of Environment, Forests, and Climate Change, *Manpower Position*, http://wccb.gov.in/Content/ManpowerPosition.aspx (last accessed July 23, 2017).

⁶⁸ Vijendra Mahandiyan, Environmental Noise Pollution (Causes, Evils, Legislation and Controls) 126 (2006).

⁶⁹ The Wild Life (Protection) Amendment Bill, 2013.

enough to tackle the exponential increase of wildlife trafficking offences.

(b) Judicial Developments

Legislative framework aside, the judicial development in this regard has also been progressive. In 2010, the Supreme Court in *Sansar Chand v. State Of Rajasthan*⁷⁰ made some critical observations and showed zero-tolerance for such offences. In this case, Sansar Chand (the appellant) was the gang leader of a poaching network that had transnational operations. Give this context, the Court observed as follows:

"This illegal trade is organized and widespread and is in the hands of ruthless sophisticated operators, some of whom have top level patronage. The actual poachers are paid only a pittance, while the leaders of the organized gangs who have international connection in foreign countries make massive profits. Poaching of wild life is an organized international illegal activity which generates massive amount of money for the criminals."

This position taken by the Court is in conformity with the international law position, as it now exists. It concluded its judgement by requesting the Central and State Governments "to make all efforts to preserve the wild life of the country and take stringent actions against those who are violating the provisions of the Wildlife (Protection) Act, as this is necessary for maintaining the ecological balance in our country."⁷¹

⁷⁰ Sansar Chand v. State Of Rajasthan, (2010) 10 SCC 604.

⁷¹ Id.

In another case, T.N. Godavarman Thirumalpad v. Union Of India & Ors,72 the Court heavily relied on the International Conventions and standards such as Convention for Conservation of Antarctic Living Resources 1980, the Protocol to Antarctic Treaty on Environmental Protection 1998, the Bern Convention on Conservation of European Wildlife and Natural Habitats 1982, CITES, and CBD as well as the International Union for Conservation of Nature's 'Red List' to evince the vulnerability of sandalwood. The Court rejected the anthropocentric approach in favour of an eco-centric approach. The former approach values human beings as the key factor and postulates that we possess a greater intrinsic worth than other species. As a consequence, any specie, which may potentially be used by humans, may be exploited – in some cases to the point of extinction.⁷³

These precedents were applied in the 2013 case *Centre for Environment Law, WWF-I v. Union of India (UOI) and Ors.*⁷⁴ In this, the court further elaborated on the ecocentricism theory and stated the implications of this approach. Animals found in the wild are to be considered as properties of the country for which no State can claim separate ownership and it becomes the State's prerogative to preserve the wildlife and to protect it, with the aim of securing the ecological and environmental security of the nation.⁷⁵

⁷² T.N. Godavarman Thirumalpad v. Union of India, (2012) 1 S.C.R. 923.

⁷³ Id.

⁷⁴ Centre for Environment Law, WWF-I v. Union of India (UOI) and Ors,(2013) 8 SCC 234

⁷⁵ Id.

Thus, these judgements provide a classic example of judicial activism of the courts and have set a strong precedent against illegal trade of wildlife. Notwithstanding these efforts, the trafficking of such animals and plants continues as many now face the threat of extinction. This owes largely to the dissonance that continues to exist between orders given by Courts and the attitude of the state executive in effecting the same. Take for example the Jallikattu Case⁷⁶ where directions were given banning the 'tradition' of bullfighting in the State. Despite this, the enforcement of the same has been weak and negligible owing to the lackadaisical and unwilling attitude of the executive in the State of Tamil Nadu.⁷⁷ Similarly, many other successful public interest litigations relating to the protection of the environment that are being regularly disregarded due to poor or no enforcement. These include the prevalent practice of smoking in public places, which was banned in 2001,⁷⁸ and public defecation⁷⁹ for which specific guidelines were given regarding the construction of more toilets by the respective states.

The lesson that we learn from this is that while progressive and pro-wildlife judicial pronouncements are of utmost importance, without a well-functioning executive, good intentions cannot be realised and crimes cannot be curtailed. In light of this, the next section shall observe the shortcomings and make recommendations to remedy them.

⁷⁶ Animal Welfare Board of India v. A. Nagaraja, Civil Appeal No. 5387 of 2014.

⁷⁷ PETA Urges Government to Enforce 'Jallikattu' Ban, (Jan. 5, 2017), DECCAN HERALD, http://www.deccanherald.com/content/217087/F (last accessed Jul. 23, 2017).

⁷⁸ Murli S. Deora v. Union of India, (2001) 3 SCC 765.

⁷⁹ Municipal Council, Ratlam v. Vardhichand& Others, AIR 1980 SC 1622.

5. WAY FORWARD

Preventing illegal wildlife trafficking has proved to be a daunting task for both the State and NGOs that operate in the country. The inefficiency of the intelligence-gathering mechanism coupled with a dearth of economic resources and equipment has weakened the efforts made by the legislature and judiciary. Furthermore, the lack of tools to combat trafficking and poaching, shortage of manpower, vehicles, or trained enforcement officials has allowed the illegal trade to grow in India. While we have noted some of the more progressive judgements, the attitude of most agencies remains lax and leniency is often exhibited while meting out punishments for these crimes. Wildlife trafficking crimes are a low level of priority at both a federal and central level, resulting in these efforts having no significant deterrent effect.⁸⁰

In Maharashtra, for example,a review of judgments delivered between 2009 and 2015 reflects that of the hundred and forty-seven court orders under the Wildlife (Protection) Act, 1972 (WPA), only seventeen resulted in recorded convictions. This translates to a conviction rate of merely 11.56%.⁸¹ This trend exists across most Indian states.⁸²

⁸⁰ Apoorva Joshi, India Steps Up Efforts to Combat Wildlife Trade, MONGABAY, (Oct. 9, 2015), https://news.mongabay.com/2015/10/india-steps-up-efforts-to-combat-wildlife-trade/ (last accessed Feb. 4, 2017).

⁸¹ Badri Chatterjee, 19,028 Animal Cruelty Cases in Mumbai Over 5 Years; Not a Single Arrest, HINDUSTAN TIMES, (Jun. 7, 2017), http://www.hindustantimes.com/mumbai-news/19-028-animal-cruelty-cases-in-mumbai-over-5-years-not-a-single-arrest/story-71BzHW03ONSXiKhu8FN0HL.html (last accessed Jan. 13, 2018).

⁸² Id.

The primary priority must be in improving the ground-level enforcement bodies. In 2008, TRAFFIC India established a program for training sniffer dogs to assist in wildlife protection in India. They have trained nearly twenty-five dog squads including the new recruits, and these have been deployed in nine states across India.⁸³ The aim of this program is to modernize the methods of deterring wildlife trafficking and illegal trade.

Additionally, TRAFFIC India in collaboration with WWF, and Indian government agencies, have recently intensified their training programs for law enforcement officers and forest personnel. For example, in a project with the Parambikulam Tiger Conservation Foundation, TRAFFIC India conducted an enforcement capacitybuilding workshop in the Tiger Reserve in the state of Kerala. Over fifty-five enforcement officials from different forest departments, the police force of Kerala, as well as the State's Customs and Central Excise department were mandated to attend the training. The aim was to equip the officials better to deal with cases of wildlife crime. This included teaching them about the latest technology and modern tools that are used, and create a better understanding of strategies used by poachers and smugglers.⁸⁴ More programs like this would be instrumental in creating awareness amongst government and bureaucratic officials. These workshops also help in greater coordination amongst the different agencies.

⁸³ CHRISTIAN NELLEMANN, ENVIRONMENTAL CRIME CRISIS: THREATS TO SUSTAINABLE DEVELOPMENT FROM ILLEGAL EXPLOITATION AND TRADE IN WILDLIFE AND FOREST RESOURCES (2014).

⁸⁴ CRIMINAL NATURE: THE GLOBAL SECURITY IMPLICATIONS OF THE ILLEGAL WILDLIFE TRADE (2013).

Apart from greater cooperation within domestic agencies, in 2016 India also formally joined the South Asia Wildlife Enforcement Network (SAWEN) to work in conjunction with seven other South Asian countries to combat trans-boundary wildlife trafficking crimes.⁸⁵ They aim to do this through communication, coordination, collaboration, capacity building and cooperation in the region.⁸⁶

Lastly, India has recently developed a Draft National Wildlife Action Plan for 2017-2031. While the intentions behind this are noble, the plan fails to adequately address issues such as wildlife diseases, access to modern technology, solutions to the humananimal conflict, and how to deal with wildlife that falls out of the boundaries of the national parks.⁸⁷

6. CONCLUSION

It thus appears that while India has a long way to go in completely eradicating these offences, the steps being taken by the Government are in the right direction. However, if the abovediscussed shortcomings were taken greater consideration of, it would be hugely beneficial in tackling the crimes with a greater degree of efficiency.

The unceasing slaughter of endangered wildlife is creating an imbalance of humanity and nature. At this juncture, it becomes imperative that the world's political forces establish an universal and

 ⁸⁵ Press Release, South Asia Wildlife Enforcement Network, April 13, 2016, http://pib.nic.in/newsite/PrintRelease.aspx?relid=138834 (last accessed Feb. 7, 2017).
 ⁸⁶ Id

⁸⁷ Janaki Lenin, Six Critical Areas Where The New National Wildlife Plan Falls Short, FIRSTPOST, (Feb. 8 2016), available at http://www.firstpost.com/india/six-critical-areas-where-thenew-national-wildlife-plan-falls-short-2616512.html, (last accessed Jan. 27, 2018).

joint action that undoes the risk that has been exposed to the species that now face the threat of extinction. The illegal trade in wildlife has also exponentially undermined sustainable development, adversely affecting natural resources and rural communities, and facilitated generation of illegal profits for transnational organized criminal groups. A strict, zero-tolerance policy becomes necessary in this regard, and all countries must start treating wildlife crimes as serious crimes within their respective jurisdictions.

India must continue to maintain and improve upon its efforts to combat this crime through stricter legislation and greater conviction for offences. Cases such as those of high-profile celebrities - such as Salman Khan's 'Blackbuck' case – must also not be granted leniency, and acquittals must not easily be given. Greater awareness among the different branches and sensitivity to the issue must be present in order to have a genuine reduction in the crimes rates. Thus, what is most important presently is a shift in the casual attitude to a more forthcoming one.