



Orient BlackSwan

Indian Environmental Law

KEY CONCEPTS
AND
PRINCIPLES

Edited by
Shibani Ghosh

With a foreword by
Pratap Bhanu Mehta

INDIAN ENVIRONMENTAL LAW

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AND PRINCIPLES

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Dhvani Mehta

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Commonly used Latin Phrases

<i>amicus curiae</i>	friend of the court; a person who on invitation of the court, assists the court in any judicial proceedings
<i>certiorari</i>	a writ by which a higher court requires an inferior court or tribunal to transfer the record of its proceedings in a case that has been disposed of for review
<i>fait accompli</i>	fact or deed accomplished, presumably irreversible
<i>habeas corpus</i>	having the body; a writ issued to bring a person before a court, to ensure that their imprisonment is not illegal
<i>in loco parentis</i>	in the place of a parent; refers to the legal responsibility of a person or organisation assuming some of the functions and responsibilities of a parent of another
<i>lis</i>	refers to a controversy or dispute before a court
<i>locus standi</i>	right of a party to appear in court or to bring an action and to be heard
<i>mandamus</i>	a command; a writ issued to compel the performance of duty of a public or quasi-public nature
<i>opinio juris</i>	opinion of law
<i>prohibition</i>	a writ issued by a higher court to an inferior court, preventing the inferior court from usurping jurisdiction with which it is not legally vested

viii Commonly used Latin Phrases

<i>quo warranto</i>	by what authority; a writ issued against a person who claims or who usurps any office, to enquire by what authority she or he supports the claim
<i>stricto sensu</i>	in the strict sense
<i>suo motu</i>	of one's own motion; when the court initiates proceedings on its own without any party approaching it
<i>ubi jus ibi remedium</i>	where there is a right, there is a remedy

List of Acronyms

Anr	Another
CAMPA	Compensatory Afforestation Planning and Management Authority
CBD	Convention on Biological Diversity
CEC	Central Empowered Committee
CETPs	Common Effluent Treatment Plants
CIC	Central Information Commission
CNG	Compressed Natural Gas
CPCB	Central Pollution Control Board
CRZ	Coastal Regulation Zone
DPSP	Directive Principles of State Policy
EAC	Expert Appraisal Committee
EC	Environmental Clearance
ECE	Economic Commission for Europe
EIA	Environmental Impact Assessment
EU	European Union
ICJ	International Court of Justice
IMF	International Monetary Fund
ITLOS	International Tribunal for the Law of the Sea
IUCN	International Union for Conservation of Nature and Natural Resources
MA	Miscellaneous Application
MDGs	Millennium Development Goals
MHRD	Ministry of Human Resources Development
MoEF	Ministry of Environment and Forests
MoEFCC	Ministry of Environment, Forest and Climate Change
NEAA	National Environment Appellate Authority

NEERI	National Environmental Engineering Research Institute
NGO	Non-governmental Organisation
NGT	National Green Tribunal
NPV	Net Present Value
OA	Original Application
OECD	Organisation for Economic Cooperation and Development
Ors	Others
PIL	Public Interest Litigation
RLEK	Rural Litigation and Entitlement Kendra
SDGs	Sustainable Development Goals
SPCB	State Pollution Control Board
ST	Scheduled Tribes
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Council on Trade and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WP	Writ Petition
WSSD	World Summit on Sustainable Development
WTO-DSB	Dispute Resolution Body of the World Trade Organisation

Foreword

This important and impressive volume will fill a gap in our understanding of environmental law in India. The arguments presented here are of great legal, philosophical and practical interest. There is a particular problem that is perhaps unique to environmental law. Of all the bodies of law, environmental law is one area where the law itself is articulated in terms of abstract policy frameworks, or institutional doctrines. Ideas like 'sustainable development' and 'precautionary principle' are not legal ideas in a conventional sense. They are *ways of looking at the world*, or principles to be taken into account when formulating policy. They cannot easily be codified. Many laws are often vague and ambiguous. These have to be resolved by interpretive methods. But many of the ideas used in environmental law are not legal ideas in the conventional sense in that they are not precisely defined enough to be a guide for future action; it is also often not clear on *whom* the obligations these ideas entail devolve; it is often not clear how they can be translated into legal directives. Different judges interpret them differently, they are sometimes used rhetorically and sometimes with scientific discipline behind them, and sometimes without any settled social meaning.

Add to this a further challenge. In many areas of law, like constitutional law and criminal law, there is decades, if not centuries, of argument that has given them determinate legal shape. Or in a democratic culture many of these laws acquire constitutional status through some process of public deliberation. Our 'environmental constitution', our legal mediation with nature, has been much more of an act of judicial improvisation. The rise of environmental jurisprudence in India is largely a consequence of state abdication. Powers of the Judiciary have increased as a consequence of legislative and executive failure. The Supreme Court began to create special environmental benches in response

to particular environmental crises; the legislature then morphed the idea into the National Green Tribunal—a Tribunal dealing especially with environmental cases. While the state has created an elaborate environmental regulatory structure, including laws and institutions of enforcement, these structures have, for the most part, failed to secure our environment. The fact is that India has the dirtiest air, the most hazardous water, and is at severe risk from the effects of climate change.

India has an impressive record of grass root environmental movements, and deep historical traditions of environmental care. And formally at least, no politician denies the importance of the environment or even the imminence of climate change. But translating these sentiments into a determinate plan for environmental action has not been easy. The gap between high rhetoric and implementation remain significant. Even in the Courts, the gap between recognising legal principle and the weakness of the remedy on offer remains astonishingly wide. Indian law has also typically blurred the boundaries between different genres of law: the expansion of rights- based litigation has often meant that ordinary tort claims are adjudicated as constitutional claims. The social bases for environmental litigation is uneven: a handful of lawyers and judges in Delhi have far-reaching impact in terms of the power they exercise, while the full promise of environmental litigation is yet to be realised across High Courts in India. The nature of environmental regulation and adjudication is such that there has to be a careful weighing of causes and consequences. But despite the fact that the National Green Tribunal has technical members, or the Courts can enlist experts, the technical quality of adjudication has been relatively weak.

This is the context in which environmental law is created in India. In order to make space for it, judges have often had to resort to higher metaphysical principles. What does it mean to make ‘sustainable development’ a principle of *law*? What does ‘public trust doctrine’ imply for property rights? Or even in more familiar cases like ‘polluter pays’, what are the tort yardsticks by which judges work? This important volume is the first of its kind to look at

environmental law at multiple levels. Most volumes look at materials familiar to lawyers: judicial doctrine, legal precedent, enumerated rights, and so forth. Some will venture into enforcement issues. But this is unique in this respect. It looks at these two levels of analysis. But more originally, it provides the first systematic analysis of four concepts that provide the background picture against which law gets formed: sustainable development, precautionary principle, polluter pays and public trust. Sustainable development, at its most ambitious best, gives content and sets bounds to the goals of development, precautionary principle is an attitude to risk, polluter pays an instrument of liability and enforcement, and public trust a picture of the underlying sense of collective stewardship that should guide our relations to each other and nature. This book is the first account of how these four pillars of a broader environmental imagination are used in the law. There are some internal tensions amongst them: the calculus of cost-benefit, for example, does not sit easily with the idea of nature having an inherent sacrality. The public trust sensibility is not quite the same as a purely torts approach to environmental law. But there are also the tensions produced by different interpretations of these principles.

This volume is going to be an indispensable first step to untangling the beating heart of environmental jurisprudence. It does extraordinary service by uncovering the larger assumptions embedded in familiar and unfamiliar cases. The essays on offer in this excellent volume are historically rich and analytically clarifying. They have the virtue of being non-polemical. They cover a vast terrain and identify patterns in adjudication. These virtues make this volume an indispensable guide to environmental jurisprudence in India. More broadly, it is a reminder that converting concern for the environment into legal doctrine still remains the most pressing challenge of our time. We should be deeply grateful to Shibani Ghosh, for putting together a volume that combines moral urgency and legal acuity.

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PRATAP BHANU MEHTA

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Introduction

Over the past three decades, the Indian judiciary has almost single-handedly revolutionised environmental law and governance in the country. It has delivered landmark verdicts on a wide variety of issues affecting the environment—from industrial pollution to waste disposal; exploitative mining to unchecked deforestation; noxious vehicular fumes to rampant poaching. It has pushed and prodded apathetic executive agencies into action. Occasionally criticised for jurisdictional overreach, the judiciary's interventions have brought to fore the unaccounted costs of economic growth and development, and the iniquitous sharing of the burden of these costs. Through its judgments, it has identified a constitutional mandate, concurrent with relevant statutory provisions, to protect the environment and to uphold people's rights to the environment. At the same time, it has created a framework of legal principles that forms an integral part of Indian environmental law, and is frequently relied on in environmental litigation.

The extraordinary degree of judicial activity in India in the environmental sphere can be attributed to at least three factors. *First*, there are inadequacies in Indian laws, regulatory processes and institutions which limit their effectiveness in preventing, mitigating and responding to environmental degradation, and in promoting and ensuring environmental conservation. Even though Parliament has legislated on environmental issues since the early

2 Introduction

1970s, environmental laws in India are deficient in their coverage, compliance requirements and liability provisions. Regulatory processes such as environmental clearance granting processes are poorly designed and implemented—misaligned with the desired environmental outcomes. Statutory bodies like pollution control boards, under-resourced and vulnerable to external (and extraneous) influence, do not discharge their functions in a comprehensive and independent fashion. As the legislature and the executive are underperforming, those affected by environmental degradation or otherwise dissatisfied by a regulatory decision or policy, look to a ‘responsive’ judiciary for relief.

Second, individual or collective rights are either absent, limited, or poorly defined in relation to natural resources, leading to at least three problems. First, no particular individual or group is invested in protecting the environmental resource—a classic tragedy of the commons case (air pollution being a case in point); second, there are several interests associated with the resources that often conflict (for instance, tribals access forests for their livelihood, but so do mining companies for the coal beneath the forests); and third, the associated interests may be spatially and temporally so diverse that it is challenging to foresee and manage the effects of using the resource (for example, upstream and downstream impacts of dams, or the lowering of groundwater levels due to deforestation). In such situations, the judiciary is perceived to be a neutral arbiter that can pronounce on the rights and claims relating to such public goods—authoritatively and with some degree of finality.

Third, the political will and long term planning necessary to tackle environmental problems is lacking. Environmental protection measures, including the setting up and running of effective regulatory authorities, require financial and human resources. These resources are limited. With limited political backing, environmental causes often lose claims to these resources. The need for political will to address environmental problems becomes even more apparent when the causes of environmental degradation are mired in jurisdictional complexities—inter-state, between the Centre and the states, or between different departments

within a state. With relevant authorities not giving due attention to environmental problems and ignoring demands for redress, the judiciary has emerged as *the* alternative forum to raise grievances, with the hope of receiving some relief.

In response to these popular expectations, the Indian judiciary—Supreme Court of India, High Courts and more recently the National Green Tribunal (NGT)—has often stepped up to the plate. At the cost of being criticised for stepping on the (jurisdictional) toes of the legislature and the executive, the Indian judiciary has delivered far-reaching orders on issues ranging from industrial and vehicular pollution to forest conservation; wildlife protection to encroachment of natural resources; rehabilitation and resettlement of project affected persons to waste management; environmental impact of infrastructure projects to faulty regulatory processes. The judiciary has influenced—and occasionally dictated—environmental policy and actively monitored implementation of its orders.

While the three factors discussed earlier provide some explanation for the judiciary playing an instrumental role in the country's environmental governance, they also highlight an important dimension of environmental legal disputes. These disputes are by their very nature complex, and issues raised are often not merely a matter of statutory interpretation or a disputed question of law or fact, but require the decision maker to consider and respond to multiple economic, political and social realities.

In its efforts to manage such complex polycentric disputes, the Indian judiciary relies on a framework of rights and environmental law principles. The rights framework is based on the judiciary's interpretation of the right to life guaranteed under Article 21 of the Constitution as including a right to environment, and when read with Articles 48A and 51A(g), a clear constitutional mandate to protect the environment. This right to environment has been defined in many ways—a right to live in a healthy environment with minimal disturbance of the ecological balance, a right to live in a pollution-free environment, a right to decent environment, etc. More recently, the judiciary has even recognised a right of

the environment—signalling a move away from its conventionally anthropocentric approach to environmental conservation. Making the realisation of this substantive right to environment meaningful, inside and outside the courtroom, are certain procedural guarantees. These guarantees, often termed as procedural environmental rights, include the right to information, public participation and access to justice. Mostly of statutory origin and supported by sympathetic and expansive judicial interpretation, these rights are a vital part of the environmental rights framework.

Legal principles, drawn from international and foreign environmental law, complement and reinforce this rights framework. These principles include the principles of sustainable development, polluter pays, precaution and inter/intra generational equity, and the public trust doctrine. These principles did not, at the time the courts first referred to them, find place in Indian statutory law. The Supreme Court, credited with introducing these principles to Indian law, looked elsewhere—international legal documents, foreign law and other branches of law, and provided explanations ranging from international obligation to follow a particular principle to shared common law traditions to justify the legal imports. Over the past two decades, these ‘imported’ principles have been accepted as an intrinsic part of Indian environmental law, *albeit* with some definitional and conceptual adjustments.

Lawyers arguing environmental cases routinely rely on substantive and procedural environmental rights and invoke these legal principles, and judges frequently refer to them while delivering judgments. An appreciation of Indian environmental law is incomplete without the knowledge of this rights framework and these legal principles, and how the Indian courts have interpreted and operationalised them. This volume has been conceptualised to improve our understanding of these rights and principles, to evaluate their pre-eminent status in environmental litigation in India, and to understand the mechanisms used by the courts to implement them.

RATIONALE FOR THE VOLUME

Incidents of environmental degradation and conflicts over access and use of natural resources are steadily rising in India. In this context, and for reasons indicated earlier, it is not surprising that judicial activity in the environmental sphere continues to grow. When faced with environmental disputes, Indian courts often venture beyond pure black-letter application of relevant statutory provisions and creatively invoke principles of environmental law that are drawn from diverse sources.

Environmental rights and legal principles are central to Indian environmental law and judicial decision-making. Conceptual clarity about their content and how the courts have applied them is a *sine qua non* for more effective environmental litigation and advocacy. Where these rights and principles have found statutory expression (expressed or implied), limitations in definition, as well as design and implementation of processes, are important to acknowledge as they impact judicial and environmental outcomes significantly. Understanding the implication of these rights and legal principles also makes the impact of other factors (social, economic and political) on the courts' reasoning more evident and potentially subjects judicial reasoning to greater and more rigorous scrutiny.

While underscoring the importance of these rights and principles to Indian environmental law, it is necessary to acknowledge also that judicial reasoning underlying the reliance on these rights and principles is not always very informative; making it difficult to determine their content, scope, and relevance in particular scenarios. The articulation of certain environmental outcomes in the rights language has won the Indian judiciary praise and recognition, and has also accorded environmental issues constitutional gravitas. But the content of an environmental right, as well as its limits, are far from clear. As a right, it is one among several rights that form part of the right to life, including the right to livelihood and the right to development. These rights—and related interests—frequently conflict and in such cases, determining which

right would trump is an exercise of judicial discretion, for which there is little guidance. Parameters to assess whether the right has been protected or violated (fully or in part) are also not well-defined. Similarly, judgments relying on these legal principles often do not follow a clear line of reasoning that identifies the scope and relevance of the principles. As one commentator observed, the Supreme Court of India while incorporating legal principles from the international domain ‘pursues a method that allows for maximum leeway and minimal rationale-based accountability’.¹

This volume is designed to create a space for an interpretive discussion about the evolution and content of environmental rights and principles that may improve our understanding of these rights and principles, their utility in Indian environmental litigation in particular, and in environmental governance more generally. The chapters shed light on the assumptions underlying the environmental law principles that drive their application and problematise judicial reliance on them. A better understanding can improve the quality of arguments being raised in courts, lend a more robust basis for judicial reasoning and, arguably, result in more ‘implementable orders’. Indian environmental judgments also provide valuable insights into different facets of judicial decision-making in India’s adversarial system, including the quality of reasoning, consistency and conceptual clarity.

The need for clarity and consistency is reinforced by the legislative mandate given to the NGT under the National Green Tribunal Act 2010. The preamble to the Act acknowledges that the judiciary has interpreted the right to life to include the right to healthy environment. The Tribunal has jurisdiction over a wide range of environmental issues and is required to apply the principle of sustainable development, precautionary principle, and

1. Saptarishi Bandopadhyay, ‘Because the Cart Situates the Horse: Unrecognized Movements Underlying the Indian Supreme Court’s Internalization of International Environmental Law’ (2010) 50(2) *Indian Journal of International Law* 204.

polluter pays principle while making decisions.² As it builds its own jurisprudence, the Tribunal is likely to develop tests for applying these legal principles, while being guided by the judgments and reasoning adopted by the higher judiciary. Lack of clarity in the understanding of these principles could restrict their utility to the Tribunal and the parties before it.

Chapters in this volume rely on an in-depth study of relevant judgments of the Supreme Court, High Courts and NGT while discussing the origin of the rights and principles in Indian law, how the courts have operationalised them and limitations in the jurisprudence evolved by the courts. Where appropriate, authors have referred to relevant statutory provisions and provided background from international and foreign environmental law and other areas of law. But the focus of the volume remains the treatment of environmental rights and legal principles by Indian courts. An (partial) exception is Chapter 2, on procedural environmental rights, which adopts a different methodological approach as several procedural rights are recognised (or limited) by statutes and, therefore, relevant case law are mostly on the implementation of these provisions, and play a less crucial role in interpreting these rights.

It is necessary to flag that the formal enunciation of these rights and principles in judicial decisions itself is not sufficient to fundamentally change environmental conditions on the ground. The decisions, though perhaps well-intentioned in their final judicial outcome, do not necessarily lead to curtailment and/or remediation of environmental degradation. Whether a judgment has the desired results in a particular case, or in deterring future harmful activities, depends on several factors that cannot always be controlled from inside the courtroom, and are, in part, a reflection of the complexities in environmental disputes. A discussion on the factors influencing the implementation of environmental judgments is an important area for future research. While this is briefly touched

2. National Green Tribunal Act 2010 s 20.

on in Chapter 7, it requires a much deeper engagement which is beyond the scope of this volume.

STRUCTURE OF THE VOLUME

The volume is divided into two parts: **Part I** on **environmental rights** includes Chapter 1 on *substantive environmental rights* and Chapter 2 on *procedural environmental rights*; and **Part II** on **key legal principles**—*principle of sustainable development* (Chapter 3), the *polluter pays principle* (Chapter 4), *precautionary principle* (Chapter 5) and *public trust doctrine* (Chapter 6)—and a final chapter on the *implementation mechanisms* adopted by the judiciary (Chapter 7).

In Chapter 1, Lovleen Bhullar discusses the evolution of the right to environment as a substantive right in Indian environmental law. Drawing from judgments of different fora, she identifies the linkages made by the Indian judiciary between environmental protection and the Constitution, specifically Articles 21, 47, 48A and 51A(g). The constitutional mandate to protect the environment has led the courts to craft many formulations of the environmental right, and the chapter critically explores some of these formulations. Bhullar finds the courts to have adopted a predominantly anthropocentric approach to environmental protection, with occasional judicial recognition of the right of the environment to be protected regardless of its instrumental value to humans. The path of evolution of the right to environment, and its realisation in the present day, however, is problematic. As Bhullar points out, there are instances when the courts have recognised the right even though it was not relevant to the fact situation. Furthermore, the right to environment is not an absolute right; it is one of many constitutional and statutory rights, and it may get sidelined in the greater public interest. She concludes that the inherent imprecision of the right, while unfortunate in some cases, allows courts the flexibility to adapt its directions to a given fact situation, ideally in the interests of the environment.

In Chapter 2, Shibani Ghosh looks at procedural environmental rights—the right to information, public participation and access to justice. Although related, substantive and procedural rights are different in two significant ways: first, the role of the courts while implementing procedural rights is more limited because they often have clear statutory guidance; and second, orders for the protection of procedural environmental rights are relatively easier to issue, to comply with and to monitor the compliance of. The chapter examines each of the three procedural rights in detail and refers to relevant provisions of environmental and general laws, along with case law. In the context of right to information relating to the environment, the chapter focusses on disclosure requirements under the Environment (Protection) Act 1986, the Environmental Impact Assessment (EIA) Notification 2006 and the Right to Information Act 2005. Public participation in environmental decision-making is largely limited to the environmental clearance process and the process of settlement of forest rights under the Forest Rights Act 2006, and the chapter discusses certain limitations in the two processes. The right to access environmental justice is analysed from the standpoint of accessibility of redressal fora—in particular, the NGT. Ghosh identifies the loopholes and limitations in the various laws and concludes that despite statutory expression of procedural environmental rights, there is no room for complacency as these rights are routinely curtailed and denied.

The four principles that make up the bulk of Part II of this volume were selected because of the Indian judiciary's extensive reliance on them. As mentioned earlier, the NGT is expected to apply the principles of sustainable development, precaution and polluter pays in its decision-making. The principle of prevention, although a distinct principle of international environmental law, is yet to find an independent place in Indian environmental law and has, in fact, been conflated with the precautionary principle. To the extent it has been relied on even implicitly by the courts, it has been analysed in the chapter on precautionary principle. Principles of inter- and intra generational equity, which also find mention in

some environmental judgments,³ are yet to gain sufficient traction in Indian environmental law to allow for in-depth analysis, of the kind possible in the case of the other four principles.

Instead of a chronological description of cases, authors of Part II adopt a thematic approach, dissecting each principle into themes and discussing relevant case law through the lens of these themes, such as the definitional content of the principle, rules governing its application and analytical problems faced when judges rely on it.

In Chapter 3, Saptarishi Bandopadhyay critically analyses the principle of sustainable development, as interpreted and applied by the Indian judiciary. The chapter begins with a succinct description of the historical evolution of the principle internationally—quite apt given the Indian Supreme Court’s inclination to look towards international fora in environmental cases. It then analyses the *Vellore* judgment⁴ in some detail, in an attempt to distill the Court’s definition and understanding of the principle. The Supreme Court (tentatively) invokes customary international law, finally endorsing the Brundtland Commission’s definition of sustainable development—‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.⁵ *Vellore* and the Court’s approach to sustainable development have been widely quoted in subsequent judgments by Indian courts to achieve diverse objectives. One case in particular

3. *A. P. Pollution Control Board v. Prof. M. V. Nayudu* (1999) 2 SCC 718; *M. C. Mehta v. Union of India* (2009) 6 SCC 142; *Glanrock Estate (P) Ltd. v. State of Tamil Nadu* (2010) 10 SCC 9; *G. Sundarrajan v. Union of India* (2013) 6 SCC 620.

4. *Vellore Citizens’ Welfare Forum v. Union of India and Ors* (1996) 5 SCC 647.

5. World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future* (OUP 1987) 41. The page cited here corresponds to the online version available at <<http://www.un-documents.net/our-common-future.pdf>> accessed 12 October 2018.

that Bandopadhyay discusses is the *Narmada* judgment⁶ in which the majority opinion rejects a challenge to a massive dam project. *Narmada* provides a window to understand the ways in which the judiciary frames the interests before it—environmental protection *versus* economic development; interests of the liberal administrative State *versus* interests of those the State chooses to disenfranchise. As case law analysis by Bandopadhyay reveals, the Supreme Court has ‘instrumentally harnessed the vagueness inherent in sustainable development’. He concludes that while this strategy has allowed the Court great discretion in reaching varying and sometimes contradictory conclusions, it has also diminished the extent to which lawyers and litigants can expect the Court to justify its determinations. However, the chapter cautions that interpretive flexibility in itself may not be undesirable, as it leaves the field of legal argumentation and political struggle relatively open.

Chapter 4 discusses the polluter pays principle and the manner in which it has been operationalised by Indian courts. The origin of the principle, as Bhullar discusses, can be traced to the economic theory of externalities from where it made its way to the Organisation for Economic Cooperation and Development (OECD) Guiding Principles on environmental policies. Subsequently, the principle found (implicit) expression in the Brundtland Commission Report, and then as Principle 16 of the Rio Declaration 1992. The principle was first invoked by the Supreme Court in its 1996 judgment in the *Bichhri* case,⁷ and soon after in the *Vellore* case. As the application of the principle leads to the question of liability for causing pollution and restoring the damaged environment, the chapter in particular explores the link between the polluter pays principle and the absolute liability principle developed by the Supreme Court. Bhullar poses five questions to understand how the Indian courts have operationalised the polluter pays principle—who is the polluter; how and when is the application of the principle triggered;

6. *Narmada Bachao Andolan v. Union of India* (2000) 10 SCC 664.

7. *Indian Council for Enviro-legal Action v. Union of India* (1996) 3 SCC 212.

how is the loss assessed and the compensation determined; what does the polluter pay; and finally, what are the limits of the principle? Bhullar concludes that while the flexible approach in which the Indian judiciary has applied the principle has allowed different aspects of the principle to be fleshed out, it has also led to courts speaking in contradictory voices. She is concerned that the principle has not had the desired deterrent effect and that its ability to ensure justice for victims of pollution is unclear.

In Chapter 5, Lavanya Rajamani explores the conceptual underpinnings of the precautionary principle, tracing its definition, interpretation and legal status in international law, before turning to Indian law. The precautionary principle finds its way into Indian environmental jurisprudence again through the *Vellore* judgment. The Supreme Court in its judgment identified three elements to the principle: the first is that '[e]nvironmental measures—by the State Government and the statutory authorities—must anticipate, prevent and attack the causes of environmental degradation'; the second, borrowing from Principle 15 of the Rio Declaration, is that '[w]here there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation'; and the third element shifts the burden of proof to the developer/industrialist.⁸ As Rajamani notes, the version of precautionary principle conceived of by the Supreme Court is a 'strong' version, a version that does not find wide support in international law. Her analysis of *Vellore* reveals that the application of the precautionary principle in the case appears to be at odds with the Court's own definition. There was no 'threat' of damage or scientific uncertainty—the tanneries were irrefutably causing high levels of pollution. This lack of clarity in the Court's engagement with the principle, and the blurring of lines between distinct legal principles, forms the crux of Rajamani's argument. The systemic problems in Indian environmental governance perhaps explain the need for an indigenous version of the precautionary principle that, in effect, conflates the principles

8. *Vellore* (n 4), para 11.

of precaution and prevention, and reverses the burden of proof. Rajamani concludes that while the current use of the principle may be instrumentally useful in arriving at environmentally favourable judicial outcomes, it does not augur well for the development of a clear line of jurisprudence.

Chapter 6 traces the growth and application of the public trust doctrine in Indian environmental law. The doctrine—an import from American law (and not international law like the previous three principles)—was introduced to Indian environmental law by the Supreme Court in 1996 through its landmark decision in the *Kamal Nath* case.⁹ In this case, the Court holds the State to be a trustee of all natural resources, and hence under a legal duty to protect such resources. Ghosh explains the contours of the doctrine, as inferred from Indian judicial pronouncements—the source of the doctrine, properties that are held in public trust and principles that are applied by courts while implementing the doctrine. Courts have found that the doctrine places restrictions on the government’s powers to allocate natural resources; recognises a duty of the government to take affirmative steps to protect the environment for the enjoyment of the general public; protects public access to certain resources; and finally, expects decision-making processes relating to natural resources to possess certain qualities. Ghosh argues that it is difficult to identify a core content of the doctrine that could lend a degree of predictability to decision-making regarding public trust properties. In the absence of a reasonably comprehensive definition and the all-encompassing applicability of the doctrine (not just to a limited set of resources), the value of the doctrine, independent of constitutional and public law principles, is unclear. But at the same time, Ghosh acknowledges the desirability of making the doctrine more relevant, rather than insisting on its redundancy. She proposes ways in which the doctrine may be predictably triggered, and the nature of protection that may then be afforded to natural resources held in trust.

9. *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388.

In the final chapter of the volume, Chapter 7, Dhvani Mehta explores the various mechanisms adopted by Indian courts to implement their orders in environmental cases. To fully grasp the role of the four legal principles discussed in Chapters 3–6 in Indian environmental governance, it is important to understand the manner in which courts operationalise their implementation. Chapter 7 refers to the distinction between executive and judicial functions, and demonstrates the various ways in which the Indian judiciary, in effect, stands in for the executive. It gives an overview of the compliance and enforcement mechanisms available to environmental regulatory authorities in India, and then, with references to case law (many of which rely on one or more of the four legal principles), illustrates the implementation mechanisms developed by the courts. These mechanisms serve three distinct purposes: evidence-gathering, monitoring and prevention of environmental damage and remediation. The chapter then analyses the effectiveness of these mechanisms in the context of some landmark cases like *Vellore, Bichhri, Godavarman*¹⁰ and the *Oleum Gas Leak* case.¹¹ Mehta clarifies that although an important parameter to judge the effectiveness of an environmental judgment is to assess the resulting environmental quality, her inquiry is a narrower one—what are the mechanisms that Indian courts have adopted to support and monitor the implementation of their judgments. She concludes that judicial implementation mechanisms have had mixed success. While various external factors influence the implementation process, there are also certain internal weaknesses that must be acknowledged: courts have been inconsistent while deploying implementation mechanisms, their orders require more robust legal reasoning and they need to integrate better with the existing regulatory framework.

Although the four legal principles discussed in Part II of the volume have different origins and implications, there are certain

10. Various orders and judgments in *T. N. Godavarman v. Union of India* WP (C) No. 202/1995.

11. *M. C. Mehta v. Union of India* (1986) 2 SCC 176.

common themes that each chapter has reflected upon. These themes are important to consider while analysing the evolution and future of Indian environmental law and litigation.

First, Indian courts have created indigenous versions of these legal principles which often do not bear much resemblance to either the conventional definition of these principles in international or foreign law (from where the principle is sourced) or to previous interpretations by Indian courts. Courts have moulded the principles to fit unique fact situations, rather than first assessing the relevance of the principle in the particular factual scenario, and then applying or rejecting it. As contributors to this volume discuss, various explanations have been offered by the Supreme Court to explain the importation of these principles into Indian environmental law. These explanations may not have a firm historical standing in Indian law or international law, but the legal principles are now well rooted in Indian environmental law (and more recently, in statutory law).

Second, there appears to be a ‘definitional crisis’ in the principles discussed. As the case law analysis highlights, Indian courts have defined and interpreted the principles in ways that are vague and inconsistent, and which do not lend themselves to application based on objective measures or tests. While dealing with a (mostly) non-responsive executive machinery and/or limited legislative mandate, judges have created a space for themselves—essentially supported by the lack of a clear definition or predictable criteria that can trigger a particular principle.

Third, these legal principles are mostly used in conjunction with other principles and statutory obligations, and therefore the independent legal value of these principles is unclear. For instance, in the context of the precautionary principle and public trust doctrine, the final legal outcome of a case may not necessarily turn on the application of the principle, but on the interplay of a variety of other factors, such as the extent of statutory violations and the nature of environmental degradation and harm. On occasion then, the application of these principles obfuscates more than it clarifies.

Finally, and perhaps as a corollary to the previous two themes, these principles may be rendered redundant given the manner in which the courts are invoking them—inconsistently and with little internal coherence. In order to protect these principles from becoming irrelevant, authors propose alternative theoretical constructs that interpret principles differently and/or more narrowly.

CONCLUSION

The chapters collectively recognise the challenges faced in Indian environmental governance as well as the numerous forces that influence executive and judicial decision-making—factors that have influenced the judiciary’s progressive expansion of its argumentation tool box. This approach, often adopted by litigants, involves the invocation of various permutations of rights, legal principles, concepts and rules, even when the resulting claims go beyond traditional legal positions associated with such rules and standards. A high degree of definitional flexibility in the legal principles—as evident from the case law analyses in this volume—allows them to be applied to a diverse set of situations. It allows public-spirited citizens and project-affected persons battling corporations, bureaucracies, and even their government, to resort to a wider set of legal arguments. The judiciary has nurtured this tool box approach with its inclination to creatively interpret the law to arrive at a fruitful judgment. With litigants and lawyers pursuing their cases with every potentially relevant tool, the outcome of the case could hinge on which tool(s) the judge considers relevant and how the judge uses it/them. The chapters in this volume uniformly suggest that analytical clarity and consistency in the application of these environmental rights and legal principles, that is, sharpening the tools, as it were, would make judicial decisions more robust and less vulnerable to legal (and popular) challenges.

The aim of this volume is to trigger a larger discussion in environmental regulation and, more specifically, law and litigation

about the nature and quality of arguments that are raised during the resolution of natural resource conflicts. Environmental law is expected to govern issues that are multifarious and constantly evolving. The legal system, accordingly, has to develop a level of sophistication and maturity that meaningfully responds to these issues. The exercise of judicial discretion must be based on, and circumscribed by, conceptually sound and nuanced legal arguments that emanate from a robust framework of environmental rights and legal principles.

Part I

ONE

The Judiciary and the Right
to Environment in India
Past, Present and Future

LOVLEEN BHULLAR*

Over the years, there has been an increased endorsement of the right *to* environment or an environmental right at the international level.¹ However, differences of opinion persist in respect of the

*I would like to thank Shibani Ghosh for her insights and advice on the finalisation of this chapter.

1. See, for example, James W. Nickel, 'The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification' (1983) 18 *Yale Journal of International Law* 281; Dinah Shelton, 'Human Rights, Environmental Rights, and the Right to Environment' (1991) 28 *Stanford Journal of International Law* 103; Sumudu Atapattu, 'The Right to a Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment under International Law' (2002) 16 *Tulane Environmental Law Journal* 65; Dinah Shelton, 'Human Rights and the Environment: What Specific Environmental Rights Have Been Recognised?' (2006) 35 *Denver Journal of International Law and Policy* 129; John G. Merrills, 'Environmental Rights' in Daniel Bodansky, Jutta Brunnee and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2008) 663; Jona Razzaque, 'Right to a Healthy

formulation of the right: as an independent, substantive right that also accommodates the right *of* environment; as a right derived from existing human rights; or as a procedural right.² Concern has also been expressed about the anthropocentric basis of the right, its limited application depending on the interests of the claimants, and potential conflict or synergy with other rights.³

The implementation of the right depends on its inclusion in domestic environmental law—either in a country’s constitution or in its national law. There is no explicit reference to the right to environment either in the Constitution of India or in any of the domestic environmental laws.⁴ However, the right is well established in domestic law as a result of judicial interventions. The purpose of this chapter is to unpack the right to environment, as recognised by the judiciary in India.

The chapter is structured as follows: the next section considers the source of the right to environment—both substantive and procedural—in Indian law. This is followed by an examination of the different anthropocentric formulations of the right. The

Environment in Human Rights Law’ in Mashood A. Baderin and Manisuli Ssenyonjo (eds) *International Human Rights Law: Six Decades After the UDHR and Beyond* (Ashgate 2010) 115; Dinah Shelton, ‘Developing Substantive Environmental Rights’ (2010) 1(1) *Journal of Human Rights and the Environment* 89.

2. See Michael R. Anderson, ‘Human Rights Approaches to Environmental Protection: An Overview’ in Alan Boyle and Michael R. Anderson (eds) *Human Rights Approaches to Environmental Protection* (Clarendon Press 1998) 1, 4–10.

3. See generally Boyle and Anderson (n 2).

4. National environmental laws in India comprise a general law, that is, the Environment (Protection) Act 1986 (EP Act), special laws, including laws relating to forests, such as the Indian Forest Act 1927 and the Forest (Conservation) Act 1980; laws relating to wildlife, such as the Wildlife (Protection) Act 1972; laws relating to pollution, such as the Water (Prevention and Control of Pollution) Act 1974 (Water Act) and the Air (Prevention and Control of Pollution) Act 1981 (Air Act), as well as delegated legislation, including a number of rules, regulations and notifications, which have been framed under these laws.

fourth section analyses judicial developments that reflect the accommodation of an ecocentric perspective. The fifth section considers some of the outcomes of judicial recognition of the right to environment, and the challenges relating to its realisation. The final section provides brief concluding remarks.

RIGHT TO ENVIRONMENT: GENESIS IN LAW

This section first briefly examines the substantive basis of the right to environment and then discusses the procedural law basis that has facilitated its development.

Substantive Basis

Indian courts have identified, explicitly or implicitly, different legal sources of the right to environment.

Link with the Fundamental Right to Life

The most commonly discussed source of the right to environment is Article 21 of the Constitution, which guarantees the fundamental right to life.⁵ The ‘activism’ or ‘creativity’⁶ of the higher judiciary (the Supreme Court of India and High Courts) has been widely credited with the incorporation of the right to environment into the fundamental right to life. In fact, it is believed by some that the Supreme Court, more than any other jurisdiction, has ‘fostered an

5. The Constitution of India 1950, Article 21 reads, ‘No person shall be deprived of his life or personal liberty except in accordance with the procedure established by law’.

6. Lavanya Rajamani, ‘Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability’ (2007) 19(3) *Journal of Environmental Law* 293, 294. See generally S. P. Sathe, *Judicial Activism in India: Transcending Borders and Enforcing Limits* (OUP 2001).

extensive and innovative jurisprudence on environmental rights'.⁷ The higher judiciary's approach reflects the formulation of the right to environment as a right derived from an existing right, that is, the fundamental right to life in the Constitution. The relationship between the fundamental right to life and the right to environment has been expressed in different forms.

First, there is an implicit recognition of a link between the fundamental right to life and the environment, which predates the explicit recognition of the right to environment. As early as in 1981, the Supreme Court observed that the right to life includes 'the right to live with human dignity and all that goes along with it, namely, the bare necessities of life'.⁸ This was followed by an indicative list of what is included in the bare necessities of life. Although the environment is not explicitly mentioned, the use of the term 'such as' suggests that this is merely an illustrative list. In other words, it does not appear to rule out the possibility of including the environment in the 'bare necessities of life' in the facts and circumstances of a particular case. The Court also held that the right to life embraces 'not only physical existence of life but the quality of life'.⁹ Arguably, a certain threshold of environmental quality is essential to ensure human dignity and to guarantee a minimum quality of life. However, it is pertinent to mention that environmental issues were not raised in these cases.

In fact, the Supreme Court¹⁰ has traced the origins of the right to environment to its decision in *Bandhua Mukti Morcha v. Union*

7. Michael R. Anderson, 'Individual Rights to Environmental Protection in India' in Boyle and Anderson (n 2) 199.

8. See *Francis Coralie Mullin v. The Administrator, Union Territory of Delhi and Ors* (1981) 1 SCC 608, para 8.

9. See *State of Himachal Pradesh and Anr v. Umed Ram Sharma and Ors* (1986) 2 SCC 68, para 11.

10. See *A. P. Pollution Control Board II v. Prof. M. V. Nayudu (Retd) and Ors* (2001) 2 SCC 62 (APPCB II), para 7. The Court observed, 'Our Supreme Court was one of the first Courts to develop the concept of right to "healthy environment" as part of the right to "life" under Article 21 of our Constitution. (See *Bandhua Mukti Morcha v Union of India.*)'

of *India*.¹¹ Although there is no explicit reference to the right to environment in this case, a number of observations made by the Court are relevant. First, after reading the relevant provisions of the Mines Act 1952, the Court recognised the need to ensure that the workers can live a 'healthy decent life'.¹² Second, the Court issued directions to stop air pollution after observing that the dust resulting from the operation of the stone crushers was the cause of air pollution, reduced visibility, and was a serious health hazard to the workmen.¹³ Third, it observed that 'there can be no doubt that pure drinking water is absolutely essential to the health and well-being of the workmen and some authority has to be responsible for providing it'.¹⁴ Fourth, the Court relied on the statement in the expert's report that 'vast open mountain dug-up without a thought as to environment is used by men and women and children as one huge open latrine' to direct the government to ensure the provision of 'conservancy facilities in the shape of latrines and urinals'.¹⁵

This decision is significant as the Court, after referring to the fundamental right to live with human dignity that is enshrined in Article 21 of the Constitution, and observing that this right derives its life breath from Directive Principles of State Policy (DPSP), (i) implicitly recognised several rights, such as to health, clean drinking water, sanitation, clean air and life itself, (ii) of a vulnerable section of society, that is, workmen, and (iii) within the framework of the statutory duties of the government.

According to the Court, protection of workers' health, opportunities for children to develop in a healthy manner, just and humane conditions of work and maternity relief were included in the right to life with human dignity. The Court held:

These are the minimum requirements which must exist in order to enable a person to live with human dignity and

11. (1984) 3 SCC 161.

12. *Ibid.*, para 28.

13. *Ibid.*, para 31.

14. *Ibid.*, paras 8 and 33.

15. *Ibid.*, para 34.

no State—neither the Central Government nor any State Government—has the right to take any action which will deprive a person of the enjoyment of these basic essentials. Since the Directive Principles of State Policy contained in clauses (e) and (f) of Article 39, Article 41 and 42 are not enforceable in a court of law, it may not be possible to compel the State through the judicial process to make provision by statutory enactment or executive fiat for ensuring these basic essentials which go to make up a life of human dignity but where legislation is already enacted by the State providing these basic requirements to the workmen and thus investing their right to live with basic human dignity, with concrete reality and content, the State can certainly be obligated to ensure observance of such legislation for inaction on the part of the State in securing implementation of such legislation would amount to denial of the right to live with human dignity enshrined in Article 21, more so in the context of Article 256 which provides that, the executive power of every State *shall* be so exercised as to ensure compliance with the laws made by Parliament and any existing laws which apply in that State.¹⁶

Similarly, a number of cases in which environmental issues were raised do not explicitly refer to the right to environment, but to the right to life included in Article 21 of the Constitution. For instance, in a case alleging environmental pollution on account of industrial activity, the Supreme Court observed:

Every citizen has a fundamental right to have the enjoyment of quality of life and living as contemplated by Article 21 of the Constitution of India. Anything which endangers or impairs by conduct of anybody either in violation or in derogation of laws, that quality of life and living by the people is entitled to be taken recourse of Article 32 of the Constitution.¹⁷

In another case, the Supreme Court observed:

If an industry is established without obtaining the requisite permission and clearances and if the industry is continued to

16. *Ibid.*, para 10.

17. *Chhetriya Pardushan Mukti Sangharsh Samiti v. State of Uttar Pradesh and Ors* (1990) 4 SCC 449, para 8.

be run in blatant disregard of law to the detriment of life and liberty of the citizens living in the vicinity, can it be suggested with any modicum of reasonableness that this Court has no power to intervene and protect the fundamental right to life and liberty of the citizens of this country.¹⁸

Second, some decisions include an explicit reference to the right to environment although they do not specifically involve an environmental issue. In these cases, a more general discussion on the content of the fundamental right to life has led to the inclusion of a reference to the right to environment. For instance, in a case concerning a housing scheme for weaker sections of society, the Supreme Court held that the right to life ‘would take within its sweep ... the right to decent environment’.¹⁹

Third, some of the early cases involving environmental issues explicitly recognise the right to environment without any reference to the fundamental right to life. The Supreme Court has sought to protect and safeguard ‘the right of the people to live in healthy environment with minimal disturbance of ecological balance and without avoidable hazard to them and to their cattle, homes and agricultural land and undue affectation of air, water and environment’.²⁰ However, according to a decision of the High Court of Andhra Pradesh, this decision ‘can only be understood on the basis that the Supreme Court entertained those environmental complaints under Article 32 of the Constitution as involving violation of Article 21’s right to life’.²¹

18. *Indian Council for Enviro-legal Action v. Union of India and Ors* (1996) 3 SCC 212, para 54.

19. *M/s Shantistar Builders v. Narayan Khimalal Totame and Ors* (1990) 1 SCC 520, para 9.

20. *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1985) 2 SCC 431 (RLEK 1985), para 12. According to the Court, ‘this is the first case of its kind in the country involving issues relating to environment and ecological balance ...’ (ibid., para 1).

21. See *T. Damodhar Rao and Ors v. The Special Officer, Municipal Corporation of Hyderabad and Ors* (1987) SCC OnLine AP 6, para 24.

Even before the explicit recognition of the link by the Supreme Court, some High Courts had implicitly recognised the right to environment as a part of the fundamental right to life. For instance, the High Court of Andhra Pradesh held:

... it would be reasonable to hold that the enjoyment of life and its attainment and fulfillment guaranteed by Art. 21 of the Constitution embraces the protection and preservation of nature's gifts without [which] life cannot be enjoyed. There can be no reason why practice of violent extinguishment of life alone should be regarded as violative of Art. 21 of the Constitution. The slow poisoning by the polluted atmosphere caused by environmental pollution and spoilation should also be regarded as amounting to violation of Art. 21 of the Constitution.²²

Finally, some cases have explicitly recognised the right to environment as a guaranteed fundamental right under Article 21 of the Constitution. The Supreme Court has identified 'pollution-free water and air' as essential for the enjoyment of the fundamental right to life.²³ Subsequently, the Court has traced environmental aspects (which concern 'life') to Article 21 of the Constitution.²⁴ In *M. C. Mehta v. Kamal Nath and Ors*, the Court held: 'Any disturbance of the basic environmental elements, namely, air, water and soil, which are necessary for "life", would be hazardous to "life" within the meaning of Article 21 of the Constitution'.²⁵

Link with the Directive Principles of State Policy

The Supreme Court has referred to duties in respect of the environment with reference to Articles 47 and 48A of the

22. *Ibid.*, para 24. The same is the case with the recognition of the right to water. See, for example, *F. K. Hussain v. Union of India* 1990 SCC OnLine Ker 63.

23. *Subhash Kumar v. State of Bihar* (1991) 1 SCC 598, para 7.

24. *A. P. Pollution Control Board v. Prof. M. V. Nayudu (Retd) and Ors* (1999) 2 SCC 718, para 57.

25. (2000) 6 SCC 213, para 8.

Constitution.²⁶ Article 48A is the only constitutional provision that explicitly lays down the duty of the State in respect of the environment.²⁷ The word ‘environment’ in Article 48A of the Constitution has been interpreted to be of ‘broad spectrum’ and to include ‘hygienic atmosphere and ecological balance’.²⁸ The State has been identified as having a particular duty to ‘forge in its policy to maintain ecological balance and hygienic environment’.²⁹ Article 47 creates a duty for the State to raise the level of nutrition and the standard of living and to improve public health. The High Court of Karnataka has observed that ‘[t]he standard of living and public health cannot be improved unless there is pollution free air and water’.³⁰ The Supreme Court has also held that the DPSP included in ‘Articles 39(e), 47 and 48A by themselves and collectively cast a duty on the State to secure the health of the people, improve public health and protect and improve the environment’.³¹

The right to environment is derived from the fundamental right to life, which is framed as a negative right (that is, ‘no person shall be deprived ...’).³² Therefore, it has been argued that the right to

26. *Indian Council for Enviro-Legal Action* (n 18), para 49; *Intellectuals Forum, Tirupathi v. State of Andhra Pradesh* (2006) 3 SCC 549, paras 82 and 86.

27. Inserted by the Constitution (Forty-second Amendment) Act 1976, s 10. The Constitution of India, Article 48A, reads, ‘[T]he State shall endeavor to protect and improve the environment and to safeguard the forests and wild life of the country’.

28. *Virender Gaur and Ors v. State of Haryana and Ors* (1995) 2 SCC 577, para 7.

29. *Ibid.*

30. See *C. Kenchappa and Ors v. State of Karnataka and Ors* ILR 2000 KAR 1072, 1078.

31. See *M. C. Mehta v. Union of India and Ors* (2002) 4 SCC 356 (CNG vehicles case), para 1.

32. Lavanya Rajamani, ‘The Right to Environmental Protection in India: Many a Slip between the Cup and the Lip?’ (2007) 16(3) *Review of European Community and International Environmental Law* 274, 278.

environment is not an actionable self-executing right.³³ DPSP are ‘fundamental in the governance of the country’ and it is ‘the duty of the State to apply these principles in making laws’, but they are not intended to be ‘enforceable by any court’.³⁴ However, the Supreme Court has read the fundamental rights in conjunction with the DPSP, ‘like two wheels of a chariot, one no less important than the other’.³⁵ The combined reading of Article 21 and Article 48A of the Constitution has allowed the Court to interpret the right to environment, which is read into the (primarily negative) right to life, as imposing both positive and negative duties on the State, to protect, respect and fulfil the right to environment.³⁶

Link with the Fundamental Duty of Citizens

The State is not the only duty-bearer in respect of the right to environment. The Constitution also imposes a fundamental duty on citizens to protect and improve the environment.³⁷ The Supreme Court observed:

Preservation of the environment and keeping the ecological balance unaffected is a task which not only governments but also every citizen must undertake. It is a social obligation and

33. Ibid.

34. The Constitution of India, Article 39.

35. See *Minerva Mills v. Union of India* (1980) 3 SCC 625, para 56. See also *Kesavananda Bharati and Ors v. State of Kerala and Anr* (1973) 4 SCC 225; *Akhil Bharatiya Soshit Karamchhari Sangh (Railway) v. Union of India and Ors* (1981) 1 SCC 246; *Unnikrishnan v. State of Andhra Pradesh* (1993) 1 SCC 645.

36. See Shubhankar Dam and Vivek Tewary, ‘Polluting Environment, Polluting Constitution: Is a “Polluted” Constitution Worse than a Polluted Environment?’ (2005) 17(3) *Journal of Environmental Law* 383, 386.

37. The Constitution of India, Article 51A(g), imposes a duty on every citizen ‘to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures ...’.

let us remind every Indian citizen that it is his fundamental duty as enshrined in Article 51-A(g) of the Constitution.³⁸

Similarly, after referring to the broad spectrum of the word ‘environment’ in Article 51A(g) to include ‘hygienic atmosphere and ecological balance’, the Court also highlighted the duty of every citizen to maintain a hygienic environment.³⁹ As in the case of the DPSP discussed earlier, which imposes a duty on the State corresponding to the right to environment of the citizens, arguably, this fundamental duty of the citizens corresponds to the right to environment of other citizens.

Further, the National Green Tribunal (NGT) has relied on Article 51A(g) of the Constitution to give a liberal and flexible construction to ‘person aggrieved’ in cases brought under the National Green Tribunal Act 2010 (NGT Act).⁴⁰ In this form, citizens may discharge their fundamental duty by drawing the attention of the NGT to cases of non-realisation of the right to environment of other citizens.

Procedural Basis

Under Articles 32 and 226 of the Constitution, the Supreme Court and High Courts, respectively, have original jurisdiction over all cases concerning fundamental rights. Adherence to the traditional view of standing would mean that the judiciary’s expansive reading of Article 21 of the Constitution, to include the right to environment, would only permit those with personal interest to approach the courts in case of violation of their fundamental right. The introduction of a procedural innovation—public interest

38. *Rural Litigation and Entitlement Kendra and Ors v. State of Uttar Pradesh and Ors* (1986) Supp SCC 517 (RLEK 1986), para 20.

39. *Gaur* (n 28), para 7.

40. See *Vimal Bhai and Ors v. Ministry of Environment and Forests and Ors*, Appeal No. 5/2011, judgment dated 14 December 2011, NGT (Principal Bench).

litigation (PIL)—provided the necessary fillip to the recognition and realisation of the right to environment, by opening the doors of the courts to litigants espousing public interest.⁴¹

The development of PIL in India has been traced to judicial recognition of the need to benefit the persons who by virtue of their ‘socially or economically disadvantaged position are unable to approach the court for judicial redress’.⁴² There are a number of important features of PIL.⁴³ In terms of access to the court, the traditional rule of *locus standi* has been relaxed, as a result of which ‘public-spirited citizens’ are granted representative standing (where the cause of the poor and the oppressed is being espoused) or citizen standing (where the performance of public duties is being enforced). Further, the formal requirements regarding the lodging of a petition are simplified. For instance, courts can even admit a postcard as a petition (which is referred to as epistolary jurisdiction). Judicial proceedings are no longer viewed as being adversarial, and a court-appointed commission can engage in

41. For more information, see Bharat Desai, ‘Enforcement of the Right to Environment Protection through Public Interest Litigation in India’ (1993) 33 *Indian Journal of International Law* 27; J. Mijin Cha, ‘A Critical Examination of the Environmental Jurisprudence of the Courts of India’ (2005) 10 *Albany Law Environmental Outlook Journal* 197.

42. See *S. P. Gupta v. Union of India* (1981) Supp SCC 87, para 16.

43. The origin, development, advantages and limitations of public interest litigation have been extensively documented. See, for example, Upendra Baxi, ‘Taking Suffering Seriously: Social Action Litigation in the Supreme Court of India’ (1985) 4 *Third World Legal Studies* 107; Clark D. Cunningham, ‘Public Interest Litigation in the Indian Supreme Court: A Study in the Light of American Experience’ (1987) 29(4) *Journal of the Indian Law Institute* 494; P. P. Craig and S. L. Deshpande, ‘Rights, Autonomy and Process: Public Interest Litigation in India’ (1989) 9(3) *Oxford Journal of Legal Studies* 356; Ashok H. Desai and S. Muralidhar, ‘Public Interest Litigation: Potentials and Problems’ in B. N. Kirpal *et al.* (eds), *Supreme but Not Infallible: Essays in Honour of the Supreme Court of India* (OUP 2000) 159; Anuj Bhuvania, ‘Courting the People: The Rise of Public Interest Litigation in Post-Emergency India’ (2014) 34(2) *Comparative Studies of South Asia, Africa and the Middle East* 314.

the exercise of collection of evidence. Insofar as remedies are concerned, the court can order far-reaching remedial measures and supervise and monitor their execution.

As in the case of the substantive basis of the right to environment, the development of the procedural basis can also be traced to the ideals of social justice enshrined in DPSP.⁴⁴ Courts have also acknowledged the pursuit of public interest environmental litigation as an expression of the fundamental duty of every citizen to protect and improve the natural environment, which is set out in Article 51A(g) of the Constitution.⁴⁵ The NGT has relied on Article 51A(g) of the Constitution to give a liberal and flexible construction to ‘person aggrieved’ in environmental cases,⁴⁶ thus increasing the pool of people who can approach the NGT. Similarly, other judgments of the NGT have adopted a liberal approach while interpreting the definition of ‘aggrieved person’.⁴⁷ Chapter 2 of this volume provides a more detailed account of the procedural aspects of the right to environment in India.

FORMULATIONS OF THE RIGHT

There are different formulations of the right to environment. This subsection explores some of these formulations, which have received scholarly attention to varying extents. The articulation of the right by the Indian judiciary reflects an anthropocentric bias.

44. Craig and Deshpande, *ibid.*, 365–66.

45. See, for example, RLEK 1986 (n 38), para 20; *L. K. Koolwal v. State of Rajasthan and Ors* (1986) SCC OnLine Raj 43, paras 2–3.

46. See *Vimal Bhai* (n 40).

47. See, for example, *Jan Chetna v. Ministry of Environment and Forests*, Appeal No. 22/2011 (TH), judgment dated 9 February 2012, NGT (Principal Bench); *Goa Foundation and Anr v. Union of India and Ors*, OA No. 26/2012, judgment dated 18 July 2013, NGT (Principal Bench); *Betty C. Alvares v. State of Goa and Ors*, OA No. 63/2012, order dated 14 February 2014, NGT (Western Zone Bench).

Protection of Environment and Conservation of Natural Resources

Indian courts have interpreted the right to environment to include protection of environment and conservation of natural resources.⁴⁸ The Environment (Protection) Act 1986 (EP Act) provides for the protection and improvement of environment, and it defines the term ‘environment’ very broadly to include ‘water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property’.⁴⁹ Thus, the provisions of the EP Act offer some indication of the nature of environmental protection that is envisaged by the lawmakers and that is to be ensured by the implementing agencies. Of course, the actual level of environmental protection will depend on several factors including economic constraints, environmental factors and development priorities.⁵⁰ Although courts have not defined the term ‘conservation’, the emphasis on the need for conservation of natural resources is clearly motivated by the need to ensure their availability for human use—whether it is sustainable use or not is another question. For instance, the Supreme Court has held that mining operations impair the right to natural resources.⁵¹

The Constitution is clearer in respect of this formulation of the right to environment in the context of the corresponding duties, which can be traced to Article 48A of the Constitution. This is also reflected in judicial decisions, explicitly or implicitly. The Supreme Court has explicitly referred to Article 48A while recognising the constitutional imperative on the state and local governments to

48. *Intellectuals Forum* (n 26), para 86. See also *Kinkri Devi and Anr v. State of Himachal Pradesh and Ors* (1987) SCC OnLine HP 7, para 8. The High Court of Himachal Pradesh mentions ‘preservation and protection of the ecology, the environment and the natural wealth and resources’ in the context of Article 21 of the Constitution.

49. EP Act s 2(a).

50. See *Rajamani* (n 32) 278.

51. *M.C. Mehta v. Union of India* (2001) 4 SCC 577.

‘ensure and safeguard proper environment’ and to ‘take adequate measures to promote, protect and improve both the man-made and the natural environment’.⁵² In other cases, without referring to Article 48A of the Constitution, the Court has observed that the right to environment imposes a duty to ensure conservation and preservation of resources.⁵³ It has also clearly specified the purpose behind the imposition of the duty, that is, to ensure that present and future generations are equally aware of the resources.⁵⁴ Although the Court does not specify the nature of the resources and who is the duty-bearer, this is, arguably, a reference to natural resources and the State, respectively.

Ecological Balance

The right to environment has also been viewed through the lens of ecological balance. In general parlance, ecological balance refers to the equilibrium between organisms and between organisms and their physical surroundings. According to the Supreme Court:

Environmentalists’ conception of the ecological balance in nature is based on the fundamental concept that nature is ‘a series of complex biotic communities of which a man is an interdependent part’ and that it should not be given to a part to trespass and diminish the whole.⁵⁵

A number of decisions include references to the need to maintain, preserve, protect or improve (or take prudent care of) ecological balance, or to cause minimal disturbance to the ecological balance⁵⁶ (not to destroy or affect or devastate ecological balance, or to cause or create ecological imbalance).⁵⁷ It has been argued that what constitutes ‘ecological balance’ in a given case and

52. *Gaur* (n 28), para 7.

53. *Intellectuals Forum* (n 26), para 84.

54. *Ibid.*

55. *State of Bihar v. Murad Ali Khan* (1988) 4 SCC 655, para 10.

56. *RLEK* 1985 (n 20), para 12.

57. *Chhetriya Pardushan* (n 17), para 7.

how it can be maintained are difficult questions and entail a scientific enquiry, which is beyond the competence of the Court.⁵⁸ Nevertheless, courts have attempted to answer these questions. For instance, the Supreme Court has noted that ‘material resources of the community like forests, tanks, ponds, hillock, mountain etc. are nature’s bounty. They maintain delicate ecological balance.’⁵⁹ The Court has also identified practices that disturb the ecological balance, such as deforestation,⁶⁰ the killing of animals and birds⁶¹ and the working of mines for exploitation of mineral resources.⁶²

Perhaps, as a reflection of the fact that the right to environment draws its life from the fundamental right to (human) life, its articulation in terms of ecological balance is also predicated on anthropocentrism. This has led to the observation that the Supreme Court appears to be conflating threats to ecology with threats to health.⁶³ A good example is when the Court sought to protect and safeguard ‘the right of the people to live in healthy environment with minimal disturbance of ecological balance and without avoidable hazard to them and to their cattle, homes and agriculture and undue affectation of air, water and environment’.⁶⁴ Similarly, the Court has held that ‘any threat to ecology can lead to violation of the right to enjoyment of a healthy life guaranteed under Article 21’.⁶⁵ In another case, the rationale for the protection of the material resources of the community was ‘a proper and healthy environment which enables people to enjoy a quality life which is the essence of the guaranteed right under Article 21’.⁶⁶

58. Rajamani (n 32) 278.

59. *Hinch Lal Tiwari v. Kamala Devi* (2001) 6 SCC 496, para 13.

60. *T. N. Godavarman Tirumulpad v. Union of India and Ors* (2006) 5 SCC 47.

61. *Union of India v. Zavaray S. Poonawala and Ors* (2015) 7 SCC 347.

62. RLEK 1986 (n 38).

63. Rajamani (n 32) 278.

64. RLEK 1985 (n 20), para 12.

65. *T. N. Godavarman (87) v. Union of India* (2006) 1 SCC 1, para 77.

66. *Hinch Lal* (n 59), para 13.

Pollution

A third formulation of the right to environment is linked to pollution. In some cases, this is expressed as the right to live in a 'pollution-free' environment,⁶⁷ atmosphere⁶⁸ or water and air,⁶⁹ or to fresh air.⁷⁰ However, it is widely accepted that the right to pollution-free environment is meaningless and unrealistic.⁷¹ Even the Supreme Court has acknowledged that '[e]nvironmental changes are the inevitable consequences of industrial development'.⁷² In other words, some pollution is inevitable and freedom from pollution means prevention and control of an elevated level of pollution.⁷³

It has been suggested that the courts do not provide any concrete guidance as to acceptable levels of pollution.⁷⁴ However, courts have restricted the scope of the right to pollution-free environment to reduction in the quality of life of others,⁷⁵ to environmental quality that becomes a hazard to human health,⁷⁶ and to irreversible environmental damage.⁷⁷ The Supreme Court has also laid down a requirement in order to allege a violation of the right: the endangerment or impairment of quality of life resulting

67. See *M. C. Mehta v. Union of India* (1992) 3 SCC 256, para 2.

68. *Vellore Citizens' Welfare Forum v. Union of India and Ors* (1996) 5 SCC 647, paras 16–17.

69. *Charan Lal Sahu v. Union of India* (1990) 1 SCC 613, para 137; *Subhash Kumar* (n 23), para 7; *Mehta* (n 67), para 2; *Gaur* (n 28), para 7.

70. *Mehta* (n 67), para 2.

71. *Rajamani* (n 32) 279; Gitanjali Nain Gill, 'Human Rights and the Environment in India: Access through Public Interest Litigation' (2012) 14(3) *Environmental Law Review* 200, 205.

72. *Mehta* (n 67), para 2.

73. *Rajamani* (n 32) 279; Gill (n 71) 205.

74. *Rajamani*, *ibid.*

75. *M. C. Mehta v. Union of India and Ors* (2004) 12 SCC 118, para 46.

76. *M. C. Mehta v. Union of India and Ors* (2001) 3 SCC 756.

77. *Mehta* (n 75), para 45.

from a violation of the right must be in derogation of (pollution-related) laws.⁷⁸

Domestic environmental laws have defined the term ‘pollution’,⁷⁹ and statutory bodies have prescribed standards for the discharge of various pollutants into the environment. However, the fact that the outer limit of the acceptable level of pollution has been prescribed does not necessarily mean that first, the standard would be complied with, and second, that compliance with the statutory standards will lead to the realisation of the right to environment. Here, it is important to take into account the dissatisfaction with the existing standards in terms of their ability to address environmental problems,⁸⁰ and the extent to which it is possible to comply with them.⁸¹

78. *Subhash Kumar* (n 23), para 7.

79. Water ‘pollution’ means ‘such contamination of water or such alternation of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to create, a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms’. See Water Act, s 2(e). ‘Air pollution’ means ‘any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment’. See Air Act, s 2(a). ‘Environmental pollution’ means ‘the presence in the environment of any environmental pollutant’, that is, ‘any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment’. See EP Act s 2(c) read with s 2(b).

80. See, for example, Susan G. Hadden, ‘Statutes and Standards for Pollution Control in India’ (1987) 22(16) *Economic and Political Weekly* 709; Aparna Sawhney, ‘Managing Pollution: PIL as Indirect Market-Based Tool’ (2003) 38(1) *Economic and Political Weekly* 32; T. Rajaram and Ashutosh Das, ‘Water Pollution by Industrial Effluents in India: Discharge Scenarios and Case for Participatory Ecosystem Specific Local Regulation’ (2008) 40 *Futures* 56.

81. See, for example, Manju Menon and Kanchi Kohli, ‘Environmental Regulation in India: Moving “Forward” in the Old Direction’ (2015) 50(50)

Link with Socioeconomic Rights

The enjoyment of a number of socioeconomic rights that have also been read into the fundamental right to life guaranteed under Article 21 of the Constitution, such as the rights to health, housing, water and sanitation, is inextricably linked with the right to environment.

Right to Health

Historically, concerns relating to public health have underpinned the legal and policy framework concerning environmental pollution. In many cases, this approach resonates in the judicial formulation of the right to environment. The Supreme Court has viewed the fundamental right to life, of which a hygienic environment forms an integral part, as ‘healthy’ life, thus reinforcing the very close link between health and environment.⁸² The Court has also highlighted the essential role of a humane and healthy environment in order to live with human dignity.⁸³ The Court has further observed: ‘[t]he right to have living atmosphere congenial to human existence is a right to life’.⁸⁴ In a more recent decision, the NGT has observed that domestic environmental jurisprudence understands the concept of environment as ‘hygienic, clean and decent’.⁸⁵ These decisions appear to reflect a narrow conception of the environment—linked

Economic and Political Weekly 20. See also P. M. Prasad, ‘Environment Protection: Role of Regulatory System in India’ (2006) 41(13) *Economic and Political Weekly* 1278.

82. *Gaur* (n 28), para 7.

83. *Ibid.* On ‘healthy’ environment, see also RLEK 1985 (n 20), para 12; APCCB II (n 10), paras 4, 6, 7 and 11; *Intellectuals Forum* (n 26), para 84. On ‘humane’, ‘healthy’ and ‘hygienic’ environment, see also *State of Madhya Pradesh v. Kedia Leather and Liquor Ltd and Ors* (2003) 7 SCC 389, para 10.

84. *Gaur* (n 28), para 6.

85. *Kehar Singh v. State of Haryana*, OA No. 124/2013, judgment dated 12 September 2013, NGT (Principal Bench), para 28.

to human health and concerned with the immediate environment/surroundings rather than adopting a holistic approach towards the natural environment. Further, it has been argued that the use of adjectives ‘leave[s] ample scope for value judgments and judicial discretion’ and ‘subjective opinion’.⁸⁶

In *C. Kenchappa and Ors v. State of Karnataka and Ors*, the High Court of Karnataka traced the origin of the right to a ‘wholesome’ environment to the decision of the Supreme Court in *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh*.⁸⁷ Interestingly, neither this decision nor any other decision of the Supreme Court actually uses the term ‘wholesome’. In common parlance, as well as in laws, however, the term is used in the context of being favourable to human health.

Right to Water

The provision of ‘pure’ and ‘wholesome’ drinking water for domestic purposes is a statutory responsibility of urban and rural local bodies.⁸⁸ Further, the maintenance or restoration of wholesomeness of water for different uses is one of the objectives of the Water (Prevention and Control of Pollution) Act 1974 (Water Act). In light of the fact that the sources of water supply for human needs form an integral component of the environment, there is a direct link with the right to environment. The judiciary, which has read the right to water into the right to life guaranteed under Article 21 of the Constitution, adopts a more restricted approach, given its predominant focus on water for drinking purposes. In this

86. See, for example, Rajamani (n 32) 279 [in respect of the terms ‘decent’ and ‘congenial’]. See generally Alan Boyle, ‘Human Rights or Environmental Rights: A Reassessment’ (2007) 18 *Fordham Environmental Law Review* 471, 507.

87. *Kenchappa* (n 30) 1078 [referring to RLEK 1985 (n 20)].

88. See, for example, Uttar Pradesh Municipalities Act 1916; Uttar Pradesh Panchayat Raj Act 1947.

context, judicial decisions have recognised the right to 'clean',⁸⁹ 'pure',⁹⁰ 'safe',⁹¹ 'sweet'⁹² or 'wholesome' water. They have also recognised the duty of the State to provide clean,⁹³ unpolluted⁹⁴ or safe⁹⁵ drinking water. Some of these cases also impose a duty to protect water sources through prevention or control of water pollution.

Article 21 of the Constitution has not provided the exclusive basis of the right to water.⁹⁶ For instance, the High Court of Madhya Pradesh has ruled that under Article 47 of the Constitution, the State has the 'primary' responsibility to 'improve the health of public [by] providing unpolluted drinking water'.⁹⁷ Based on a combined reading of Articles 21 and 47, the Court concluded that the State has a duty 'towards every citizen of India to provide pure drinking water'.⁹⁸ However, in a majority of the cases relating to the right to water, the courts have not referred to Article 47, unlike the right to environment cases, which include frequent references to Article 48A.

89. See, for example, *APPCB II* (n 10), para 3; *Gautam Uzir and Anr v. Gauhati Municipal Corporation* (1999) 3 Gauhati Law Times 110.

90. See, for example, *Hamid Khan v. State of Madhya Pradesh* (1996) SCC OnLine MP 287, para 6; *Mahendra Prasad Sonkar and Surya Prakash Singh v. State of Uttar Pradesh and Ors* (2004) Allahabad Law Journal 3836, para 11.

91. See, for example, *Wasim Ahmed Khan v. Government of Andhra Pradesh* (2001) SCC OnLine AP 1090; *Vishala Kochi Kudivella Samrakshana Samithi v. State of Kerala* (2006) SCC OnLine Ker 63, para 4.

92. See, for example, *Attakoya Thangal v. Union of India* 1990 (1) Kerala Law Times 580, 583; *F. K. Hussain* (n 22), para 7.

93. See, for example, *APPCB II* (n 10), para 3; *PR Subas Chandran v. Government of Andhra Pradesh* (2001) SCC OnLine AP 746, para 26.

94. See, for example, *Hamid Khan* (n 90), para 6.

95. See, for example, *Wasim Ahmed Khan* (n 91); *Vishala Kochi* (n 91).

96. See Philippe Cullet, 'Water Sector Reforms and Courts in India: Lessons from the Evolving Case Law' (2010) 19(3) *Review of European Community and International Environmental Law* 328, 329.

97. *Hamid Khan* (n 90), para 6.

98. *Ibid.*

Right to Sanitation

There is a clear link between the right to sanitation and the right to environment. Human waste is usually discharged into water bodies or on land. If untreated, it can cause water or soil pollution. Therefore, proper treatment of human waste before its disposal into the environment is an essential component of the right to sanitation. In a few cases, courts have read the rights to health, sanitation and environment into the constitutional right to life. The Rajasthan High Court explicitly observed:

Maintenance of health, preservation of the sanitation and environment falls within the purview of Art. 21 of the Constitution as it adversely affects the life of the citizen and it amounts to slow poisoning and reducing the life of the citizen because of the hazards created, if not checked.⁹⁹

Subsequently, the Supreme Court held that the right to life cannot be enjoyed without ‘the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation’.¹⁰⁰ Further, in a number of decisions concerning water pollution, the operation of sewage treatment plants, which treat human waste before its disposal into the environment in accordance with the prescribed statutory standards, has been raised.¹⁰¹ While some of these decisions explicitly mention Article 21, and some of them even refer to the right to environment, there is no reference to the right to sanitation. Nevertheless, the implicit link is obvious. Previously, without any reference to Article 21 or the right to environment, the Supreme Court has compelled ‘a statutory body to carry out its

99. *Kookval* (n 45), para 3.

100. *Gaur* (n 28), para 7.

101. See, for example, *Jai Narain and Ors v. Union of India and Ors* (1996) 1 SCC 9. See also *Capt. M. V. Subbarayappa v. Bharat Electronics Employees Co-operative House Building Society Ltd* (1989) SCC OnLine Kar 333; *Narayana Setty and Ors v. State of Karnataka and Ors* (2003) SCC OnLine Kar 221.

duty to the community by constructing sanitation facilities at great cost and on a time-bound basis'.¹⁰²

Right to Housing

The right to environment has also been formulated as the right to 'decent' environment in decisions concerning housing/shelter.¹⁰³ As in the case of the decisions concerning the right to health, however, these decisions reflect a narrow conception of the environment that is concerned with the immediate environment/surroundings rather than adopting a holistic approach towards the natural environment.

RIGHT OF ENVIRONMENT: ANTHROPOCENTRISM AND BEYOND

The potential of the right to environment to protect the environment is determined by the extent of its anthropocentrism. The judicial recognition of the right to environment is inextricably linked to the fundamental right to life (of humans). As a result, an anthropocentric approach is inherent in most formulations of the right to environment.

The Supreme Court has captured the difference between an anthropocentric approach and an ecocentric approach to environmental protection in the following passage:

... Anthropocentrism is always human interest focussed and non-human has only instrumental value to humans. In other words, humans take precedence and human responsibilities to non-human based benefits to humans. Ecocentrism is nature-centred where humans are part of nature and non-humans have intrinsic value. In other words, human interest does not

102. *Municipal Council, Ratlam v. Shri Vardichand and Ors* (1980) 4 SCC 162, para 1. See also *Rampal v. State of Rajasthan* (1980) SCC OnLine Raj 32.

103. See *Shantistar Builders* (n 19), para 9. See also *Chameli Singh and Ors v. State of Uttar Pradesh and Ors* (1996) 2 SCC 549, para 8 [right to shelter includes 'clean and decent surroundings'].

take automatic precedence and humans have obligations to non-humans independently of human interest. Ecocentrism is therefore life-centred, nature-centred where nature includes both humans and non-humans ...¹⁰⁴

The anthropocentric right to environment may nevertheless promote ecocentric considerations in some cases, although they are primarily linked to the instrumental value of the environment to human beings. For instance, in a case concerning the grant of forest clearance for bauxite-ore mining in a tribal area of the state of Odisha, the Supreme Court held that the Gram Sabha has to consider whether or not Scheduled Tribes (STs) like Dongaria Kondh, Kutia Kandha and others have any religious rights, that is, rights of worship over the Niyamgiri hills.¹⁰⁵ This decision followed from a combined reading of the provisions of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 and the Panchayats (Extension of the Scheduled Areas) Act 1996, which led the Court to conclude that the Gram Sabha has an obligation to safeguard and preserve the traditions and customs, cultural identity, community resources, etc., of the right-holders.

The issue of the right of rivers to unfettered and/or minimum flow has also received judicial attention.¹⁰⁶ The NGT directed the concerned state governments to fix the quantity of water that should be released throughout the year to ensure the environmental/minimum flow of river Yamuna, which will maintain the carrying capacity of the river and ensure prevention and control of pollution, as well as provide clean and wholesome water for the use of the residents of Delhi. The authorities concerned were also directed to put an end to development activities that obstruct the flow of the

104. See *T. N. Godavarman Thirumulpad v. Union of India* (2012) 3 SCC 277, para 17.

105. *Orissa Mining Corporation v. Ministry of Environment and Forests and Ors* (2013) 6 SCC 476.

106. See *Manoj Misra v. Union of India and Ors*, OA No. 06/2012, order dated 22 July 2013 and order dated 13 January 2015, NGT (Principal Bench).

river. Similarly, courts have made observations for the protection of the floodplains of rivers.¹⁰⁷ Ecocentric considerations appear to have weighed in the minds of the decision-makers, although an anthropocentric approach is also clearly visible.

Some other cases have experimented with a more ecocentric approach that protects the right *of* environment. For instance, the Supreme Court considered the issue of rights of animals in a case concerning the plight of the bulls used in Jallikattu, bullock-cart races, etc., in the states of Tamil Nadu and Maharashtra.¹⁰⁸ The petitioner argued that the pain and suffering caused to the animals violates Article 21 and Article 51A(g) of the Constitution. According to the Court:

Every species has a right to life and security, subject to the law of the land, which includes depriving its life, out of human necessity. Article 21 of the Constitution, while safeguarding the rights of humans, protects life and the word 'life' has been given an expanded definition and any disturbance from the basic environment which includes all forms of life, including animal life, which are necessary for human life, fall within the meaning of Article 21 of the Constitution. So far as animals are concerned, in our view, 'life' means something more than mere survival or existence or instrumental value for human beings, but to lead a life with some intrinsic worth, honour and dignity ...¹⁰⁹

Mindful, perhaps, of the need to respect the principle of separation of powers, the judiciary merely planted the idea but left it to the legislature to fertilise it, in the form of a legislative enactment. The Court 'expected' Parliament to 'elevate rights of animals to that of constitutional rights ... so as to protect their dignity and honour'.¹¹⁰

107. See also *Delhi Development Authority v. Rajendra Singh and Ors* (2009) 8 SCC 582; *Manoj Misra v. Delhi Development Authority and Ors*, OA No. 65/2016, order dated 9 March 2016, NGT (Principal Bench).

108. *Animal Welfare Board of India v. A. Nagaraja and Ors* (2014) 7 SCC 547.

109. *Ibid.*, para 72.

110. *Ibid.*, para 91.9.

While animal rights activists have appreciated the expansive interpretation of the right to life and right to environment,¹¹¹ the observations of the Supreme Court have resuscitated the issue of the application of a rights-based approach to animals.¹¹²

Further, the judiciary has recently accorded rights akin to fundamental/legal rights to the rivers Ganga and Yamuna and all their tributaries, streams, every natural water flowing continuously or intermittently of these rivers specifically,¹¹³ as well as to glaciers, rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests, wetlands, grasslands, springs and waterfalls.¹¹⁴ In both cases, the High Court of Uttarakhand has identified *persons in loco parentis* as the human face to protect, conserve and preserve these right-holders.

The recognition of the ecocentric perspective is not limited to cases dealing with the fundamental right to life. After observing that environmental pollution affects every living being, the NGT highlighted the fundamental duty of every citizen, under Article 51A(g) of the Constitution, to protect and improve environment ‘not only for the benefit of the human beings and citizens of this country but having regard to all living creatures’.¹¹⁵

111. See, for example, M. Suchitra, ‘Animal rights groups welcome SC ban on Jallikattu’ (2014) *Down to Earth* <<http://www.downtoearth.org.in/news/animal-rights-groups-welcome-sc-ban-on-jallikattu-44291>> accessed 13 April 2017.

112. See, for example, Jessamine Therese Mathew and Ira Chadha-Sridhar, ‘Granting Animals Rights Under the Constitution: A Misplaced Approach? An Analysis in Light of *Animal Welfare Board of India v. A. Nagaraja*’ (2014) 7 *NUJS Law Review* 349; Vishrut Kansal, ‘The Curious Case of *Nagaraja* in India: Are Animals Still Regarded as “Property” With No Claim Rights?’ (2016) 19(3) *Journal of International Wildlife Law and Policy* 256.

113. See *Mohd Salim v. State of Uttarakhand and Ors*, WP (PIL) No. 126/2014, decided on 20 March 2017 (High Court of Uttarakhand).

114. See *Lalit Miglani v. State of Uttarakhand and Ors*, WP (PIL) No. 140/2015, decided on 30 March 2017 (High Court of Uttarakhand).

115. *Sandeep Lahariya v. State of Madhya Pradesh and Ors*, OA No. 04/2013, judgment dated 11 November 2013, NGT (Central Zone Bench), para 19.

In another case, the NGT identified a peculiar feature of environmental litigation, that is, the *lis* is between the environment and its alleged polluter.¹¹⁶ According to the Tribunal, '[I]t is aptly said that rivers, mountains, trees, birds, flora and fauna have no language, particularly, in legal parlance and, therefore, they speak through human beings'.¹¹⁷

RIGHT TO ENVIRONMENT: BEYOND RECOGNITION

The recognition of the right to environment by the higher judiciary and the NGT has received a mixed response, and the need to recognise the limitations in its scope and adopt a cautious approach has been highlighted. This section examines some of the outcomes of judicial recognition, and the challenges relating to the realisation of the right to environment.

Development of Domestic Environmental Jurisprudence

The judicial recognition of the right to environment has affected domestic environmental jurisprudence in different ways.

Integration of Principles of Environmental Law

One of the techniques employed by the Supreme Court to elaborate the right to environment is to integrate established as well as nascent principles of international and foreign environmental

116. *Mr S. K. Shetye and Anr v. Ministry of Environment and Forests and Ors and The Chairman, Board of Trustees of the Port of Mormugao v. Goa Coastal Zone Management Authority and Ors*, OA No. 17 and 20 (THC)/2013, judgment dated 29 May 2014, NGT (Western Zone Bench), para 25.

117. *Ibid.*

law into domestic environmental jurisprudence.¹¹⁸ The principles of international environmental law include the polluter pays principle,¹¹⁹ precautionary principle,¹²⁰ principle of intergenerational equity¹²¹ and sustainable development.¹²² The Court has also imported the public trust doctrine from another jurisdiction (the United States).¹²³ On the one hand, this integration is viewed as a reflection of the Court's 'progressive stance on environmental protection'.¹²⁴ On the other hand, it is alleged that some of the principles merely create a smokescreen; they obfuscate the hard questions and render application and implementation of the right to environment difficult.¹²⁵ These principles form the subject matter of extensive discussion in the other chapters of this volume.

Procedural Rights to Environment

The procedural rights to environment include access to information, public participation in decision-making and access to judicial remedies. Certain laws provide for these rights, albeit they do not use the language of rights. It is the judiciary that has established a

118. See Rajamani (n 6) 294; Gill (n 71) 204. Gill views the public trust doctrine and the principle of intergenerational equity as derivatives, and considers the precautionary principle and the polluter pays principle as essential parts of Article 21.

119. *Indian Council for Enviro-Legal Action* (n 18), para 67; *Vellore* (n 68), paras 11–13.

120. *Ibid.*

121. See *State of Himachal Pradesh v. Ganesh Wood Products* (1995) 6 SCC 363. See also *Indian Council for Enviro-legal Action v. Union of India* (1996) 5 SCC 281 (*CRZ Notification case*); *Intellectuals Forum* (n 26), para 79.

122. *M. C. Mehta v. Union of India and Ors* (1997) 2 SCC 353 (*Taj Trapezium case*), para 30. See also *Narmada Bachao Andolan v. Union of India* (2000) 10 SCC 664, para 123.

123. See *M. C. Mehta v. Kamal Nath and Ors* (1997) 1 SCC 288. See also *Intellectuals Forum* (n 26), paras 74–78.

124. Rajamani (n 32) 274.

125. *Ibid.*, 284. See also Gill (n 71) 205.

link between the fundamental right to life and the procedural rights to environment. For instance, the Supreme Court held: '[T]he right to information and community participation for protection of environment and human health ... flows from Article 21'.¹²⁶

The judicial recognition of the right to environment as part of the fundamental right to life can guarantee access to justice for the right-holders or their representatives. They are entitled to invoke the writ jurisdiction of the Supreme Court and High Courts to seek redress where the quality of life is endangered or impaired by a violation or derogation of laws.¹²⁷ In fact, the Rajasthan High Court interpreted the fundamental duty of the citizen under Article 51A of the Constitution as the right to approach the court to ensure the performance of statutory duties by the State.¹²⁸ This procedural guarantee has facilitated the development of public interest environmental litigation in India, and the adjudication of a range of environmental issues, such as the adverse effects of air pollution on monuments of national importance¹²⁹ and cities,¹³⁰

126. *Research Foundation for Science Technology National Resource Policy v. Union of India and Anr* (2005) 10 SCC 510, para 16. See also *Tirupur Dyeing Factory Owners' Association v. Noyyal River Ayacutdars Protection Association* (2009) 9 SCC 737, para 27. In *Tirupur*, in support of this proposition, the Court also refers to *Bombay Dyeing & Mfg Co Ltd v. Bombay Environmental Action Group* (2006) 3 SCC 434; *T. N. Godavarman Thirumulpad v. Union of India* (2002) 10 SCC 606; *N. D. Jayal v. Union of India and Ors* (2004) 9 SCC 362; *M. C. Mehta v. Kamal Nath and Ors* (2002) 3 SCC 653; *Mrs Susetha v. State of Tamil Nadu and Ors* (2006) 6 SCC 543. However, none of these other cases explicitly refer to any of the procedural rights, although some of them discuss environmental impact assessment, which may guarantee these procedural rights.

127. See, for example, *Chhetriya Pardushan* (n 17), para 8; *Subhash Kumar* (n 23), para 7.

128. *Koolwal* (n 45), para 2.

129. *Taj Trapezium* case (n 122).

130. See *M. C. Mehta v. Union of India and Ors* (1996) 4 SCC 351 and 750, (1997) 11 SCC 327 and (1998) 9 SCC 149 (*Delhi Industrial Relocation* cases); *M. C. Mehta v. Union of India and Ors* (1998) 9 SCC 589 (*Delhi Vehicular Pollution* case).

the adverse effects of surface water pollution due to municipal and trade effluents,¹³¹ protection of forests and wildlife,¹³² and garbage disposal in cities.¹³³

Legislative Recognition of the Right

There is no explicit reference to the right to environment, either in the Constitution or in any of the domestic environmental laws. However, a shift in the approach of the legislature is visible. For instance, the preamble of the NGT Act, which provides for the establishment of the NGT *inter alia* for the enforcement of any legal right relating to environment, takes note of the judicial decisions that have construed the right to healthy environment as a part of the right to life under Article 21 of the Constitution.

Realisation of the Right to Environment: Some Challenges

Although, judicial recognition of the right to environment began more than three decades ago, there are concerns relating to the realisation of the right to environment in specific cases.

First, in a number of cases, the recognition of the right has not been followed by its application to the particular facts and circumstances. For instance, in *Subhash Kumar*,¹³⁴ which is one of the leading authorities cited in support of the recognition of the right to sanitation, the Supreme Court did not issue any orders

131. *M. C. Mehta v. Union of India and Ors* (1987) 4 SCC 463 (*Kanpur Tanneries case*); *M. C. Mehta v. Union of India and Ors* (1988) 1 SCC 471 (*Kanpur Municipalities case*); *M. C. Mehta v. Union of India and Ors* (1997) 2 SCC 411 (*Calcutta Tanneries case*).

132. *Godavarman* (n 126).

133. *Almitra H. Patel and Anr v. Union of India and Ors* (2000) 2 SCC 679.

134. *Subhash Kumar* (n 23).

or directions as it was discovered that the petitioner's allegation was false. Further, while courts have recognised the right to environment in a number of cases, environmental issues were not the subject matter in all cases. In order to determine the scope and application of the right to environment, it is important to consider cases which have been filed under Article 32 or Article 226 of the Constitution, alleging a violation of the fundamental right to environment, or where the petitioner has alleged the violation of his/her/their right to environment, or the right to environment has formed part of the courts' decision-making process as reflected in the reported judgment.

Second, the constitutional right to environment is not an absolute right. Its realisation is contingent upon the right to (human) life, which precludes cases where judicial intervention may be required for the protection of the environment for its own sake. Further, its realisation is linked to the violation or derogation of existing laws, which confines the outer limits of the corresponding duties of the government to those prescribed in existing laws. This may result in a failure to consider situations where the right to environment and the right to life are violated due to the inadequacy of existing laws or the absence of laws.

Third, arguably, the Court has passed 'far-reaching'¹³⁵ orders and judgments in several cases. However, whether or not they are 'progressive'¹³⁶ will depend on the perspective of the stakeholder who makes such an assessment, as well as the position of the assessee in respect of the doctrine of separation of powers. The development of public interest environment litigation in India is marked by tension between two camps: one applauding judicial interventions in environmental matters in a period of legislative and executive inertia and the other criticising the (alleged) foray of the judiciary into areas traditionally reserved for the other two branches of government.

135. See, for example, Rajamani (n 32) 277.

136. *Ibid.*

Fourth, the anthropocentric perspective privileges the right to environment of some members of society and some environmental concerns over others. This may undermine the principle of intragenerational equity, which also forms part of domestic environmental law. It is argued that the right to environment has been invoked to raise the concerns of the ‘middle class’ urban residents, often to the detriment of the poor residents (such as slum-dwellers), smaller-sized or less influential industries and their workers.¹³⁷ This capture has been facilitated by the ‘middle class’ preferences of the judges.¹³⁸ The imbalance in terms of the number of environmental cases relating to urban and rural areas is another matter of concern. However, in recent years, an increasing number of cases relating to environmental issues faced by people in rural areas are receiving judicial attention, particularly from the NGT.

Finally, besides the right to environment, a number of other rights have also been read into Article 21 of the Constitution, including the right to development and the right to livelihood.¹³⁹ The realisation of each of these rights may undermine the other rights, for instance, where the environment is used/exploited for the realisation of the right to development or the right to livelihood of an individual or a community. Courts have recognised the need to strike a delicate balance or to reconcile the tension between these rights. However, they have not identified any indicators for this purpose, and the determination continues on an *ad hoc*

137. See, for example, Amita Baviskar, ‘Between Violence and Desire: Space, Power, and Identity in the Making of Metropolitan Delhi’ (2003) 55(175) *International Social Science Journal* 89; Usha Ramanathan, ‘Illegality and the Urban Poor’ (2006) 41(29) *Economic and Political Weekly* 3193; Nivedita Menon, ‘Environment and the Will to Rule’ in Mayur Suresh and Siddharth Narain (eds) *The Shifting Scales of Justice: The Supreme Court in Neo-liberal India* (Orient BlackSwan 2014) 59.

138. See Rajamani (n 6) 302–03. See also Varun Gauri, ‘Public Interest Litigation in India: Overreaching or Underachieving’ (2010) 1 *Indian Journal of Law and Economics* 71, 80.

139. *Samatha v. State of Andhra Pradesh* (1997) 8 SCC 191; *Madhu Kishwar v. State of Bihar* (1996) 5 SCC 125.

basis. As a result, on the one hand, there are cases like the *Kanpur Tanneries* case, where the Supreme Court observed that ‘we are conscious that closure of tanneries may bring unemployment, loss of revenue, but life, health and ecology have greater importance to the people’.¹⁴⁰ On the other hand, in cases involving the adverse environmental impact of infrastructure projects, the Court has sacrificed the right to environment of some for the greater ‘public interest’.¹⁴¹ The trope of sustainable development may compel the courts to authorise a certain level of environmental degradation and the dilution of the right to environment for the sake of the realisation of the so-called right to development. This prioritisation of the right to development over the right to environment, and of the right to environment over the right of livelihood of the poor, has been criticised.¹⁴² This state of affairs also highlights the need for the recognition of an independent, substantive right to environment (or right of environment), so that the environment can be protected for its own sake.

CONCLUSION

The right to environment is firmly entrenched in, and has contributed to the development of, domestic environmental jurisprudence in India. Its origin has been traced to decisions of the higher judiciary, where the right to environment was explicitly or implicitly interpreted to flow from the fundamental right to life or the duties of the State in DPSP, and/or based on a combined

140. *Kanpur Tanneries* case (n 131) 482.

141. See, for example, *Narmada* (n 122); *Jayal* (n 126).

142. See Prashant Bhushan, ‘Sacrificing Human Rights and Environmental Rights at the Altar of “Development”’ (2009–10) 41 *George Washington International Law Review* 389; Videh Upadhyay, ‘Changing Judicial Power: Courts on Infrastructure Projects and Environment’ (2000) 35(43/44) *Economic and Political Weekly* 3789. See also Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court: Litigation, Interpretation, Implementation* (Orient BlackSwan 2014).

reading of the fundamental right to life, DPSP and the fundamental duty of citizens. The right to environment continues to provide the substantive and/or procedural basis for the decisions of the Supreme Court, High Courts, and the NGT. Many of these decisions do not deal with a specific 'right to environment'; instead, they address different components of the right.

The different formulations of the right to environment have been criticised on the ground that they are poorly defined and imprecise, and thus offer little guidance in making difficult judgments that are central to its realisation.¹⁴³ Suffice to say that while this criticism is justified in some cases, the broadly defined content of the right has permitted the judiciary to tailor appropriate relief to the facts and circumstances of the cases. In the process, courts have had to choose between the rigid application of the precise substance of the right and confining its directions to the realisation of the right through the discharge of statutory duties (which may preclude many situations) and the adoption of a flexible approach, which may render justice but expose the courts to the criticism of judicial overreach.

Irrespective of its formulation, the right to environment is linked to the right to life of human beings and, therefore, the adoption of an anthropocentric approach is inevitable. In the absence of a substantive right to environment, which could accommodate the intrinsic value of the environment, some cases on the right to environment reflect the willingness of the Indian judiciary to look beyond the instrumental value of the environment. While these decisions are welcomed among environmentalists, they sound a note of caution for those who view the rights-based approach as the panacea for environmental problems.

143. See, for example, Rajamani (n 32) 278.

TWO

Procedural Environmental Rights in Indian Law

SHIBANI GHOSH*

INTRODUCTION

The Indian judiciary in the past three decades has recognised a ‘right to environment’ or an ‘environmental right’. Courts have provided different formulations of this right and have traced its source, expressly or implicitly, to the Constitution of India and, in particular, to three constitutional provisions—Articles 21, 48A and 51A(g).¹ To realise this larger environmental right,

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1. See Lovleen Bhullar, ‘The Judiciary and the Right to Environment in India: Past, Present and Future’ in Chapter 1 of this volume; Michael R. Anderson, ‘Individual Rights to Environmental Protection in India’ in Alan Boyle and Michael R. Anderson (eds) *Human Rights Approaches to Environmental Protection* (Clarendon Press 1998) 199; Lavanya Rajamani, ‘The Right to Environmental Protection in India: Many a Slip between the Cup and the Lip?’ (2007) 16(3) *Review of European Community and International Environmental Law* 274.

certain procedural guarantees are recognised in Indian law. These guarantees, often termed as procedural rights, are the right to access justice or means of grievance redressal, right to access information or be informed, and right to participate in decision-making processes or the right to be consulted. Although Indian courts have, on occasion, linked each of these rights to a fundamental right, giving them constitutional gravitas, these rights have evolved with considerable clarity as statutory rights outside the realm of constitutional law.

Procedural environmental rights perform an instrumental role in securing the substantive right to environment and improving environmental outcomes.² In the international legal context, it is said that the reluctance on part of the states at the Stockholm Conference of 1972 to recognise a substantive right to environment, led scholars and activists to consider human rights in a more 'instrumental' fashion while populating the environmental right.³ They identified the procedural rights to information, public participation and remedies, which already existed as political rights, as prerequisites to effective environmental protection.⁴ These procedural rights, understood as environmental rights, were 'an intermediate step between simple application of existing rights to the goal of environmental protection and recognition of a new full-fledged right to environment'.⁵

2. Philippe Cullet, 'Definition of an Environmental Right in a Human Rights Context' (1995) 13 *Netherlands Quarterly of Human Rights* 25; See also Richard Desgagne, 'Integrating Environmental Values into the European Convention on Human Rights' (1995) 89(2) *The American Journal of International Law* 263.

3. Dinah Shelton, 'Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?' (2006) 35 *Denver Journal of International Law and Policy* 129, 132.

4. *Ibid.*

5. Dinah Shelton, 'Human Rights, Environmental Rights, and the Right to Environment' (1991) 28 *Stanford Journal of International Law* 103, 117. See generally Donald K. Anton and Dinah L. Shelton, *Environmental Protection and Human Rights* (CUP 2011), Chapter 6.

Subsequently, in 1992, states adopted the Rio Declaration on Environment and Development.⁶ In Principle 10 of the Declaration, the three procedural rights crucial for effective public participation in environmental matters were enshrined for the first time at a United Nations (UN)–wide level.⁷ The enunciation of these participatory rights has significantly influenced international environmental law. Before 1992, essentially no international environmental agreement included provisions that addressed the components of Principle 10. But almost all treaties adopted in or after 1992 provide for public access to information and/or public participation.⁸

At the national level, procedural environmental rights are valuable not only for their instrumental role, but because they represent ‘a true democratization of environmental

6. UN Conference on Environment and Development (UNCED), ‘Rio Declaration on Environment and Development’ (14 June 1992) UN Doc A/CONF.151/26 (Vol I) Resolution 1, Annex I, reprinted in 31 ILM 874 (1992) (Rio Declaration).

7. Rio Declaration, Principle 10:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

See Jonas Ebbesson, ‘Principle 10: Public Participation’ in Jorge E. Viñuales (ed.) *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015) 287.

8. Ebbesson, *ibid.*, 308. See also Jonas Ebbesson, ‘The Notion of Public Participation in International Environmental Law’ (1998) (8)1 *Yearbook of International Environmental Law* 51.

decision-making'.⁹ Irrespective of the final outcome, exercising procedural environmental rights could give citizens a sense of empowerment, as they would have at least some engagement with decisions affecting them.¹⁰ The rights could also bring government decisions and actions under public and judicial scrutiny, thereby increasing transparency and accountability in governance. And finally, they make environmental justice more accessible overall. Historically, disadvantaged or under-served populations that (disproportionately) suffer the adverse consequences of poor environmental decision-making have at least a fighting chance if they are guaranteed procedural environmental rights.

Procedural environmental rights occupy a central role in Indian environmental law and litigation. Many of the landmark environmental judgments of the Supreme Court were delivered in cases which were either treated as public interest litigations (PILs),¹¹ or in which the Court adopted unconventional techniques in its treatment of the case¹²—with the objective of making the judicial process more accessible and the outcome more 'just'.

Procedural environmental rights are also shaping present day environmental litigation and its outcome. From the availability

9. Cullet (n 2) 36; Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3rd edition, OUP 2002), Chapter 5, 288–89.

10. J. C. Gellers and Chris Jeffords, 'Procedural Environmental Rights and Environmental Justice: Assessing the Impact of Environmental Constitutionalism' (2015) Human Rights Institute University of Connecticut Economic Rights Working Paper No. 25 <<http://web2.uconn.edu/economics/working/HRI25.pdf>> accessed 30 March 2017.

11. For example, *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1985) 3 SCC 614; *Indian Council for Enviro-legal Action v. Union of India* (1996) 3 SCC 212.

12. For example, *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388 (the Supreme Court took cognisance of a newspaper Article reporting environmental damage); *Vellore Citizens' Welfare Forum v. Union of India and Ors* (1996) 5 SCC 647 (the Supreme Court gave directions for the constitution of an authority to 'deal with the situation' of pollution caused by tanneries).

of the National Green Tribunal (NGT) to expeditiously decide environmental cases, to the use of information disclosed under the Right to Information Act 2005 (RTI Act), to making legal and factual claims regarding effective denial of a procedural right—these rights are indispensable tools for those trying to protect and improve the environment.

In terms of the judicial treatment of substantive and procedural environmental rights, there are at least two points of departure. *First*, when courts consider substantive environmental rights, they are required to recognise and enforce rights which are not clearly defined, either in the Constitution or in any statute.¹³ In the absence of judicially manageable standards,¹⁴ they occasionally venture into policy-making and the scope of their review goes beyond looking purely at the legality of the decision-making process. On the other hand, Indian constitutional and statutory law place procedural environmental rights on relatively firmer legal footing, with clear definitional limits and, therefore, the role of the courts is more precise—to ensure that the decision-making process is in accordance with the letter (and spirit) of the law—and very much within the mandate of judicial review.

Second, orders for protection and enforcement of procedural environmental rights are easier to issue and comply with than those for substantive environmental rights. In the case of the latter, courts often—because of the imprecise nature of the right and the expected outcome—issue elaborate orders. These orders are at times vague, requiring several agencies to undertake a variety of measures on differing timescales, only some of which are verifiable or even fully achievable. In contrast, the analytical framework for enforcing procedural rights is narrower and more objectively

13. Rajamani (n 1) 279–80.

14. Harish Salve, 'Justice Between Generations: Environment and Social Justice' in B. N. Kirpal *et al.* (eds) *Supreme But Not Infallible: Essays in Honour of the Supreme Court of India* (OUP 2000) 360, 377; Rajamani, *ibid.*

bounded.¹⁵ Compliance is more easily verifiable as there are often statutory requirements to be met.

As procedural environmental rights are a vital part of Indian environmental governance and the evolution of India's environmental jurisprudence, how these rights have been interpreted in law and exercised in fact are relevant to other issues raised in this volume. This chapter analyses the legislative and regulatory framework fostering the three procedural environmental rights in India. The next three sections will examine each of these rights in detail—the relevant statutory provisions and the judicial approach—and discuss the impediments in exercising or claiming these rights. Each section also includes a brief overview of the evolution of these rights outside the realm of environmental law, as a context to understand the source of these rights in general law. The final section will provide brief concluding remarks.

It is important to acknowledge at the outset that the methodological approach of this chapter is different from others in this volume. Unlike the substantive right to environment and the principles of environmental law discussed in other chapters, procedural environmental rights in India are defined in statutory law. Judicial pronouncements specifically interpreting these rights are few—mostly focussed on their implementation or their role in guaranteeing better environmental outcomes. Therefore, the focus of this chapter is necessarily on the legislative and regulatory framework, referencing case law only where relevant. This chapter does not engage in doctrinal case law based analysis, as a majority of procedural environmental rights in India are defined in statutory law. These rights could be instrumental in realising principles of environmental law like sustainable development, polluter pays and precaution, but they are not founded in these principles.

15. Erin Daly, 'Constitutional Protection for Environmental Rights: The Benefits of Environmental Process' (2012) 17(2) *International Journal of Peace Studies* 71, 76.

THE RIGHT TO ACCESS INFORMATION

Roots in Indian law

The Supreme Court has traced the origin of its environmental rights jurisprudence to a 1984 judgment¹⁶ on the rights of persons working as bonded labour and the poor working conditions that they had to suffer.¹⁷ Almost a decade before this judgment, the Court had recognised the right of people to know ‘every public act, everything that is done in a public way, by their public functionaries’.¹⁸ The Court derived this right from the fundamental right to freedom of speech and expression. Some years later, the Court re-emphasised the importance of transparency in government functioning, and held:

[t]he concept of an open government is the direct emanation from the right to know which seems to be implicit in the right of free speech and expression guaranteed under Article 19(1) (a). Therefore, disclosure of information in regard to the functioning of Government must be the rule and secrecy an exception justified only where the strictest requirement of public interest so demands.¹⁹

Although generally considered to be an established fundamental right under Article 19(1)(a),²⁰ the Supreme Court has occasionally viewed this right to be an aspect of the right to life under Article 21.²¹

16. *Bandhua Mukti Morcha v. Union of India and Ors* (1984) 3 SCC 161.

17. *A. P. Pollution Control Board II v. Prof. M.V. Nayudu and Ors* (2001) 2 SCC 62, para 7.

18. *State of Uttar Pradesh v. Raj Narain and Ors* (1975) 4 SCC 428, para 74.

19. *S. P. Gupta and Ors v. President of India and Ors* (1981) Supp SCC 87, para 67.

20. *Chief Information Commissioner and Anr v. State of Manipur and Anr* (2011) 15 SCC 1, para 9.

21. *Reliance Petrochemicals Ltd v. Proprietors of Indian Express Newspapers Bombay Pvt. Ltd and Ors* (1988) 4 SCC 592; *Research Foundation for Science*

While the right to be informed of the affairs of the government is considered essential to constitutional democracies like India, Indian courts have recognised that in public interest the right may have to be curtailed.²²

The right to know has been extensively discussed by the Supreme Court in the context of elections.²³ The right also finds an important place in Indian administrative law²⁴ and criminal law.²⁵ An overarching right of citizens to access information held by public authorities, subject to certain exceptions, is statutorily recognised by the RTI Act.²⁶

Right to Information in the Environmental Context

In India, the legal obligation to disclose environmental information could take (at least) five forms:²⁷ First, disclosure of information relating to environmental impacts of activities to regulatory

Technology and Natural Resources Policy v. Union of India and Anr (2005) 13 SCC 186.

22. *Dinesh Trivedi, MP and Ors v. Union of India and Ors* (1997) 4 SCC 306, para 17; *Chief Information Commissioner* (n 20), para 17.

23. *Union of India v. Association of Democratic Reforms and Anr* (2002) 5 SCC 294, para 46; *Peoples' Union for Civil Liberties and Anr v. Union of India and Anr* (2003) 4 SCC 399, para 18.

24. *Chougule and Co. (P) Ltd v. Union of India and Anr* (1971) 3 SCC 162; *Institute of Chartered Accountants of India v. L. K. Ratna and Ors* (1986) 4 SCC 537; *Ravi Yashwant Bhoir v. District Collector, Raigad and Ors* (2012) 4 SCC 407.

25. See Constitution of India 1950, Article 22(1), Code of Criminal Procedure 1973 ss 50(1) and 75. See also *D. K. Basu v. State of West Bengal* (1997) 1 SCC 416, para 35.

26. Right to Information Act 2005 (RTI Act) s 3, read with ss 2(f), 2(h), 8 and 9.

27. Adapting the classification in Peter H. Sand, 'The Right to Know: Freedom of Environmental Information in Comparative and International Law' (2011) 20(1) *Tulane Journal of International and Comparative Law* 203.

authorities by those undertaking such activities;²⁸ second, disclosure of information relating to regulatory decisions and decision-making processes affecting the environment by the concerned regulatory authority;²⁹ third, disclosure of information relating to specific processes and potential risks at workplaces for the benefit of employees as well as communities in close proximity;³⁰ fourth, disclosure of information to consumers through labelling of products;³¹ and fifth, disclosure of information by companies of their sustainability practices.³² Some of these obligations arise from specific environmental regulations, while others from government schemes and policies. Separately, the RTI Act also places certain disclosure obligations on public authorities.

This section focusses on the first two forms of information disclosure by providing examples from the provisions of the pollution control laws—the Water (Prevention and Control of Pollution) Act 1974 (Water Act) and Air (Prevention and Control

28. For example, disclosure requirements under the EIA Notification 2006 (text accompanying n 42–45).

29. For example, Environment (Protection) Rules 1986 (EP Rules), rule 5(3); Water Act s 25(6) and Air Act s 51.

30. For example, Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 (Hazardous Waste Rules), rule 4(6)(b); see also *M. C. Mehta & Anr v. Union of India* (1986) 2 SCC 187, para 20(7).

31. See, for example, Hazardous Waste Rules, rules 17(2) and 18(2) and Form VIII; Standards and Labelling Program of the Bureau of Energy Efficiency which requires energy consumption related information about electrical appliances to be made publicly available <<https://www.beeindia.gov.in/content/star-labelled-appliances>> accessed 30 March 2017.

32. Ministry of Corporate Affairs, Government of India, 'National Voluntary Guidelines on Social, Environmental and Economical Responsibilities of Business 2011'. <http://www.mca.gov.in/Ministry/latestnews/National_Voluntary_Guidelines_2011_12jul2011.pdf> accessed 30 March 2017; Securities and Exchange Board of India (SEBI), 'SEBI Board Meeting' PR No. 145/2011. <<http://www.sebi.gov.in/sebiweb/home/detail/22104/yes/PR-SEBI-Board-meeting>> accessed 30 March 2017.

of Pollution) Act 1981 (Air Act); the Notification of 14 September 2006 issued under the Environment (Protection) Act 1986 (EP Act), also known as the Environmental Impact Assessment (EIA) Notification 2006; and the RTI Act.

Under the Pollution Control Laws

The Water Act and Air Act, two principal laws that regulate pollution in the country, require regulated entities to apply for consents to the State Pollution Control Boards (SPCBs), before commencing operations that potentially impact the environment.³³ The application process³⁴ and the conditions for grant of consent require mandatory disclosure of certain categories of environmental impact information. Compliance with these consent conditions has to be disclosed in an annual environmental statement.³⁵

The two laws require the maintenance of a register by the SPCBs, available to the public for inspection. The register is meant to record the particulars of persons to whom the consent has been granted, standards of emission laid down in the consent and other particulars that may be prescribed.³⁶ SPCBs are also required to provide copies of relevant reports on regulated entities to private persons who may have filed a complaint in court against an alleged offence.³⁷

Functioning without a consent or in violation of consent conditions is a criminal offence punishable under the two laws. Therefore, whether the consent has been granted, and on what conditions, are important facts that could have serious legal consequences. Information contained in consents is relevant while assessing the environmental impact of the entity and, if necessary, to

33. Water Act s 25(1); Air Act s 21(1).

34. Water (Prevention and Control of Pollution) Rules 1975, Form XIII.

35. EP Rules, rule 14, read with Form V.

36. Water Act s 25(6); Air Act s 51.

37. Water Act s 49(2); Air Act s 43(2).

challenge its operation in an appropriate forum. Although SPCBs are required to monitor and enforce the compliance of consent conditions, for a variety of reasons including limited resources, lack of trained personnel and heavy workload, they do not.³⁸ Making this information publicly accessible allows persons, particularly those directly affected by the polluting entity, to challenge violations of the law and demand regulatory compliance.³⁹

While the law gives the public access to information regarding regulated entities, whether this statutory procedural right is effectively enjoyed is uncertain. SPCBs may refuse to provide copies of relevant reports to private complainants if, in their opinion, it would be against the 'public interest'.⁴⁰ What constitutes 'public interest' is left to the SPCBs' discretion and no guidance is provided in the law. Performance audit reports prepared by the Comptroller and Auditor General (CAG) of India for several SPCBs over the years reveal that registers containing consent information are not maintained in accordance with law.⁴¹

38. See Centre for Science and Environment, 'Turnaround: Reform Agenda for India's Regulators' (2009).

39. For example, *Abraham Thomas Kumily v. Union of India and Ors*, Application No. 146/2015, order dated 12 December 2015, NGT (Southern Zone Bench); *Yogesh Nagar President v. Union of India and Ors*, OA No. 228/2014, judgment dated 10 December 2015, NGT (Principal Bench).

40. Water Act s 49(2) proviso; Air Act s 43(2).

41. For example, CAG Environment Audit Reports on Air Pollution <<http://iced.cag.gov.in/wp-content/uploads/2013/02/ARs-on-Air-pollution.pdf>> accessed 30 March 2017; Audit Report (Civil and Commercial) for the year ended 31 March 2007 for Jharkhand. <<http://iced.cag.gov.in/wp-content/uploads/2014/02/14.-PR-of-SPCB-Jharkhand.pdf>> accessed 30 March 2017; Report of the Comptroller and Auditor General of India on General and Social (non-PSUs) Sectors for the year ended 31 March 2014, Government of Madhya Pradesh <[http://www.agmp.nic.in/reports/reports%2012-13/Consolidated%20AR-English\(Non%20PSUs\)2013-14.pdf](http://www.agmp.nic.in/reports/reports%2012-13/Consolidated%20AR-English(Non%20PSUs)2013-14.pdf)> accessed 30 March 2017.

Under the EIA Notification 2006

The EIA Notification 2006 requires certain categories of projects to obtain a prior environmental clearance (EC) before commencing construction.⁴² During this process, information about the proposed project has to be made publicly available before a final decision is reached. This includes disclosure of the Terms of Reference (ToR) issued by the regulatory authority for EIA studies, the draft EIA report and its summary prepared by the project proponent, in addition to the notice for, and the minutes of, the public hearing. Some of these disclosure requirements are included in the EIA Notification itself; others have been introduced and emphasised through executive orders.⁴³

The High Court of Delhi, while emphasising the need to provide public information about a proposed project 30 days prior to the mandatory public hearing under the EIA Notification, held:

32. ... information about the project and in particular about the EIA report is not available to anyone in the public domain till the time of the public hearing. Till such time it is available only to the project proponent and the MoEF. Unless it is required to be made available mandatorily, it is unlikely that any member of the affected public can have access to such information. It is imperative for the affected person to be fully informed of the proposal (the EMP) submitted by the project

42. For details on the process, Shibani Ghosh, 'Demystifying the Environmental Clearance Process' (2013) 6(3) *NUJS Law Review* 433.

43. MoEF, Government of India, order dated 20 March 2012 in No. J-11013/19/2012-IA.II(I) <<http://moef.nic.in/downloads/public-information/order-20032012-a.pdf>> and <<http://moef.nic.in/downloads/public-information/order-20032012-b.pdf>> accessed 30 March 2017; MoEF, circular dated 30 June 2009 in No. J-11013/41/2006-IA.II(I). <http://www.moef.nic.in/divisions/iass/cir_incr_trans.pdf> accessed 30 March 2017; MoEF, letter dated 08 February 2013 in File No.16-1312012-FC <<http://www.moef.nic.in/assets/8%20Feb%202013.pdf>> accessed 30 March 2017.

proponent for dealing with the likely environmental damage that can be caused if the project is granted clearance.⁴⁴

Once an EC is granted, information about the clearance has to be published in the stipulated manner.⁴⁵ Publication of the EC letter in the public domain is crucial as it determines when the clock starts ticking for potential litigation before the NGT. It is only when the content of the letter is available that a prospective appellant would be able to effectively exercise her right of appeal before the Tribunal.⁴⁶ The limitation period to file an appeal before the NGT is 30 days from the date on which the impugned order (in this case the EC) is ‘communicated’.⁴⁷ The Tribunal has held that communication in this context ‘mean[s] and must be construed as meaning the date on which the factum and content both, of the Environmental Clearance order are made available in the public domain and are easily accessible by a common person’.⁴⁸ The Tribunal’s interpretation of what constitutes communication is not only significant from the point of view of information disclosure, but also for ensuring that access to the Tribunal is not unduly curtailed by lax compliance of disclosure requirements.

44. *Utkarsh Mandal v. Union of India* (2009) SCC OnLine Del 3836. See also *T. Mohana Rao v. MoEF and Ors*, Appeal No. 23/2011, judgment dated 23 May 2012, NGT (Principal Bench).

45. EIA Notification, para 10(i)(a).

46. *Save Mon Region Federation and Ors v. Union of India and Ors*, MA No. 104/2012 in Appeal No. 39/2012, order dated 14 March 2013, NGT (Principal Bench), para 55; *Medha Patkar and Ors v. MoEF and Ors*, Appeal No. 1/2013, judgment dated 11 July 2013, NGT (Principal Bench).

47. National Green Tribunal Act 2010 (NGT Act) s 16.

48. *Save Mon Region* (n 46), para 55. See Shibani Ghosh, ‘Case Note: Access to Information as Ruled by the Indian Environmental Tribunal: *Save Mon Region Federation v. Union of India*’ (2013) 22(2) *Review of European Community and International Environmental Law* 202.

Under the RTI Act

The RTI Act has been a useful tool in increasing transparency in environmental governance by making information relating to environmental decisions and policy-making more accessible. The Act puts in place a mechanism by which information may be sought from public authorities,⁴⁹ and the same has to be provided in a time-bound manner by Public Information Officers (PIOs) appointed under the Act.⁵⁰ The Act also provides for an appellate procedure, with the Central or State Information Commissions (quasi-judicial bodies) being the second and final appellate forum. Information can be exempt from disclosure on grounds specified in the Act.⁵¹ But if the public authority finds that public interest outweighs the interests protected by the exemption, it can direct the disclosure of the information.⁵² The right to information as defined by the RTI Act is quite broad in scope—it applies to public authorities at all levels of government, and even covers certain information held by private bodies.⁵³

Information obtained under the RTI Act is routinely used in environmental cases, and has at times proven crucial to the final judgment. In *Utkarsh Mandal*,⁵⁴ the High Court of Delhi set aside an EC granted to a mining project. One of the main reasons for its decision was that it found, based on evidence revealed under the RTI Act, that the credibility of the expert appraisal committee (EAC) was affected by its particular constitution and manner of functioning.⁵⁵

49. RTI Act s 2(f) read with s 2(h).

50. If information is not provided within the time limit stipulated and without legal basis, penalty can be imposed on concerned officials. See RTI Act s 20.

51. RTI Act s 8 and 9.

52. *Ibid.*, s 8(2)

53. *Ibid.*, s 2(h)

54. *Utkarsh Mandal* (n 44).

55. For reliance on information collected through the RTI Act, see *Conservation of Nature Trust and Ors v. District Collector, Kanyakumari*

The Central Information Commission (CIC) has played an important role in increasing transparency in environmental decision-making through its orders. It has directed documents relating to applications for EC and forest clearance, as well as minutes of committee meetings, to be made available on the website of the Ministry of Environment and Forests (MoEF), in a time-bound manner.⁵⁶ Two significant orders of the CIC, discussed later, view access to information as a way to reduce distrust in government functioning.

The first relates to the disclosure of the report submitted by the Western Ghats Ecology Expert Panel (WGEEP) to the MoEF. The Ministry refused to disclose the report on the ground that the report was a draft still under consideration. The statutory first appeal was rejected on grounds that the disclosure of the report would affect strategic, scientific or economic interests of the State. In a subsequent appeal, the CIC directed the disclosure of the report. The Commission held:

The disclosure of the WGEEP report would enable citizens to voice their opinions with the information made available in the said report ... This would facilitate an informed discussion between citizens based on a report prepared with their/public money. MOEF's unwillingness to be transparent is likely to give citizens an impression that most decisions are taken in furtherance of corruption resulting in a serious trust deficit.⁵⁷

In a writ challenging the CIC's order, the High Court, while upholding the order, observed that '[b]efore the formation of the policy, all the stakeholders should be able to deal with the report and consider whether to support or oppose the findings and

District and Ors, Application No. 104/2013, order dated 14 September 2016, NGT (Southern Zone Bench).

56. *Shibani Ghosh v. MoEF*, CIC/SG/C/2011/001409/17503, order dated 29 February 2012, Central Information Commission (CIC); *Shibani Ghosh v. MoEF*, CIC/SG/C/2011/001398/16936, order dated 18 January 2012, CIC.

57. *G. Krishnan v. MoEF*, CIC/SG/A/2012/000374/18316, order dated 9 April 2012, CIC.

recommendations made therein, and the policy should be eventually formulated after due consideration of all points of view'.⁵⁸

In a second case, the CIC directed the disclosure of an expert committee's report on the Coastal Regulation Zone (CRZ) and related documents. The committee had been set-up to look into the implementation of the CRZ Regulation 2011. After the committee submitted its report, the Regulations were amended several times. The appellant contended that a perusal of the report could reveal the basis for these amendments. The environment ministry refused to disclose the report as it had not been accepted yet—a ground summarily dismissed by the CIC. The CIC held that given the ecological importance of coastal regions, it was in public interest that the report was disclosed, and that suppression of the report was giving rise to suspicions.⁵⁹

Although the RTI Act can be used to access information on various environmental indicators and decision-making processes, it may not always be possible to do so in a timely manner. This could be for a variety of reasons—information not being properly recorded and maintained by the public authority, PIOs not replying within the stipulated time frame or evading the application by providing incorrect or misleading replies, or information being provided in a language or format which the applicant cannot understand. Furthermore, the appellate process under the RTI Act takes a considerable amount of time to complete,⁶⁰ and at the end of the process the information, if received, may no longer be useful to the applicant.

The higher judiciary's record in upholding the right to information under the RTI Act has been mixed. In fact, the Supreme Court has held the view, though not in the context of

58. *Union of India v. G. Krishnan* (2012) SCC OnLine Del 2869, para 20.

59. See also *Kavitha Kuruganti v. MoEF*, CIC/SA/A/2015/901798, order dated 1 April 2016 and order dated 12 August 2016, CIC.

60. See Research, Assessment and Analysis Group (RaaG) and Satark Nagrik Sangathan (SNS), 'Tilting the Balance of Power: Adjudicating the RTI Act' (RaaG, SNS and Rajpal and Sons 2016) 48–50.

environmental information, that the statutory exemptions from information disclosure need not be read narrowly but purposively, and as a means to protect equally important public interests that protect democratic values.⁶¹ Even though there is a statutory right to access information, its realisation is faced with several practical and legal impediments.

RIGHT TO PUBLIC PARTICIPATION

Roots in Indian Law

Intrinsically linked to the right to information is the right to participate in the affairs of government, considered essential in democracies. The Supreme Court has recognised this right and held that ‘democracy cannot exist unless all citizens have a right to participate in the affairs of the polity of the country’.⁶² The citizens’ right to participate in decision-making processes is not specifically enumerated in the Constitution. However, it may be derived from various provisions.

First and foremost, democratically elected representatives are the direct outcome of Indian citizens exercising their right to vote. Second, the right to life has been read to include the right to community participation for the protection of environment and human health.⁶³ Third, implementation of directive principles of state policy (DPSP) by the government, in particular Articles 39(b) and (c), 47 and 48A, would be far more effective if relevant stakeholders are effectively involved in the decision-making process.

61. *CBSE v. Aditya Bandopadhyay* (2011) 8 SCC 497, para 61; *ICAI v. Shaunak H. Satya* (2011) 8 SCC 781, para 25.

62. *Ministry of Information and Broadcasting v. Cricket Association of Bengal* (1995) 2 SCC 161, para 82.

63. *Research Foundation for Science Technology and Natural Resources Policy v. Union of India and Anr* (2005) 10 SCC 510, para 42: ‘... the right to information and community participation necessary for protection of environment and human health is an inalienable part of Article 21’.

And finally, arguably, the fundamental duty of every citizen under Article 51A(g) to protect the environment cannot be discharged without opportunities for participation in decision-making, along with access to information.⁶⁴

Public participation may take place in many different forms—public hearings, stakeholder meetings, citizens’ jury, call for public comments on draft laws, etc.⁶⁵ Besides the form of participation, whether the right to participate has been properly effectuated depends on various factors—who was consulted (or considered to be a stakeholder), at what point of the decision-making process did the consultation take place, how were the concerns addressed and how much weight was attached to the public participation process while reaching the final decision.⁶⁶

In a recent case,⁶⁷ the Supreme Court adopted the definition of public consultation provided by the Court of Appeal in England:⁶⁸

108. ... To be proper, consultation must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals to allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; *and the product of consultation must be conscientiously taken into account when the ultimate decision is taken ...* (emphasis supplied)⁶⁹

64. Lavanya Rajamani and Shibani Ghosh, ‘Public Participation in Indian Environmental Law’ in Lila Barrera-Hernandez *et al.* (eds) *Sharing the Costs and Benefits of Energy and Resource Activity: Legal Change and Impact on Communities* (OUP 2016) 393, 395.

65. Gene Rowe and Lynn J. Frewer, ‘Public Participation Methods: A Framework for Evaluation’ (2000) 25(1) *Science, Technology, and Human Values* 3, 8–9.

66. *Ibid.* See also Neil A. F. Popovic, ‘The Right to Participate in Decisions that Affect the Environment’ (1993) 10(2) *Pace Environmental Law Review* 683.

67. *Cellular Operators Association of India v. Telecom Regulatory Authority of India* (2016) 7 SCC 703.

68. *R. v. North and East Devon Health Authority, Ex Parte Coughlan* 2001 QB 213; (2000) 2 WLR 622 (CA).

69. *Cellular Operators* (n 67), para 82.

The Supreme Court found that although the concerned regulatory authority had undertaken a comprehensive stakeholder consultation, there was no discussion or reasoning rejecting the arguments raised by some of the stakeholders, and therefore the authority's decision against them was 'not a conclusion which a reasonable person can reasonably arrive at'.⁷⁰

Public Participation in Environmental Decision-making

A citizen's right to participate in the environmental decision-making process in India is a statutory right. The two principal avenues for public consultation and participation in Indian environmental regulation are the EP Act and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 (the Forest Rights Act). The two pollution control laws—Water Act and Air Act—have very limited opportunities for public participation.⁷¹ This section discusses relevant provisions of the EP Act and the Forest Rights Act as well as opportunities for public participation under the EIA Notification 2006.

Under the EP Act 1986

At the rule-making stage, the EP Act has an important provision for public notice and comment. The central government is empowered to prohibit or restrict the location of industries and carrying out of operations and processes in different areas—keeping in mind the environmental impact of such industries, operations or processes.⁷² While doing so, the central government has to provide details of the

70. Ibid.

71. C. M. Abraham and Armin Rosencranz, 'An Evaluation of Pollution Control Legislation in India' (1986) 11 *Columbia Journal of Environmental Law* 101.

72. EP Act s 3(2)(v).

prohibition or restriction—information about the area to which it relates, and reasons for proposing the prohibition or restriction—in a draft notification.⁷³ The draft notification is made available for comment, providing stakeholders an opportunity to comment on the scope and impact of the proposed notification before it is formally issued,⁷⁴ with the expectation that the central government will consider the comments while finalising the notification.

The central government can, however, do away with the public notice requirement if it would be in ‘public interest’ to refrain from undertaking such consultation.⁷⁵ This overriding ‘public interest’ is not defined in the EP Act. In one instance, the central government considered unemployment of high numbers of persons in the state of Rajasthan due to closure of mines to be sufficient reason to exempt an amendment to the EIA Notification from public notice.⁷⁶ Therefore, it appears that the public interest that needs protection need not be directly related to environmental concerns. In certain other notifications, the central government only states that in public interest it has done away with the public notice requirement, with no further explanation.⁷⁷

73. EP Rules, rule 5(3).

74. For example, Ministry of Environment, Forest and Climate Change (MoEFCC), Public Notice on Draft Waste Management Rules, 2015 <<http://www.moef.nic.in/sites/default/files/Draft%20waste%20management%20rule%201072015.pdf>> accessed 31 March 2017; MoEFCC, Notification SO 3999(E) dated 9 December 2016, <<http://envfor.nic.in/sites/default/files/Building%20and%20Construction.pdf>> accessed 31 March 2017 (on buildings and construction); MoEFCC, *Draft Environment Laws (Amendment) Bill 2015* dated 7 October 2015 <<http://www.moef.nic.in/sites/default/files/ScanJobInvitation%20of%20comments%20Draft%20Environment%20Law.pdf>> accessed 31 March 2017.

75. EP Rules, rule 5(4).

76. MoEFCC, Notification dated 1 July 2016 <http://environmentclearance.nic.in/writereaddata/public_display/orders/1093646087%EIANotification1july%202016.pdf> accessed 31 March 2017.

77. For example, MoEFCC, Notification SO 996(E) dated 10 April 2015 <http://environmentclearance.nic.in/writereaddata/EIA_

It is certainly conceivable that situations may arise wherein the central government has to take urgent action and cannot engage in public consultation. However, this power should be exercised sparingly and primarily to avoid an imminent environmental threat; not, for instance, to introduce institutional or systemic changes. The rationale for such exceptional actions curtailing public participation must meet some threshold criteria that are in consonance with the preamble and objectives of the EP Act.

Under the EIA Notification 2006

The EIA Notification 2006 has a mandatory public consultation requirement for certain categories of projects before the proposed project is granted clearance. The EIA Notification defines public consultation as ‘the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate’.⁷⁸ The public consultation component of the EC process has been considered ‘an embodiment of the principles of natural justice’.⁷⁹ The consultation process includes two components—a public hearing (held in proximity to the proposed project site) and written responses sent by concerned persons to the relevant regulatory authority.⁸⁰

notifications/2015_04_10_SO_996(E).pdf> accessed 31 March 2017 (amendment relating to scoping requirements); MoEFCC, Notification SO 811(E) dated 23 March 2015 <[http://environmentclearance.nic.in/writereaddata/EIA_notifications/2015_03_23_S.O.%20811\(E\)%20.pdf](http://environmentclearance.nic.in/writereaddata/EIA_notifications/2015_03_23_S.O.%20811(E)%20.pdf)> accessed 31 March 2017 (relating to coal block allocation); MoEFCC, Notification SO 1141(E) dated 29 April 2015 <[http://environmentclearance.nic.in/writereaddata/EIA_notifications/2015_04_29_SO_1141\(E\).pdf](http://environmentclearance.nic.in/writereaddata/EIA_notifications/2015_04_29_SO_1141(E).pdf)> accessed 31 March 2017 (relating to validity period).

78. EIA Notification, para 7(i)(III)(i).

79. *S. Nandakumar v. The Secretary to Government of Tamil Nadu Department of Environment and Forest and Ors* (2010) SCC OnLine Mad 3220.

80. EIA Notification, para 7(i)(III)(ii).

The categories of projects that are exempt from the public consultation process are listed in the EIA Notification and can be changed only through an amendment to the EIA Notification.⁸¹ Existing projects which are planning to modernise or expand may be exempt from the public consultation process but only after due consideration by the EACs.⁸² Appendix IV to the EIA Notification explains the process of conducting a public hearing, and the regulatory requirements have been discussed in detail elsewhere.⁸³ The advantage of a public hearing has been aptly described by the High Court of Delhi:

... it brings about transparency in a proposed project and thereby gives information to the community about the project; there is consultation with the affected parties and they are not only taken into confidence about the nature of the project but are given an opportunity to express their informed opinion for or against the project. This form of a social audit, as it were, provides wherever necessary, social acceptability to a project and also gives an opportunity to the EAC to get information about a project that may not be disclosed to it or may be concealed by the project proponent.⁸⁴

81. See, for example, MoEFCC, Notification dated 15 January 2016 <[http://environmentclearance.nic.in/writereaddata/EIA_notifications/2016_01_15_SO_147\(E\).pdf](http://environmentclearance.nic.in/writereaddata/EIA_notifications/2016_01_15_SO_147(E).pdf)> accessed 31 March 2017; MoEFCC, Notification dated 03 February 2015 <<http://www.moef.nic.in/sites/default/files/S0%20N0.%20382-12252012071005.pdf>> accessed 31 March 2017.

82. In *Electrotherm (India) Limited v. Patel Vipulkumar Ramjibhai and Ors* (2016) 9 SCC 300, the Supreme Court found the EAC's decision to exempt a steel plant undertaking capacity expansion from the public consultation process to be invalid and improper as it had failed to consider the additional pollution load. See also MoEF, Office Memorandum dated 3 June 2009 in No. J-11013/41/2006-IA.II(I) <http://moef.nic.in/divisions/iass/offc_memo_instruction.pdf> accessed 31 March 2017.

83. Ghosh (n 42); Naveen Thayyil, 'Public Participation in Environmental Clearances in India' (2014) 56(4) *Journal of the Indian Law Institute* 463.

84. *Samarth Trust v. Union of India* (2010) SCC OnLine Del 2127, para 17.

Some of the typical issues faced in a public hearing are reflected in the following paragraph from a judgment of the High Court of Madras, while it was adjudicating on the legality of allotment of land for a solid waste management plant:

Such public hearings should not be a make belief affair, just to comply with the requirements of the notification. It is the responsibility of the District Magistrate or officers of equal status to see that all the affected persons are given audience. The panel of officers conducting the public hearing must remember that such hearings are conducted only to record the views of the affected parties. The statutory panel should hear the views of the affected persons and not those who have assembled in the meeting hall at the behest of the developer with a hidden agenda to block or prevent the opposition to the project ... the attempt should be to conduct the hearing in an open and transparent manner with opportunity to express even the dissenting views without fear ... The minutes of the hearing should contain a true note of what has transpired in the meeting. Such positive steps on the part of the statutory authorities would inspire confidence in the affected people.⁸⁵

In several cases challenging the grant of environmental clearances to projects, appellants have raised the issue that the public consultation was not properly undertaken—either in letter or spirit of the law. In some cases, the courts have overlooked such challenges as being mere procedural oversight, not affecting the substantive decision.⁸⁶ However, in some cases, courts have struck down the proposed project's EC or kept it in abeyance because public consultation was not carried out properly. In *Debadityo Sinha and Ors v. Union of India and Ors*, one of the reasons the NGT set aside the EC granted to a super-critical coal-based thermal power plant was that the videography of the public hearing showed persons carrying guns

85. *S. Nandakumar* (n 79), para 34.

86. *Lower Painganga Dharan Virodhi Sangharsha Samiti v. State of Maharashtra*, Application No. 13(THC)/2013, judgment dated 10 March 2014, NGT (Western Zone Bench); *Balachandra Bhikaji Nalwade v Union of India* (2009) SCC OnLine Del 2990.

present during the hearing.⁸⁷ According to the Tribunal, ‘guns are bound to strike fear in the hearts of men around and dominate their free will’ and, therefore, it was difficult to call the public hearing as a free and fairly conducted public hearing.⁸⁸ In another case, the NGT suspended the EC granted to a hydroelectric power project, *inter alia* on the ground that one of the impact assessment reports had been done after the public consultation process was over and therefore the public did not get a chance to express its views on it.⁸⁹

The public participation process under the EIA Notification has repeatedly come under public and judicial scrutiny.⁹⁰ There are several areas of concern with regard to the design and efficacy of the process.⁹¹ First, public consultation is conducted based on poor quality of information provided in the draft EIA Report and Environmental Management Plan. The fact that the project proponent commissions the EIA reports casts doubt on the credibility of the reports, and this concern is aggravated by the lack of mechanisms to hold those preparing inadequate or misleading reports accountable. Second, certain categories of projects are granted blanket exemption from the public consultation process on the questionable premise that either the nature, size or capacity of these projects renders their environmental impacts insignificant or that public consultation in such projects (for example, defence projects) should be dispensed with for other reasons. This list of exempted projects has only grown over the years, indicating the

87. *Debadityo Sinha and Ors v. Union of India and Ors*, Appeal No. 79/2014, judgment dated 21 December 2016, NGT (Principal Bench).

88. *Ibid.*, para 59.

89. *Save Mon Region Federation and Ors v. Union of India and Ors*, Appeal No. 39/2012, judgment dated 7 April 2016, NGT (Principal Bench); See also *M. P. Patil v. Union of India and Ors*, Appeal No. 12/2012, judgment dated 13 March 2014, NGT (Principal Bench).

90. Ghosh (n 42); M. P. Ram Mohan and Himanshu Pabreja, ‘Public Hearings in Environmental Clearance Process; Review of Judicial Intervention’ (2016) 51(50) *Economic and Political Weekly* 68.

91. Rajamani and Ghosh (n 64).

government's preference to limit public participation. Third, the Notification gives the project proponent excessive discretion while responding to concerns raised during public consultation. The proponent is only expected to respond to 'material concerns'. Materiality has not been defined leaving it entirely to the project proponent's discretion.

Public participation in the EC process is primarily during, but not limited to, the public consultation process discussed earlier. The public could continue to engage with the process by writing to the relevant EAC, constituted under the EIA Notification, highlighting specific concerns during the final appraisal of a project proposal for the grant of EC. EACs have considered these representations to be valuable to their deliberations.⁹² However, during a meeting in December 2016, the EAC for River Valley Projects decided that it would not take cognisance of representations received from civil society groups.⁹³ The EAC's decision has been criticised for limiting public participation and, in the process, for seemingly compromising its role as an independent expert body.⁹⁴

The EC process provides several opportunities for public participation. But these opportunities are under constant threat

92. For examples, see discussion in Shibani Ghosh, 'Expert Appraisal Committee (EAC) of the Environment Ministry Sidelines Civil Society' (2017) <<http://www.cprindia.org/news/5836>> accessed 31 March 2017.

93. EAC, 'Minutes of the 1st Meeting of the Expert Appraisal Committee for River Valley and Hydroelectric Projects' (30 December 2016) <<http://environmentclearance.nic.in/writereaddata/Form-1A/Minutes/12012017YXHJSW1J1stEACMeetingforRVHEP30thDecember2016.pdf>> accessed 31 March 2017.

94. Ghosh (n 92); Jay Mazoomdaar, 'Environment panel against entertaining "anti-development" representations' *The Indian Express* (14 January 2017) <<http://indianexpress.com/article/india/environment-panel-against-entertaining-anti-development-representations-4473317/>> accessed 31 March 2017; Mayank Aggarwal, 'Environment ministry's expert panel to ignore "anti-development" groups' *Mint* (16 January 2017) <<http://www.livemint.com/Politics/81WEQ2x3XivsgZjFW4jVTP/Environment-ministrys-expert-panel-to-ignore-antidevelopm.html>> accessed 31 March 2017.

of legislative or executive actions that could amend the relevant provisions, narrowly interpret them, or disincentivise public participation through design or practice.

Under the Forest Rights Act

Decisions relating to access, use, and ownership of forest land and resources also involve some degree of public consultation. The Forest Rights Act recognises several rights of Scheduled Tribes (STs) and other persons and communities that primarily reside in and depend on forests for their livelihood needs. These rights include the right to hold and live in the forest land, right to own and to access, use, and dispose minor forest produce, right of use or entitlement to fish and other products in water bodies, grazing rights, traditional seasonal resource access, etc.⁹⁵ These rights may be claimed as individuals or as communities.⁹⁶ The Act and its related rules lay down a detailed process by which individuals and communities can claim these rights. The Gram Sabhas have been designated as authorities to initiate the process for determination of the claims under the Act.⁹⁷ The Gram Sabha includes all adults in a particular village,⁹⁸ and its pivotal role in the entire process is an important facet of public consultation in forest governance in the country. Among other functions, they receive and hear claims for forest rights; prepare a list of claimants; give a reasonable opportunity to all persons to present their claims; and then finally pass a resolution on the claims.⁹⁹

The Forest (Conservation) Act 1980 (FC Act) was enacted to combat the large-scale deforestation that the country was witnessing.¹⁰⁰ The Act requires the prior approval of the central

95. Forest Rights Act s 3.

96. Ibid.

97. Ibid., s 6(1).

98. Ibid., s 2(g).

99. Ibid, s 6 read with the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Rules 2008, rules 11 and 12.

100. FC Act, Statement of Objects and Reasons.

government before state governments can permit the use of forest land for non-forest purposes or dereserve reserved forests.¹⁰¹ This process, commonly referred to as the forest clearance process, requires several levels of forest bureaucracy to comment on and approve the application.¹⁰² Unlike the EC process, it is not open to public comment or consultation.

The situation changed in 2009 when the environment ministry issued a letter to all states requiring them to enclose evidence of settlement of rights under the Forest Rights Act, or evidence that the settlement would be completed before final approval is granted under the FC Act.¹⁰³ This linkage was given statutory recognition in 2014, and now the settlement of rights in accordance with the Forest Rights Act has to be completed before the application for diversion of forest land is considered by the Conservator of Forests.¹⁰⁴

In a case before the NGT, one of the grounds to challenge the forest clearance granted to a hydropower project was that the clearance condition to settle rights under the Forest Rights Act had not been complied with.¹⁰⁵ The NGT, deciding on this limited point, directed that the entire proposal for forest diversion be placed before the Gram Sabha of four affected villages.¹⁰⁶ It further directed the Gram Sabhas to consider 'all community and individual claims which would bring within its ambit religious as well as cultural claims'.¹⁰⁷

101. *Ibid.*, s 2.

102. See Forest (Conservation) Rules 2003.

103. MoEF, 'Letter on Diversion of forest land for non-forest purposes under the Forest Conservation Act, 1980: ensuring compliance of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006' F.No.11-9/1998-FC(pt) (3 August 2009) <<http://www.moef.nic.in/divisions/forcon/3rdAugust2009.pdf>> accessed 31 March 2017.

104. See Forest (Conservation) Amendment Rules 2014.

105. *Paryavaran Sanrakshan Sangarsh Samiti Lippa v. Union of India and Ors*, Appeal No. 28/2013, judgment dated 4 May 2016, NGT (Principal Bench).

106. *Ibid.*, para 20.

107. *Ibid.*

In a landmark judgment establishing the primacy of religious rights of tribals over mining activities, the Supreme Court discussed the role of the Gram Sabha in the decision-making process, both under the Forest Rights Act and the Panchayats (Extension to the Scheduled Areas) Act 1996.¹⁰⁸ The Court was deciding whether forest land should be diverted for bauxite mining in Lanjigarh in Odisha. It held that the Gram Sabha had the power to decide whether mining in an area of religious significance affected their religious rights, and to settle all claims arising under the Forest Rights Act relating to the forestland that was proposed to be diverted.¹⁰⁹ After the Court's judgment, Gram Sabhas unanimously rejected the proposed diversion of forestland for the mining project, and based on this rejection, the MoEF declined forest clearance under the FC Act.¹¹⁰

In the past few years, the environment ministry has been restricting the application of the Forest Rights Act, and as a result the role of the Gram Sabha, in the forest clearance process.¹¹¹ Some of these efforts have been resisted by the Ministry of Tribal Affairs—the nodal agency for the implementation of the Forest Rights Act,

108. *Orissa Mining Corporation v. MoEF and Ors* (2013) 6 SCC 476.

109. *Ibid.*, paras 39–47.

110. Neha Sethi, 'Government rejects Vedanta's bauxite mining plans in Niyamgiri' *Mint* (11 January 2014) <<http://www.livemint.com/Politics/RfscBlhoFhQDapFA6uU7UK/Government-rejects-Vedantas-bauxite-mining-plans-in-Niyamgi.html>> accessed 31 March 2017.

111. See, for example, MoEF, 'Letter on diversion of forest land for non-forest purposes under the Forest Conservation Act, 1980: ensuring compliance of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006' F.No.11-9/1998-FC(pt) (28 October 2014) <[http://forestsclearance.nic.in/writereaddata/public_display/schemes/1717277111\\$Guideline.pdf](http://forestsclearance.nic.in/writereaddata/public_display/schemes/1717277111$Guideline.pdf)> accessed 31 March 2017; MoEF, 'Letter on diversion of forest land for non-forest purposes under the Forest Conservation Act, 1980: ensuring compliance of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006' F.No.11-9/1998-FC(pt) (5 February 2013) <[http://forestsclearance.nic.in/writereaddata/public_display/orders/1503732839\\$FRA.pdf](http://forestsclearance.nic.in/writereaddata/public_display/orders/1503732839$FRA.pdf)> accessed 31 March 2017.

but with limited success.¹¹² There is also a legal challenge to the *vires* of the Forest Rights Act pending before the Supreme Court.¹¹³ At the same time, a ‘Citizens’ Report’ published to commemorate 10 years of the Forest Rights Act highlights the poor implementation of the Act.¹¹⁴ A law to recognise ‘tenurial and access rights’¹¹⁵ of forest dwelling Scheduled Tribes and other communities, the Forest Rights Act espouses a participatory process, but it faces serious legal, institutional, and political impediments.

THE RIGHT TO ACCESS JUSTICE

Roots in Indian Law

The right to approach a judicial forum for an appropriate remedy is enshrined in the Indian Constitution as well as in the civil and criminal procedural laws of the country. Besides the conventional courts, various statutes passed by Parliament and state legislatures have created judicial, quasi-judicial, and administrative fora where specific grievances may be raised by statutorily identified persons. The Supreme Court has held that ‘access to justice is a human right. When there exists such a right, a disputant must have a remedy in terms of the doctrine *ubi jus ibi remedium*’.¹¹⁶

112. Nayantara Narayanan, ‘Is the environment ministry strong-arming the ministry of tribal affairs on forest rights?’ *Scroll.in* (4 May 2016) <<https://scroll.in/article/807608/is-the-environment-ministry-strong-arming-the-ministry-of-tribal-affairs-on-forest-rights>> accessed 22 April 2017.

113. *Wildlife First and Ors v. MoEF and Ors*, WP (C) No. 109/2008.

114. Community Forest Rights-Learning and Advocacy (CFR-LA), ‘Promise and Performance: Ten Years of the Forest Rights Act in India’ (December 2016) <<http://fra.org.in/document/Promise%20and%20Performance%20Report.pdf>> accessed 31 March 2017.

115. Forest Rights Act, Preamble.

116. *Bhagubhai Dhanabhai Khalasi v. State of Gujarat* (2007) 4 SCC 241, para 10.

Article 32 of the Constitution recognises the fundamental right to approach the Supreme Court directly for the enforcement of fundamental rights, and Article 226 recognises the constitutional right to approach High Courts for the enforcement of fundamental rights or any other legal right. The Supreme Court and High Courts, when approached under Articles 32 and 226, respectively, may issue directions, orders, or writs including those in the nature of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari* for the enforcement of rights.¹¹⁷ Besides their extensive writ jurisdiction, these courts enjoy wide original and appellate jurisdiction. The power of judicial review enjoyed by the higher judiciary is considered to be part of the basic structure of the Constitution and, therefore, cannot be taken away even by a constitutional amendment.¹¹⁸

In a recent judgment, the Supreme Court reviewed case law on the right to access justice and held that the right to life, guaranteed under Article 21 of the Constitution of India, included the right to access justice.¹¹⁹ The Court observed, '[t]he right is so basic and inalienable that no system of governance can possibly ignore its significance, leave alone afford to deny the same to its citizens'.¹²⁰ It identified four main facets that constituted the essence of access to justice: (i) the State must provide an effective adjudicatory mechanism; (ii) the mechanism so provided must be reasonably accessible in terms of distance; (iii) the process of adjudication must be speedy; and (iv) the litigant's access to the adjudicatory process must be affordable.¹²¹

117. See Gopal Subramaniam, 'Writs and Remedies' in Sujit Choudhry, Madhav Khosla and Pratap Bhanu Mehta (eds) *The Oxford Handbook of the Indian Constitution* (OUP 2016) 614.

118. *L. Chandra Kumar v. Union of India* (1997) 3 SCC 261, paras 76–79.

119. *Anita Kushwaha v. Pushap Sudan* (2016) 8 SCC 509.

120. *Ibid.*, para 29.

121. *Ibid.*, para 33.

Public Interest Litigation

At the core of access to justice jurisprudence in India lies PIL, a form of proceedings fashioned by the Supreme Court and subsequently adopted by the High Courts. The origin and evolution of PIL in India has been reviewed extensively in academic scholarship.¹²² The original intent of encouraging PIL cases was to lend voice to marginalised and disadvantaged sections of society that would otherwise find the formal processes of the judicial system difficult to navigate.¹²³ But it soon became a vehicle to challenge government inaction as well—to redress public wrong or injury, even though no specific legal injury was caused to an individual or a determinate class of persons.¹²⁴ The Supreme Court relaxed several procedural norms to ease access to the Court. The Court observed that the traditional rule of *locus standi* need not be adhered to.¹²⁵ The Court held that when a legal wrong or injury was caused to a person or a

122. Upendra Baxi, 'Taking Suffering Seriously: Social Action Litigation in the Supreme Court of India' (1985) 4 *Third World Legal Studies* 107; Clark D. Cunningham, 'Public Interest Litigation in Indian Supreme Court: A Study in the Light of American Experience' (1987) 29(4) *Journal of the Indian Law Institute* 494; Jamie Cassels, 'Judicial Activism and Public Interest Litigation in India: Attempting the Impossible?' (1989) 37 *The American Journal of Comparative Law* 495; S. P. Sathe, 'Judicial Activism: The Indian Experience' (2001) 6 *Washington University Journal of Law and Policy* 29; Ashok H. Desai and S. Muralidhar, 'Public Interest Litigation: Potential and Problems' in Kirpal *et al.* (n 14) 159; Shyam Divan, 'Public Interest Litigation' in Choudhry, Khosla and Mehta (n 117) 662.

123. Baxi, *ibid.*; Sathe, *ibid.*; D. S. Sengar, 'PIL to Ensure that Institutions Behave Lawfully: Public Access to Environmental Justice in India' (2003) 45(1) *Journal of the Indian Law Institute* 62.

124. S. P. Gupta (n 19), para 17; Cunningham (n 122).

125. S. P. Sathe, 'Public Participation in Judicial Process: New Trends in Law of Locus Standi with Special Reference to Administrative Law' in Sathya Narayan (ed) *Selected Works of SP Sathe (Volume II): Judicial Power and Processes* (OUP 2015) 408. See also *Municipal Council, Ratlam v. Vardichand and Ors* (1980) 4 SCC 162, para 1.

determinate class of persons, and such person/s could not approach a court for relief due to poverty, disability, or because they were in a socially or economically disadvantaged position, any member of the public could file a case on their behalf.¹²⁶ Emphasising the need to do away with procedural technicalities in such cases, the Court held:

17. ... it must not be forgotten that procedure is but a handmaiden of justice and the cause of justice can never be allowed to be thwarted by any procedural technicalities ... The court has to innovate new methods and devise new strategies for the purpose of providing access to justice to large masses of people who are denied their basic human rights and to whom freedom and liberty have no meaning.¹²⁷

Since the early 1980s, PILs have been argued and decided by the Supreme Court and the High Courts on a variety of issues of social, economic, political, and environmental relevance. Cases have been initiated by person/s adversely affected by an administrative wrong;¹²⁸ person/s approaching the Court to vindicate the rights of other persons;¹²⁹ or a public-spirited citizen who is not representing any particular class of persons, but is filing the case in her own capacity of being a citizen of the country to whom the Government owes a public duty.¹³⁰

While many PILs begin their journey in the courts as a writ petition, courts have also exercised what has come to be termed as their epistolatory jurisdiction—accepting letters written to the

126. *S. P. Gupta* (n 19), para 17.

127. *Ibid.*

128. For example, *Hussainara Khatoon and Ors (I) v. State of Bihar* (1980) 1 SCC 81; *Kinkri Devi v. State of Himachal Pradesh* (1987) SCC OnLine HP 7.

129. For example, *Sheela Barse v. Union of India* (1983) 2 SCC 96; *M. C. Mehta v. Union of India and Ors* (1988) 1 SCC 471 (*Ganga Tanneries* case).

130. *Dr B. L. Wadhwa v. Union of India and Ors* (1996) 2 SCC 594.

court as writ petitions,¹³¹ and taken cognisance of issues *suo motu* (for instance those highlighted by newspaper reports).¹³²

The proceedings, generally not adversarial, are meant to be more an exercise of cooperation and collaboration between different stakeholders.¹³³ The reason for the court to move away from the conventional adversarial system was not to create a process wherein evidence was accepted without the opposing party getting an opportunity to cross-examine, but that the respondent, most often the state, should help the court to find the truth, as the litigation was not against the State but against the illegalities committed on its behalf.¹³⁴

The response of the courts in PILs has also been different and, at times, innovative. To assist them, and the parties, in understanding and dealing with various aspects of the case, the courts occasionally appoint expert committees or commissions and *amicus curiae*.¹³⁵ Sometimes a court issues orders in the nature of

131. *Upendra Baxi (I) v. State of Uttar Pradesh* (1983) 2 SCC 308; *Sunil Batra (II) v. Delhi Administration* (1980) 3 SCC 488; *M. C. Mehta v. Union of India* (1987) 1 SCC 395, paras 4–5; *PUDR v. Union of India* (1982) 3 SCC 235; *Bandhua Mukti Morcha* (n 16). See also, Supreme Court Rules 2013, Order XXXVIII, rule 12.

132. See *In Re, News Item published in Hindustan Times titled 'And Quiet Flows The Maily Yamuna'*, WP (C) No. 725/1994 (Supreme Court). See also *M. C. Mehta v. Kamal Nath and Ors* (1997) 1 SCC 388.

133. *State of Uttaranchal v. Balwant Singh Chauhal and Ors* (2010) 3 SCC 402, para 28; *Bandhua Mukti Morcha* (n 16), para 9; *PUDR* (n 131), para 2.

134. *Sathe* (n 122) 77.

135. *Peoples' Union for Civil Liberties v. Union of India and Ors*, WP (C) No. 196/2001, Supreme Court, orders dated 8 May 2002 and 29 October 2002 (appointment of commissioners by the Court to monitor implementation of the mid-day meal scheme by the states); *Aruna Rodrigues and Ors v. Union of India and Ors* (2012) 5 SCC 331 (appointment of expert team to review risk assessment of genetically modified organisms); *T. N. Godavarman Thirumalpad (50) v. Union of India* (2013) 8 SCC 198 (appointment of the Central Empowered Committee for monitoring the implementation of the Court's orders).

‘continuing mandamus’—the court keeps the case under its judicial oversight for several years and issues orders and directions suited to the situation.¹³⁶ On some occasions, after passing a detailed order, the Supreme Court has transferred the case to the appropriate High Court for further proceedings and compliance of its orders.¹³⁷

Although the Indian judiciary is hailed for its ‘activist’ role in championing the cause of the underprivileged, and PIL has been considered ‘the judiciary’s most visible tool for marketing constitutionalism’,¹³⁸ the PIL process has some inherent flaws.¹³⁹ While some of these flaws relate to the outcome of the case¹⁴⁰ and the enforceability of judicial directions,¹⁴¹ relevant for the present discussion is the potential of the PIL mechanism to limit access to justice rather than increase accessibility. On occasion, courts have not given important stakeholders an opportunity to

136. In *M. C. Mehta v. Union of India* (2008) 1 SCC 407, para 9.

137. For example, *Vellore* (n 12).

138. *Divan* (n 122) 679.

139. See Usha Ramanathan, ‘In the Name of the People: The Expansion of Judicial Power’ in *The Shifting Scales of Justice: The Supreme Court in Neo-liberal India* (Orient BlackSwan 2014) 39; Anuj Bhunia, ‘Courting the People: The Rise of Public Interest Litigation in Post-Emergency India’ (2014) 34(2) *Comparative Studies of South Asia, Africa and the Middle East* 314; Lavanya Rajamani, ‘Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability’ (2007) 19(3) *Journal of Environmental Law* 293; Desai and Muralidhar (n 122) 176–83.

140. Armin Rosencranz and Sharachchandra Lélé, ‘Supreme Court and India’s Forests’ (2008) 43(5) *Economic and Political Weekly* 11; Véronique Dupont and Usha Ramanathan, ‘The courts and the squatter settlements in Delhi—or the intervention of the judiciary in urban “governance”’ in I. S. A. Baud and J. de Wit (eds) *New Forms of Urban Governance in India: Shifts, Models, Networks and Contestations* (SAGE Publications India 2008) 312.

141. See Supreme Court’s direction on river-linking (*Networking of River, in re* (2004) 11 SCC 360), and removal of encroachments from commonlands (*Jagpal Singh v. State of Punjab* (2011) 11 SCC 396).

express their opinion before issuing directions that affect them.¹⁴² Court-appointed *amicus curiae* has often become the focal point for submissions to the Court, excluding other parties.¹⁴³ Courts still accept letter petitions, but these are screened by a PIL cell based on certain guidelines and only a selection of letters are placed before the courts.¹⁴⁴ In 2014, 1.2 per cent, and in 2015, 0.5 per cent of the letters received by the Supreme Court were converted into Writ Petitions (Civil and Criminal).¹⁴⁵ In 2010, the Supreme Court directed all High Courts to ‘properly formulate rules for encouraging the genuine PIL and discouraging the PIL filed with oblique motives’.¹⁴⁶ This ‘streamlining’ of PILs through rule-making¹⁴⁷ could curtail the flexibility in procedure that the PIL mechanism is associated with.

Right to Access Environmental Justice

Judgments and orders delivered in PILs have significantly contributed to the development of India’s environmental jurisprudence.¹⁴⁸ The

142. Rajamani (n 139) 301–05; Anuj Bhawania, *Courting the People: Public Interest Litigation in Post-Emergency India* (CUP 2016) 101; *M. C. Mehta v. Union of India* (2001) 3 SCC 756 (directions of the Supreme Court making use of CNG mandatory in public transport).

143. Bhawania, *ibid.*, 39–43; S. Muralidhar, ‘Public Interest Litigation’ (1997–98) 33 *Annual Survey of Indian Law* 525.

144. For Supreme Court Guidelines, see <<http://supremecourtsofindia.nic.in/circular/guidelines/pilguidelines.pdf>> accessed 2 April 2017.

145. Supreme Court of India, ‘Indian Judiciary: Annual Report 2015–16’, <<http://supremecourtsofindia.nic.in/annualreport/annualreport2015-16.pdf>> accessed 2 April 2017, 40.

146. *Balwant Singh Chauhan* (n 133), para 181.

147. For example, Delhi High Court (Public Interest Litigation) Rules 2010.

148. Michael G. Faure and A. V. Raja, ‘Effectiveness of Environmental Public Interest Litigation in India: Determining the Key Variables’ (2010) 21(2) *Fordham Environmental Law Review* 239.

recognition of the right to environment, and the incorporation of principles of international and foreign law in Indian environmental law, have been the result of some of the landmark environmental PILs. Environmental law cases, in turn, are important case studies in analysing the efficacy of PIL in addressing widespread and systemic problems, and achieving outcomes that are socially equitable and environmentally desirable.¹⁴⁹ As other contributions to this volume discuss many of the cases in detail, this section focusses on statutory fora for environmental justice, in particular the NGT.

Parliament has passed three laws setting up special tribunals with the exclusive jurisdiction over environmental cases.¹⁵⁰ The third statute—the one currently in force—is the National Green Tribunal Act 2010 (NGT Act). The NGT has been set up under this Act with the express objective of providing effective access to judicial proceedings in environmental cases.¹⁵¹ The Tribunal is a key player in present-day Indian environmental governance and regulation.¹⁵²

Other than the NGT, discussed in greater detail later, there are a number of judicial and quasi-judicial fora available in India where environmental issues may be raised. Specific environmental statutes provide their own grievance redressal mechanisms. For

149. See Rajamani (n 139); Bhuwania (n 143).

150. National Environment Tribunal Act 1995 (NET Act), National Environmental Appellate Authority Act 1997 (NEAA Act) and NGT Act.

151. NGT Act, Preamble.

152. Since its inception in October 2010 to 31 October 2015, the Tribunal had received a total 12,091 cases of which 8,353 had been disposed of. See MoEFCC, 'Annual Report: 2015–2016' <<http://envfor.nic.in/sites/default/files/Ministry%20of%20Environment%20Annual%20Report%202015-16%20English.pdf>> accessed 2 April 2017. See also Gitanjali Nain Gill, 'Environmental Justice in India: The National Green Tribunal and Expert Members' (2016) 5(1) *Transnational Environmental Law* 175; Domenico Amirante, 'Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India' (2012) 29(2) *Pace Environmental Law Review* 441; Kanchi Kohli and Manju Menon, 'The Nature of Green Justice' (2012) 47(15) *Economic and Political Weekly* 19.

instance, appellate authorities appointed under the Water Act and the Air Act are empowered to hear appeals against orders and directions issued by SPCBs.¹⁵³ Appeals against the orders of the appellate authorities lie before the NGT.¹⁵⁴ Complaints against persons violating the provisions of the Water Act, Air Act, and EP Act may be filed before the criminal courts by the appropriate regulatory agency or private persons.¹⁵⁵ Under the Biological Diversity Act 2002, an appeal in case of a dispute between the National Biodiversity Authority and a State Biodiversity Board would lie before the central government,¹⁵⁶ and an appeal against a determination of benefit sharing, or an order of the Authority or State Boards, lies before the High Court.¹⁵⁷ Apart from these, environmental cases can be brought to the Supreme Court and High Courts under their writ jurisdiction, as certain environmental rights have been interpreted as fundamental rights. Environmental torts like nuisance and negligence are also recognised in Indian law, and complaints alleging nuisance and negligence have been brought before the courts.¹⁵⁸

Special Environmental Courts

In the context of environmental disputes, the Supreme Court observed in 1986 that it was necessary that judicial decision-making was informed by scientific and technical expertise. In view of the fact that environmental cases involved assessment and evolution of

153. Water Act s 28; Air Act s 31.

154. NGT Act ss 16(a) and (f).

155. Water Act s 49; Air Act s 43; EP Act s 19.

156. Biological Diversity Act 2002 s 50.

157. *Ibid.*, s 52.

158. Civil Procedure Code 1908 s 91; Code of Criminal Procedure 1973 s 133; Indian Penal Code 1860 s 268; *Municipal Council, Ratlam* (n 125); *Jaipur Golden Gas Victims Association v. Union of India and Ors* (2009) SCC OnLine Del 3357. See also Shibani Ghosh, 'Reforming the Liability Regime for Air Pollution in India' (2015) 4 *Environmental Law and Practice Review* 125, 133–35.

scientific and technical data, the Court suggested that ‘it might be desirable to set up Environment Courts on the regional basis with one professional Judge and two experts’ with the right of appeal to the Supreme Court.¹⁵⁹ In 1995, through an Act of Parliament, the central government was required to establish a National Environment Tribunal to hear cases on liability and compensation arising from accidents.¹⁶⁰ The Act referred to the Rio Declaration in its preamble, specifically quoting from the text of Principle 13 on liability and compensation for environmental damage. This Act was not notified and never came into force.

In 1996, the Supreme Court reiterated its recommendation to set up special courts with exclusive jurisdiction on all civil and criminal matters relating to the environment.¹⁶¹ It highlighted the difficulties in the existing redressal mechanisms (that is, ordinary criminal courts)—workload of the courts, long pendency of cases, grant of interim orders which prevent authorities from implementing their orders and the lack of appreciation of the significance of environmental issues.¹⁶² Subsequently, ‘in view of recent pronouncements by the Supreme Court in certain public interest litigation cases involving environmental issues’,¹⁶³ Parliament passed the National Environment Appellate Authority (NEAA) Act 1997. The Act set up an Authority with the jurisdiction to hear appeals against ECs granted (under the EIA Notification 1994).¹⁶⁴

In 1999,¹⁶⁵ and then in a follow up judgment in 2001,¹⁶⁶ the Supreme Court yet again emphasised on the need for specialised environmental courts. The Court admitted to finding it difficult

159. *M. C. Mehta v. Union of India* (1986) 2 SCC 176, para 22

160. NET Act, Preamble.

161. *Indian Council For Enviro-legal Action* (n 11), para 6.

162. *Ibid.*

163. NEAA Act, Statement of Objects.

164. *Ibid.*, s 11(1).

165. *A. P. Pollution Control Board v. M. V. Nayudu* (1999) 2 SCC 718, para 54.

166. *A. P. Pollution Control Board* (n 17), paras 70–73.

to provide adequate solutions to environmental problems. It was not in a position to monitor its orders on a regular basis or to issue urgent orders when necessary. It requested the Law Commission of India to review Indian environmental laws and the need for setting up environmental courts.¹⁶⁷ The Law Commission submitted its report on the constitution of environmental courts in 2003. It recommended the setting up of environmental courts in each state, headed by a judge and assisted by a panel of experts, exercising original and appellate jurisdiction.¹⁶⁸ The Commission categorically criticised the idea of constituting one appellate body based in Delhi, as it reduced effective access to justice for persons in remote parts of the country.¹⁶⁹

No action was taken on the report of the Law Commission to set up state-wise environmental courts, and the NEAA with its seat at New Delhi continued to function with its limited mandate. The accessibility of this forum was questioned on various grounds—the Tribunal narrowly construed *locus standi*,¹⁷⁰ it adopted a hyper-technical approach to procedural issues,¹⁷¹ and it was never fully constituted with judicial and expert members.¹⁷² In 2009, the High Court of Delhi passed adverse remarks against the central government's prolonged 'lackadaisical' approach in properly constituting the NEAA, and observed, '[b]y rendering the NEAA ineffective, the government has denied the citizens the right of

167. *Ibid.*, para 73.

168. Law Commission of India, One Hundred Eighty Sixth Report on Proposal to Constitute Environment Courts (September 2003) <<http://lawcommissionofindia.nic.in/reports/186th%20report.pdf>> accessed 2 April 2017.

169. *Ibid.*, 3.

170. *Prafulla Samantra v. MoEF and Ors* (2009) SCC OnLine Del 1333.

171. *Jan Chetna and Anr v. Union of India and Ors* (2009) SCC OnLine Del 3240; *Gomantak Shetakari Sanghatana v. Union of India and Ors* (2009) SCC OnLine Del 1172; *Prafulla Samantra*, *ibid.*

172. Armin Rosencranz, Geetanjoy Sahu and Vyom Raghuvanshi, 'Whither the National Environment Appellate Authority' (2009) 44(35) *Economic and Political Weekly* 10.

access to effective and efficacious justice in matters concerning the environment'.¹⁷³ The central government challenged the High Court's judgment before the Supreme Court¹⁷⁴ and during the pendency of this case, the NGT Act was passed by Parliament.

The National Green Tribunal

In 2010, the NGT Act came into force.¹⁷⁵ The Act in its preamble refers to India's participation at the Rio Conference in 1992, and includes text from Principles 10 and 13 of the Rio Declaration. The Tribunal consists of judicial and expert members. The judicial members are former or sitting judges of the Supreme Court or High Courts.¹⁷⁶ The expert members are persons appointed with knowledge and experience in varied fields like pollution control, hazardous substance management, environment impact assessment, climate change and forest conservation or with administrative experience.¹⁷⁷ Every bench hearing a case has to have at least one judicial member and one expert member.¹⁷⁸

Jurisdiction—NGT enjoys original jurisdiction over all civil cases where a substantial question relating to the environment arises from the implementation of provisions of laws listed in the Schedule to the NGT Act.¹⁷⁹ It exercises appellate jurisdiction over certain orders and directions issued by government agencies.¹⁸⁰ The limitation period for approaching the Tribunal ranges from

173. *Vimal Bhai and Ors v. Union of India and Ors* (2009) 157 DLT 477 (DB), para 41.

174. *Union of India v. Vimal Bhai*, SLP (C) No. 12065/2009.

175. The NGT Act repealed the NET Act and the NEAA Act. See NGT Act s 38.

176. NGT Act s 5(1).

177. *Ibid.*, s 5(2).

178. The National Green Tribunal (Practices and Procedure) Rules 2011 (NGT Rules), rule 5(1).

179. NGT Act s 14 read with s 2(m).

180. *Ibid.*, s 16.

30 days to five years, depending on the cause of action.¹⁸¹ An appeal from the order of the NGT lies before the Supreme Court.¹⁸²

In pursuance of the law laid down by the Supreme Court in *L. Chandra Kumar*,¹⁸³ the NGT Act does not, and cannot, oust the writ jurisdiction of the High Courts.¹⁸⁴ Hence, where there is a subject matter overlap between the NGT and the High Court (under Article 226), a petitioner has the statutory and constitutional right, respectively, to approach either forum. The Supreme Court¹⁸⁵ and the Odisha High Court¹⁸⁶ have held that writ petitions under Article 226 of the Constitution, raising issues of larger public interest or alleging violation of fundamental rights, need not be transferred to the NGT, even if the issues raised are within the Tribunal's jurisdiction. However, certain High Courts have applied the principle of alternative and efficacious remedy, and dismissed writ petitions while considering the Tribunal to be the appropriate forum.¹⁸⁷

In 2012, the Supreme Court directed the transfer of *all* matters covered by the NGT Act to the Tribunal to 'render [...] expeditious and specialised justice in the field of environment to all concerned'.¹⁸⁸ The direction was subsequently stayed by the Court in a different case and placed for reconsideration, but the

181. *Ibid.*, ss 14, 15 and 16.

182. *Ibid.*, s 22.

183. *L. Chandra Kumar* (n 118).

184. See also *Wilfred J. and Anr v. MoEF and Ors*, MA No. 182 and 239 in Appeal No. 14/2014, judgment dated 17 July 2014, NGT (Principal Bench), para 56.

185. *Vaamika Island (Green Lagoon Resort) v. Union of India* (2013) 8 SCC 760.

186. *Yudhisthira Sahoo and Ors v. Government of Orissa and Ors* MANU/OR/0525/2012.

187. *All India Plastic Industries Association v. Government of Tripura* (2014) SCC OnLine Tri 83; *Gajanan Enclave Pvt. Ltd v. Jaipur Development Authority and Ors* (2013) SCC OnLine Raj 3033; *Karnataka State Plastic Association v. State of Karnataka* MANU/KA/0693/2016.

188. *Bhopal Gas Peedith Mahila Udyog Sangathan and Ors v. Union of India* (2012) 8 SCC 326, para 40.

question is yet to be decided.¹⁸⁹ Meanwhile, the Supreme Court and the High Courts have been transferring at least some of the cases pending before them to the NGT for further adjudication.¹⁹⁰

Accessibility—In terms of who can access the Tribunal, the statute is broadly worded. ‘Any person’ who is aggrieved by an order (specified in Section 16), or who wishes to seek relief or compensation or settlement of a dispute may approach the Tribunal. Person includes an individual, a company, an association, a local authority, etc.¹⁹¹ However, whether such a person needs to be directly aggrieved is a question settled in one of the Tribunal’s early judgments. The Tribunal adopted a liberal approach to *locus standi* and observed:

Once, the protection and improving the natural environment is the fundamental duty of a citizen, any person can approach this Tribunal and agitate his grievance as to protection and improvement of the natural environment. The statutory provisions are subservient to the constitutional mandates. The person as defined or person aggrieved as occurs in Section 2(j), 16 and 18 (2) of the NGT Act cannot be placed above ‘every citizen’ as appears in Article 51A of the Constitution of India.¹⁹²

Therefore, with regard to legal standing, the Tribunal may be considered to be a highly accessible forum. But geographical accessibility of the NGT has been a concern from its inception.

189. *Adarsh Co-oprv. Housing Society Ltd v. Union of India and Ors*, SLP (C) Nos. 27327 and 28512-28513/2013 MANU/SC/0375/2014.

190. *T. N. Godavarman Thirumalpad v. Union of India* (2016) 13 SCC 586; *M. C. Mehta v. Union of India*, WP (C) 3727/1985, order dated 24 January 2017, Supreme Court; *Almitra H. Patel and Anr v. Union of India*, WP (C) No. 888/1996, order dated 2 September 2014, Supreme Court; *Vellore Citizens’ Welfare Forum v. Union of India and Ors* (2016) SCC OnLine Mad 1881; *Chandrabhan Rajpurohit v. State of Rajasthan* (2014) SCC OnLine Raj 5159; *Nandita Das v. Bharat Petroleum Corporation Ltd. and Ors* MANU/GJ/0237/2015.

191. NGT Act s 2(j).

192. *Vimal Bhai and Ors v. MoEF and Ors*, Appeal No. 5/2011, judgment dated 14 December 2011, NGT (Principal Bench).

The principal bench of the Tribunal is in New Delhi and there are four regional benches with specified territorial jurisdiction.¹⁹³ The Parliamentary Standing Committee considering the National Green Tribunal Bill had expressed a concern that if the Tribunal sat in only five cities, it would 'lead to serious constraints of accessibility in the long run, especially to the poor and the tribal people who live in far flung areas'.¹⁹⁴ The MoEF's response was that the Tribunal would occasionally function in a circuit mode.¹⁹⁵ Since it has been set up, on the Chairperson's orders, the Tribunal has occasionally heard cases in cities other than those where the five permanent benches are situated. However, as the Tribunal enjoys jurisdiction over certain categories of environmental cases of civil nature, to the exclusion of other forums which may be geographically more accessible (like the district courts or the High Court), the question of accessibility is a live one.

The procedure for filing a new case or case-related documents in the Tribunal is governed by the National Green Tribunal (Practices and Procedure) Rules 2011. Applications and appeals have to be filed in the prescribed format only. The filing process in the Tribunal is not very different from a regular court. Although applicants need not engage a lawyer, and can file cases and appear in person, the procedural requirements could seem daunting to someone not conversant with the court system.

A new appeal or application has to be accompanied by a fee of Rs 1,000, if no compensation is claimed.¹⁹⁶ If compensation is claimed, a fee equivalent to 1 per cent of the compensation amount

193. MoEF, 'Notification specifying ordinary places of sitting of the NGT' (17 August 2011) <<http://www.moef.nic.in/downloads/rules-and-regulations/1908.pdf>> accessed 2 April 2017.

194. Department-related Parliamentary Standing Committee on Science and Technology, Environment and Forests of Rajya Sabha, '203rd Report on The National Green Tribunal Bill, 2009' (November 2009), para 8.8.

195. Lok Sabha, 'Lok Sabha Debates of 15 March 2010', 144.

196. NGT Rules, rule 12(2).

claimed has to be paid along with the appeal or application.¹⁹⁷ The rationale behind this was to discourage frivolous cases.¹⁹⁸ However, high court fees could be a real disincentive for persons to file claims in the Tribunal. When this rule came into force, the inherent perversity was highlighted in the media.¹⁹⁹ In response, the then Environment Minister issued a public notice proposing to modify this rule.²⁰⁰ The notice stated that though it was legal to charge such a fee, the Ministry did not intend for genuine litigants to feel discouraged from seeking justice and, therefore, the said rule would be removed. However, the 2011 rules remain unamended.

In practice, applicants may file an application for exemption from depositing these fees, stating their reasons for not being able to pay the court fees. The Tribunal may allow the application, and impose a condition that if compensation is finally awarded, the applicant would pay the court fees from that amount.²⁰¹ But the risk of being required to pay a significant amount as fees, even before the case is heard, remains. While deterring frivolous litigation is an important policy goal, the same could be achieved, in part at least, by the Tribunal imposing costs under Section 23(2) of the

197. *Ibid.*, rule 12(1). However, if the person filing the compensation claim is below the poverty line, the fee amount is waived

198. MoEF, 'Proposed Modification of Rule Requiring Payment of Court Fees in National Green Tribunal Rules' (24 April 2011) <<http://www.ercindia.org/files/legislations/proposed-mod-ngt-rules.pdf>> accessed 2 April 2017.

199. Nitin Sethi, 'Victims to pay for demanding compensation from polluters' *The Times of India* (21 April 2011) <<http://timesofindia.indiatimes.com/home/environment/pollution/Victims-to-pay-for-demanding-compensation-from-polluters/articleshow/8042532.cms>> accessed 2 April 2017.

200. MoEF (n 198).

201. *Bijay Krishna Sarkar and Ors v. Inland Waterways Authority of India and Ors*, OA No. 3/2015 and MA No. 912/2014, order dated 16 January 2015, NGT (Principal Bench).

NGT Act.²⁰² The upfront payment of 1 per cent court fees seems unnecessary.

Decision-making Process—The NGT Act requires that the Tribunal deal with all cases ‘as expeditiously as possible’ and endeavour to dispose of cases within six months from the date of filing, and after giving all parties an opportunity to be heard.²⁰³ While there is no data on average time taken by the Tribunal to decide a case, anecdotal evidence from conversations with lawyers practicing before the Tribunal reveals that, in comparison to the Supreme Court and High Courts, cases come up for hearing before the Tribunal more frequently and are decided much sooner.

While adjudicating a case, the Tribunal has to apply the principles of sustainable development, precaution and polluter pays,²⁰⁴ and in case of an accident, it has to apply the no-fault liability principle.²⁰⁵ It has the powers of a civil court but is not bound by the procedure laid down by the Code of Civil Procedure 1908 or the rules of evidence contained in the Indian Evidence Act 1872.²⁰⁶ It has the power to regulate its own procedure and has to be guided by the principles of natural justice.²⁰⁷

The Tribunal considers a variety of evidence including expert committee reports and testimonials, media reports, academic work, data provided by parties on affidavit, etc. In certain cases, the Tribunal has adopted a mechanism it calls the ‘Stakeholder Consultative Process in Adjudication’,²⁰⁸ wherein stakeholder

202. See, for example, *Bajinath Prajapati v. MoEF and Ors*, Appeal No. 18/2011, judgment dated 20 January 2012, NGT (Principal Bench); *Vijay Singh v. Balaji Grit Udyog and Ors*, Appeal No. 2/2014, judgment dated 25 April 2014, NGT (Principal Bench).

203. NGT Act s 18(3).

204. *Ibid.*, s 20.

205. *Ibid.*, s 17(3).

206. *Ibid.*, ss 19(1) and (3).

207. *Ibid.*, ss 19(1) and (2).

208. *Indian Council for Enviro-legal Action v. National Ganga River Basin Authority and Ors*, OA No. 10/2015, order dated 18 December 2015, NGT (Principal Bench). See also Gill (n 152) 196.

consultations that involve concerned government agencies, relevant industry associations and others are held, before issuing directions. The Tribunal can award relief in the form of monetary compensation or restitution of environment/property damaged, set aside orders and approvals granted by regulatory authorities, issue interim injunctions, direct reconsideration of decisions, amend conditions to approvals already granted, direct the setting up of committees, etc.

After final judgments are delivered, in some cases the Tribunal continues to oversee the compliance of its directions through a series of hearings and orders similar to the continuing mandamus exercised by the Supreme Court.²⁰⁹ In some cases, the Tribunal directs the setting-up of committees to monitor the implementation of its directions.²¹⁰

The accessibility of the NGT as a grievance redressal forum for environmental cases may be assessed on a range of criteria such as geographical location, procedural and legal requirements in filing and hearing a case, and effectiveness of the adjudicatory process in protecting the environment. Whether the adjudicatory process is effective requires an in-depth analysis of the Tribunal's judgments and their implementation, which is an important area of research, but beyond the scope of this chapter. On other criteria, the Tribunal gets mixed results. The Tribunal's liberal approach to *locus standi*, the legal requirement to dispose of cases as expeditiously as possible and in accordance with principles of natural justice, admissibility of a variety of evidence and a reasonable application fee makes the Tribunal a fairly accessible forum. However, the fact that it functions through five benches makes it geographically

209. See orders in *Almitra H. Patel and Anr v. Union of India and Ors*, OA No. 199/2014, order dated 20 March 2015 and 22 September 2016, NGT (Principal Bench); *Manoj Misra v. Union of India and Ors*, OA No. 06/2012, judgment dated 13 January 2015, NGT (Principal Bench).

210. *Manoj Misra*, *ibid.*; *Puran Chand and Anr v. State of Himachal Pradesh and Ors*, Appeal No. 48(THC)/2012, judgment dated 2 February 2016, NGT (Principal Bench); *Gauri Maulekhi v. Union of India and Ors*, OA No. 486/2014, judgment dated 4 May 2016, NGT (Principal Bench).

less accessible for most parts of the country, and the possibility of having to pay 1 per cent of the compensation claimed, in addition to the adoption of procedures similar to conventional courts could act as a disincentive for litigants.

CONCLUSION

As the discussion in the preceding sections demonstrates, procedural environmental rights in India find expression in a variety of statutory mechanisms. The exercise of these rights, and in particular the right to access the higher judiciary in environmental matters, has contributed greatly to the evolution of India's environmental jurisprudence. Present-day environmental advocacy and litigation benefit significantly from the existence of these rights, and Indian courts, to the extent they have engaged in the interpretation of these rights, have been mostly sympathetic and adopted a liberal approach. But the situation is far from satisfactory. It is important to recognise the limitations in the manner in which each of the three procedural environmental rights is currently defined, and the constraints in effectively enjoying them. The potential of the 'rights language'—to ensure that the denial of these procedural guarantees results in consequences—has hardly been realised.

Of the three rights, the right to access environmental information is perhaps the most well-defined in law. Specific information disclosure requirements under environmental laws are complemented by the RTI Act that is applicable more comprehensively. However, the right to access information is incomplete if understood as accessibility of documents per se. The right must encompass the right of timely access to information, the right to accurate and comprehensible information, and the right to expect transparent governance (in other words, a duty on government agencies to make, or mandate, *suo motu* disclosures).

Timely disclosure of information is crucial to avert environmental problems, and to allow interventions in decision-making processes at the appropriate time. It is not uncommon

for infrastructure and other developmental projects to commence construction without necessary approvals and, when challenged, resort to the *fait accompli* argument.²¹¹ Such actions are abetted by the fact that people are not aware about the illegalities until much later. The right to information is violated if information is obfuscated in any manner, either by providing inaccurate or misleading information, or by providing it in a form or language not commonly understood by those most directly affected/interested. Statutory recognition for some of these concerns²¹² are accompanied by poor compliance mechanisms. Transparency in governance and reduction in information asymmetries across stakeholders needs to be recognised as an important policy goal. Decisions and decision-making processes affecting the country's environment must be opened to public scrutiny actively, and independent of external triggers (like RTI applications). Simultaneously, obfuscation of information has to be disincentivised through adverse regulatory consequences.

On the other hand, of the three rights, the scope to exercise the right to public participation is the most limited—by definition and in practice. With the exception of the EC process, and the settlement of rights process under the Forests Rights Act, people in India have very little say in the manner in which natural resources are utilised or affected. Under the Water Act and Air Act—potentially the most far-reaching national environmental laws—there are very limited opportunities for the public to intervene, by right. Even under the EC process, the public consultation requirements are neither designed nor implemented in a manner that would ensure that people's views are actually taken into account while

211. *Manoj Misra v. Delhi Development Authority and Ors*, OA No. 65/2016, order dated 9 March 2016, NGT (Principal Bench); *Him Privesh Environment Protection Society v. State of Himachal Pradesh* (2012) SCC OnLine HP 2690.

212. For example, under the RTI Act, non-disclosure of information could result in the imposition of a penalty. Under the EIA Notification 2006, applications for EC could be rejected if information provided in the application is found to be false.

conceptualising or operationalising a project. These are treated as regulatory impediments which have to be overcome at least cost, and not as deliberative processes with important stakeholders. Public participation processes must not only be mainstreamed, but must also be carefully designed—inputs taken at a time which can influence the final outcome, stakeholders properly identified, and full disclosure of information relating to the decision.

The recognition of the right to access environmental justice in India benefitted from the rich access to justice jurisprudence and the PIL mechanism that had already developed. But just as environmental cases are excellent examples to study how the Indian judiciary came to adopt an activist avatar, they also demonstrate the limitations of relying on judicial fora for improved environmental outcomes. A constitutional or statutory right to approach a judicial forum is only the first of many steps to secure justice. The right is an empty promise if the forum itself is not accessible, either geographically or due to technical requirements; if the orders of the forum are not implemented in letter and spirit; or if the forum is unable to ensure compliance of its orders.

Procedural environmental rights are certainly on firmer legal foundation than substantive environmental rights in India. But there is hardly any space for complacency as even in their more preferred status, they are being regularly curtailed or denied. While substantive statutory revisions are required to integrate these rights in Indian environmental regulations, the judiciary, in the interim, must protect and uphold these rights even if it means going beyond the strict letter of the law—a jurisdictional crossover they have not hesitated to make in the past.

Part II

THREE

Sustainable Development and Indian Environmental Jurisprudence

SAPTARISHI BANDOPADHYAY*

The notion of sustainable development, first articulated during the early 1970s, has evolved into the dominant paradigm through which states and international institutions understand a plethora of issues at the nexus of economic development and environmental protection. The adoption of this framework signals a profound shift in the way society conceives the natural environment in relation to human activities within it. But sustainable development has also drawn significant controversy pointed towards its lack of specificity, problems with implementation, and its implications for the future of the planet.

*I would like to thank Shibani Ghosh for the invitation to contribute this chapter, and for her consistent support throughout the process. An earlier draft received the attention of my fellow participants at a workshop organised by the Center for Policy Research, New Delhi (December 2013); their thoughtful reviews have done a great deal to improve my work. I am also grateful to Kriti Trehan and Rimi Jain at the Center for Policy Research, New Delhi, for the generous assistance with research. Errors, as usual, are mine.

The major principles housed under this umbrella term, for instance the precautionary principle and polluter pays principle, are the subject of detailed analysis in other chapters in this volume. My primary goal in this chapter is to offer a critical analysis of how sustainable development has evolved as a legal term of art in India, and the array of meanings associated with it. However, since the bulk of Indian environmental jurisprudence related to sustainability has been drawn from international law, I will begin by offering a brief description of the historical evolution of sustainable development in a variety of intergovernmental fora. I may add, the brief history discussed here is by no means a comprehensive survey of sustainable development at the international level. It is offered to contextualise the trajectory of environmental jurisprudence within India.

SUSTAINABLE DEVELOPMENT: A BRIEF HISTORY

In his Separate Opinion in the *Gabčíkovo–Nagymaros* decision, in 1997, Judge Christopher Weeramantry, then vice president of the International Court of Justice (ICJ), surveyed a diversity of beliefs and practices spread across the world to describe sustainability as a historic and globally appreciated ethic.¹ But the stakes underlying sustainable development emerged with the Founex Report,² which was produced in preparation for the Stockholm

1. Separate Opinion of Vice President Weeramantry, *Case Concerning the Gabčíkovo–Nagymaros Project (Hungary/Slovakia)* [1997] ICJ Rep. 7, 88 (*Gabčíkovo–Nagymaros*). See also *In the Arbitration Regarding the Iron Rhine Railway, between the Kingdom of Belgium and the Kingdom of the Netherlands* (2005) XXVII RIAA 35, para 59.

2. Preparatory Committee for the United Nations Conference on the Human Environment, ‘The Founex Report on Development and Environment—1971’ (4–12 June 1971) (Founex Report), para 5.1; see also UN General Assembly (UNGA) Res. 1831 (XVII) ‘Economic Development and the Conservation of Nature’ (18 December 1962) UN Doc A/RES/1831 (XVII).

Conference,³ initially proposed by the Swedish government in 1968. The Founex Conference was meant to serve as a forum to record the struggles of developing countries trying to balance economic development and ecological health. At the centre of the disagreement between northern and southern governments was a difference in how each group conceptualised the 'environment'. For developed countries calling for a dialogue, environmental protection was centred on the degradation of the planet's physical environment (for example, air and water pollution). Representatives of the developing world, on the other hand, could not imagine conceptualising such physical degradation without emphasising its relationship to human (developmental) concerns.⁴ While this difference reflected the unique struggles of each group, it was also informed by the ideological divide that characterised the Cold War era. Faced with the likelihood that the United Nations would fail to gather enough political support to realise a global conversation at Stockholm, the UN under-secretary for environmental affairs, Maurice Strong, proposed an agenda that fused environmental protection and developmental concerns under the umbrella

3. UN Conference on the Human Environment, 'Declaration of the United Nations Conference on the Human Environment' (16 June 1972) UN Doc A/Conf.48/14/Rev. 1, 3, reprinted in 11 ILM 1416 (1972) (Stockholm Declaration).

4. For instance, the Algerian government's response to conversations at the Founex Conference:

But what would be the use of restoring nature in a world where man remained oppressed? What would be the use of conserving natural resources in a world dominated by economic inequality and social injustice? What could be the use of a newly viable environment if the majority of human societies continued to have no say in the major decisions that govern the world and to be subject to arrangements and compromises concluded over their heads?

Statements by Head of Delegations: Algeria, in Mostfa Kamal Tolba (ed) *Evolving Environmental Perceptions: From Stockholm to Nairobi* (Butterworths 1988) 114.

concept, 'ecodevelopment',⁵ which would eventually develop into 'sustainable development'. While the notion of ecodevelopment was far from universally accepted, the Founex Report expressly incorporated its central tenets, identifying northern and southern concerns as distinct yet on par, and garnered enough support to facilitate a future conversation in Stockholm.⁶

The 1972 Stockholm Conference

In 1972, when states convened at the United Nations Conference on the Human Environment (Stockholm Conference), international environmental law was still nascent, and participants were keen to retain sovereign control over their natural resources.⁷ This tension is reflected in Principle 21 of the resulting Stockholm Declaration,⁸ which established a definitive trend in environmental

5. Anne E. Egelston, *Sustainable Development: A History* (Springer 2013) 62, citing Strong's autobiography, M. Strong, *Where on Earth Are We Going* (Alfred A. Knopf 2000).

6. Founex Report (n 2), para 1.4, which notes:

... [t]he major environmental problems of developing countries are essentially of a different kind. They are predominantly problems that reflect the poverty and very lack of development of their societies. They are problems, in other words, of both rural and urban poverty. In both the towns and in the countryside, not merely the 'quality of life,' but life itself is endangered by poor water, housing, sanitation and nutrition, by sickness and disease and by natural disasters. These are problems, no less than those of industrial pollution, that clamor for attention in the context of the concern with human environment. They are problems which affect the greater mass of mankind.

7. Philippe Sands, *Principles of International Environmental Law* (CUP 2003) 237; Ved P. Nanda and George Pring, *International Environmental Law and Policy for the 21st Century* (Transnational Publishers 2004) 39.

8. Stockholm Declaration (n 3), Principle 21 states:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to

agreements whereby the first clause of the text pays homage to state sovereignty, while the second develops a major exception with respect to the transboundary impacts of domestic activities.⁹ In addition, developing countries vociferously defended their right to growth and development,¹⁰ to the extent that, at moments, the larger discussions seemed in jeopardy.¹¹ Principle 11 of the resulting Stockholm Declaration accommodates these demands, stating that ‘environmental policies of all States should enhance and not adversely affect the present or future development potential of developing countries’.¹² Accordingly, the Conference did not take a position on structural issues perpetuated by poorly conceived land use or resource distribution, and resolutely avoided debating the value of large-scale infrastructure projects (such as dams),

exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

9. International Law Commission (ILC), ‘Draft Articles on Prevention of Transboundary Harm from Hazardous Activities’ in *Report of the International Law Commission on the Work of Its Fifty-third Session* (2001) UN Doc A/56/10, preamble. The ICJ has acknowledged the Principle 21 dichotomy as part of international custom. See *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 226, para 27; dissenting opinions of Judge Weeramantry, Judge Koroma and Ad Hoc Judge Palmer, in *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court’s Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v. France) Case* (1995) ICJ Rep. 288 at 317, 347; 363, 378; and 381, 408, respectively.

10. UN Environment Programme, ‘Stockholm 1972—Brief Summary of the General Debate’ <<http://hqweb.unep.org/Documents.Multilingual/Default.Print.asp?DocumentID=97&ArticleID=1497&l=en>> accessed 21 March 2017.

11. Nanda and Pring (n 7) 24.

12. Stockholm Declaration (n 3), Principle 11.

which developing nations believed to be crucial to their goals of industrialisation and modernisation.¹³

The Stockholm Declaration was decisively statist,¹⁴ and even two decades later the Rio Declaration on Environment and Development (Rio Declaration), was ‘unable to improve significantly upon, develop, or scale back or otherwise alter the language in adopting Principle 21’.¹⁵ (India’s National Conservation Strategy and Policy Statement on Environment and Development reflected the resulting *status quo*.¹⁶)

Nevertheless, the Stockholm Conference was significant for its focus on environmental issues. Pursuing the needs identified by the Founex Report, the Stockholm Declaration while committed to state sovereignty,¹⁷ focussed on strategies to integrate intergovernmental actions related to economic and social justice, as

13. Anne Thompson Feraru, ‘Environmental Actors’ in Kenneth A. Dahlberg *et al.* (eds) *Environment and the Global Arena Actors: Values, Policies and Futures* (Duke University Press 1985) 43.

14. One instance of this is found by contrasting the language of Stockholm Declaration (n 3), Principle 23, with Rio Declaration, Principle 11; Stockholm claims that it is ‘essential in all cases to consider the systems of values prevailing in each country’ and ‘the extent of the applicability of standards’, but Rio limits itself to ‘standards ... should reflect the environmental and developmental context’. UN Conference on Environment and Development (UNCED), ‘Rio Declaration on Environment and Development’ (14 June 1992) UN Doc A/CONF. 151/26 (Vol. I) Resolution 1, Annex I, reprinted in 31 ILM 874 (1992) (Rio Declaration).

15. Sands (n 7) 236.

16. See Ministry of Environment and Forests, Government of India, National Conservation Strategy and Policy Statement on Environment and Development (1992) <<http://moef.nic.in/downloads/about-the-ministry/introduction-csps.pdf>> accessed 21 March 2017, para 7.3: ‘The Indian approach to global environmental problems is generally in keeping with other developing countries and has the following basic elements: Our economic development cannot be hampered in the name of the global environment, which we have done nothing to damage and can do little to save ...’.

17. Stockholm Declaration (n 3), Principle 23.

well as environmental protection concerns.¹⁸ But the Declaration did not explicitly mention sustainable development.

Soon after, in October 1974, a collaboration between the United Nations Council on Trade and Development (UNCTAD) and the United Nations Environment Programme (UNEP) produced an important Symposium on Patterns of Resource Use, Environment and Development Strategies in Cocoyoc, Mexico. Significantly, the conversation in Cocoyoc fulfilled the initial goal of the Founex Conference, which had begun as a forum for highlighting the concerns of developing countries, but concluded with a détente that presented the problems of the developed and developing world as different but equally valuable in conversations about the global environment. The resulting Cocoyoc Declaration,¹⁹ on the developing world's perspective on the issue of environmental protection, broadened the conception of ecodevelopment while also orienting it towards human (developmental) issues. Accordingly, the conversation shifted from focussing on industrialisation and consumption patterns to social justice issues, such as access to food, shelter, medicine and education.²⁰ Over the next two decades, environmental protection issues were often addressed outside the auspices of the UN,²¹ but the elaboration of ecodevelopment in Cocoyoc dramatically reshaped the next major global conversation.

The 1987 Brundtland Commission Report

In 1980, the International Union for Conservation of Nature and Natural Resources (IUCN), as part of its World Conservation

18. The Stockholm Declaration resulted in UNGA Res. 2997(XXVII) 'Institutional and Financial Arrangements for International Environmental Cooperation' (15 December 1972) UN Doc A/RES/27/2997, establishing the United Nations Environmental Protection (UNEP).

19. 'The Declaration of Cocoyoc' (1975) 3(2 and 3) *World Development* 141.

20. Egelston (n 5) 75.

21. *Ibid.*, 73–84.

Strategy, inaugurated the term sustainable development.²² The Strategy was aimed at ‘the integration of conservation and development to ensure that modifications to the planet do indeed secure the survival and well-being of all people’.²³ Three years later, Gro Harlem Brundtland, the then prime minister of Norway, accepted the chair of the United Nations World Commission on Environment and Development (Brundtland Commission), charged with developing cooperative solutions to the deadlock between conservation and development.²⁴

The Brundtland Commission’s report, *Our Common Future*, recognised that ‘[e]nvironment and development are not separate challenges; they are inexorably linked’.²⁵ The report recast ecological, development, and energy crises as one and the same, noting that ‘[e]cology and economy are becoming ever more interwoven locally, regionally, nationally, and globally into a seamless net of causes and effects’.²⁶ The report focussed on *needs* and interpreted sustainable development as the kind of development that ‘meets the needs of the present without compromising the ability of future generations to meet their own needs’.²⁷ Moving beyond the traditional discourse on environmental issues, the Commission acknowledged the need for ‘equitable opportunities for all’, emphasising that ‘[i]t is therefore futile to attempt to deal with environmental problems without a broader perspective that encompasses the factors underlying world poverty and international inequality’.²⁸

22. International Union for Conservation of Nature and Natural Resources (IUCN), *World Conservation Strategy: Living Resource Conservation for Sustainable Development* (IUCN 1980).

23. *Ibid.*, Section 1, para 12.

24. World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future* (OUP 1987) Chairman’s Foreword. The pages cited here correspond to the online version available at <<http://www.un-documents.net/our-common-future.pdf>> accessed 31 March 2017.

25. *Ibid.*, 36.

26. *Ibid.*, 14.

27. *Ibid.*, 16.

28. *Ibid.*, 12.

The Brundtland Report reflected a fundamental shift in the values underlying environmental governance globally, and its interpretation of sustainable development remains the most widely accepted.²⁹ However, ecological management initiatives globally continue to arise within the context of economic investment agendas.³⁰ Against this background, a narrow but plausible reading of the Commission's definition of sustainable development could conclude that it is acceptable for humans to continue to regulate the destruction of life-forms and entire ecosystems globally, so long as they do not irreversibly endanger the fulfillment of human needs as they may be determined in the future.³¹ The Brundtland Report also clarifies that 'limits' are not absolute but constructed by the interaction of the 'present state of technology and social organization on environmental resources', and 'the ability of the biosphere to absorb the effects of human activities'.³² Through such concessions, the Report affirmed the goal of achieving economic growth through technological innovation, while leaving ambiguous the relationship between these future technologies and the environment.

The 1992 UN Conference on Environment and Development and Resulting Instruments

In 1992, the UN organised a Conference on Environment and Development (UNCED) in Rio de Janeiro (popularised as the

29. Gerhard Loibl, 'The Evolving Regime on Climate Change and Sustainable Development' in N. Schrijver and F. Weiss (eds) *International Law and Sustainable Development: Principles and Practice* (Martinus Nijhoff Publishers 2004) 97; Andreas F. Lowenfeld, *International Economic Law* (OUP 2002) 379.

30. Lester R. Brown, *Eco-Economy: Building an Economy for the Earth* (W.W. Norton and Co. 2001) 78.

31. Alan Drenghon and Bill Devall (eds) *Ecology of Wisdom: Writings by Arne Naess* (Counterpoint Press 2008) 297.

32. Our Common Future (n 24) 16.

‘Earth Summit’). By this time, the focus of intergovernmental negotiations had shifted from the ‘Human Environment’ (Stockholm Declaration) to ‘Environment and Development’—reflecting the ecodevelopment conversations at Cocoyoc and beyond. At UNCED, representatives of 172 governments arrived at a consensus on sustainable development as the appropriate paradigm within which to locate their respective economic development efforts; and adopted the five resulting instruments.

The resulting Rio Declaration was formulated as a package deal of 27 principles, of which Principle 3 explicitly incorporated the Brundtland Report’s understanding of sustainable development, while Principle 4 squarely conveyed the new *status quo*, stating: ‘In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.’³³

The Rio Declaration has been hailed as a foundational document of contemporary environmental law, and referenced by a number of international dispute resolution tribunals.³⁴ However, the Declaration has also inspired an abundance of mixed emotions—for instance, some scholars argue that while the Stockholm Declaration was explicitly focussed on human needs,³⁵ the Rio Conference was far more ecofriendly, and the resulting Declaration displayed a greater equity between environmental protection and economic development.³⁶ Others understand the Rio Declaration as following up on the Stockholm Declaration with a new, Brundtland Commission–inspired approach—focussing on sustainable development as a form of reconciliation between

33. Rio Declaration (n 14), Principle 4.

34. *Gabčíkovo–Nagyymaros* (n 1); *Nuclear Weapons* (n 9).

35. For instance, the Brundtland Commission acknowledged how the ‘1972 UN Conference on the Human Environment brought the industrialized and developing nations together to delineate the “rights” of the human family to a healthy and productive environment’. Our Common Future (n 24) 6.

36. Alexander Kiss and Dinah Shelton, *International Environmental Law* (2nd edition, Transnational Publishers 1994) 67.

environmental protection and developmental interests.³⁷ This reconciliation, however, is not necessarily neutral. Specifically, scholars have argued that Principle 1—‘[h]uman beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature’—shows the Rio Declaration to be clearly anthropocentric in its ideals.³⁸ Support for this position is found by a reading of Principle 4 which requires that environmental protection be an ‘integral part of the development process’, and not the other way around.

Similarly, Principle 12 of the Rio Declaration ties responses to the ‘problems of environmental degradation’ to the promotion of ‘a supportive and open international economic system that would lead to economic growth and sustainable development’. The danger in this arrangement is that over time the paradigm of sustainable development may absorb environmental concerns into its calculus of economic growth,³⁹ thereby making environmental protection decisions progressively dependent on the economic obligations of states.⁴⁰ Commentators have also noted that compared to Stockholm Declaration, the Rio Declaration is less statist and incorporates stronger language, making its principles obligatory.⁴¹ Nevertheless, critics argue that the document’s terms allow states tremendous leeway in terms of implementation.⁴² It merits noting that the Rio Declaration itself is not binding.

37. Marie-Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices and Prospects* (OUP 2004) 20.

38. *Ibid.*

39. For a close parallel, with respect to the economic development of developing countries, Gilbert Rist, *The Theory of Development: From Western Origins to Global Faith* (Zed Books 1997) 140–50.

40. Saptarishi Bandopadhyay, ‘An Other History of Knowledge and Decision in Precautionary Approaches to Sustainability’ (2014) 25(3) *Fordham Environmental Law Review* 552.

41. Alan Boyle and David Freestone (eds) *International Law and Sustainable Development* (OUP 1999) 3.

42. Nanda and Pring (n 7) 22–27, 39.

Finally, some scholars feel that the Rio Declaration reflects the progressive codification of international norms related to the environment;⁴³ while for others the document represents a merging of legal regimes (environmental and economic) and the creation of a hybrid regime of sustainable development.⁴⁴ The corresponding critical review describes the document as ‘a text of uneasy compromises, delicately balanced interests, and dimly discernible contradictions, held together by the interpretive vagueness of classic UN-ese’.⁴⁵ These uneasy compromises are visible across the content of the various principles which must be read together.⁴⁶ Accordingly, scholars generally acknowledge that the Rio Declaration is more a ‘system of environmental international law’, than ‘simply more international law rules about the environment’.⁴⁷

The UNCED also produced the binding United Nations Framework Convention on Climate Change (UNFCCC), dedicated to checking the spread of greenhouse gases, which explicitly incorporates sustainable development as one of the

43. Alan Boyle, ‘Codification of International Environmental Law and the International Law Commission: Injurious Consequences Revisited’ in Boyle and Freestone (n 41) 61.

44. Philippe Sands, ‘International Law in the Field of Sustainable Development’ (1995) 65(1) *British Yearbook of International Law* 303.

45. Ileana Porras, ‘The Rio Declaration: A New Basis for International Cooperation’ in Philippe Sands, *Greening International Law* (Earthscan 1993) 20.

46. For instance, Boyle and Freestone understand some elements of the Rio Declaration, such as ‘Principle 4 (integration of environmental protection and development), 10 (public participation), 15 (the precautionary approach), and 17 (environmental impact assessment)’, as reflecting the interests of developed states. Developing countries on the other hand strongly supported other elements such as ‘Principle 3 (right to development), Principles 6 and 7 (special needs of developing States and common but differentiated responsibility), and Principles 5 and 9 (poverty alleviation and capacity building)’. Boyle and Freestone (n 41) 3–4.

47. David Freestone, ‘The Road from Rio: International Environmental Law after the Earth Summit’ (1994) 6(2) *Journal of Environmental Law* 193, 218.

guiding principles;⁴⁸ Agenda 21,⁴⁹ a non-binding plan to ‘create a global partnership for sustainable development’,⁵⁰ that inspired the United Nations Commission for Sustainable Development; the binding Convention on Biological Diversity (CBD);⁵¹ and the Statement of Principles on Forests.⁵²

The Post-Rio Status Quo

Following the UNCED, many states altered their laws to reflect their commitment to sustainable development.⁵³ At the

48. United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107, Article 3.

49. Report of the United Nations Conference on Environment and Development, 3–14 June 1992 (12 August 1992) UN Doc A/CONF/151/26 (Vol I) Resolution 1, Annex II: Agenda 21; reprinted in 31 ILM 874 (1992). For a brief review of Agenda 21, Segger and Khalfan (n 37) 21–22.

50. Alexander Yankov, ‘The Law of the Sea Convention and Agenda 21: Marine Environmental Implications’ in Boyle and Freestone (n 41) 271; Thomas A. Mensah, ‘The International Legal Regime for the Protection and Preservation of the Marine Environment from Land-based Sources of Pollution’ in Boyle and Freestone (n 41) 297.

51. Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79; reprinted in 31 ILM 818 (1992).

52. Report of the United Nations Conference on Environment and Development, 3–14 June 1992 (14 August 1992) UN Doc A/CONF.151/26 (Vol III) Resolution 1, Annex III: Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests.

53. For example, Department of Environment and Energy, Government of Australia, National Strategy for Ecologically Sustainable Development 1992; Ministry of Environment and Forests, Government of India, National Environment Policy 2006; Ministry of Environment and Forests, Government of India, Environmental Action Plan 1993; various decisions of the Indian Supreme Court; Government of China, National Agenda 21—White Paper on China’s Population, Environment, and Development in

intergovernmental level, there was a conscious effort to establish sustainable development as the dominant context for integrating environmental protection concerns and economic development interests.⁵⁴ In 1997, the ICJ acknowledged the ‘need to reconcile

the 21st Century 1994; President’s Council on Sustainable Development, USA, Sustainable America—A New Consensus for Prosperity, Opportunity and a Healthy Environment 1996; European Community, Towards Sustainability: The European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development 1972, COM (92) 23 final, Vol. II; Canadian Environmental Protection Act 1999, Chapter 33; World Summit on Sustainable Development (WSSD), ‘Letter dated 6 August 2002 from the Permanent Representative of Bangladesh to the United Nations and the Chargé d’affaires a.i. of the Permanent Mission of the Netherlands to the United Nations addressed to the Secretary-General of the United Nations’ (9 August 2002) UN Doc A/CONF.199/8, Annex; ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development; WSSD, Report of the World Summit on Sustainable Development (26 August–4 September 2002) UN Doc A/CONF.199/20, Chapter 1, Resolution 1, Annex: Johannesburg Declaration on Sustainable Development (Johannesburg Declaration).

54. UNGA A/Res. 55/2, ‘United Nations Millennium Declaration’ (18 September 2000) UN Doc A/RES/55/2 I, para 6; Agreement Establishing the World Trade Organization (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 154 (Marrakech Agreement), preambular para 1; North American Free Trade Agreement (adopted 17 December 1992, entered into force 1 January 1994) 32 ILM 289, 605 (1993); WSSD, Report of the World Summit for Social Development (6–12 March 1995) (19 April 1995) UN Doc A/CONF.166/9, Chapter 1, Resolution 1: Copenhagen Declaration on Social Development, para 6; Steve Charnovitz, ‘The World Trade Organization and the Environment’ (1998) 8 *Yearbook of International Environmental Law* 98; Global Environment Facility (GEF), ‘Mainstreaming the Global Environment in World Bank Operations’ (1 October 1998) GEF/C.12/6; GEF, ‘Mainstreaming the Global Environmental Issues: Report of the UNDP to the GEF Council’ (14 September 1998) GEF/C.12/4; Jessica Howley, ‘The Gabčíkovo–Nagymaros Case: The Influence of the International Court of Justice on the Law of Sustainable Development’ (2009) 2(1) *Queensland Student Law Journal* 1, 8–11.

economic development with protection of the environment [which] is aptly expressed in the concept of sustainable development'.⁵⁵ Even earlier, Judge Weeramantry seemed to accept the importance of sustainable development when, in his Dissenting Opinion in the Nuclear Tests case, he noted the growing acceptance of the precautionary principle by quoting, approvingly, its inclusion in the Bergen Ministerial Declaration on Sustainable Development in the Economic Commission for Europe (ECE) region.⁵⁶ The majority decision in the *Gabčíkovo–Nagymaros* case (which broadly sketches the logic of sustainable development), read together with Judge Weeramantry's Separate Opinion (endorsing the sustainable development as an 'integral part of modern international law'),⁵⁷ gives the distinct sense that the ICJ endorses sustainable development without attending to specifics. Sustainable development has also been recognised by the Dispute Resolution Body of the World Trade Organisation (WTO-DSB).⁵⁸

At the outset of the twenty-first century, then, neither states nor commentators were able to agree on the meaning of sustainable development across different disciplines, nor limit the scope of how

55. *Gabčíkovo–Nagymaros* (n 1), para 140. For an analysis see Rosalyn Higgins, 'Natural Resources in the Case Law of the International Court' in Boyle and Freestone (n 41) 87.

56. *Request for an Examination* (n 9) 342. On the evolution of the precautionary principle, World Trade Organisation (WTO), *EC Measures Concerning Meat and Meat Products—Report of the Appellate Body* (16 January 1998) WT/DS48/AB/R (AB-1997-4); *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan)* (Provisional Measures, Order of 27 August 1999) <www.itlos.org/fileadmin/itlos/documents/cases/case_no_3_4/Order.27.08.99.E.pdf> accessed 4 April 2017, para 77.

57. Separate Opinion of Vice President Weeramantry, in *Gabčíkovo–Nagymaros* (n 1) 86.

58. In 1998, the Appellate Body of WTO-DSB incorporated sustainable development into its interpretation of Article XX(g) of the General Agreement on Tariffs and Trade, WTO, *United States—Import Prohibition of Certain Shrimp and Shrimp Products—Report of the Appellate Body* (12 October 1998) WT/DS58/AB/R, adopted by the WTO-DSB on 6 November 1998.

sustainability may be pursued in practice.⁵⁹ Sustainable development was variously understood as a ‘group of congruent norms’,⁶⁰ or as ‘a system’⁶¹ which functioned at the nexus of economic development, environmental protection and social concerns, as an attempt to reconcile these interests. It was also apparent that while states valued the aspirations and rhetoric underlying sustainability, they were unlikely to accept sustainable development as a binding principle of customary international law.⁶²

The Millennium Declaration and Beyond

In September 2000, the UN hosted a historic meeting of world leaders in New York. The resulting Millennium Declaration⁶³ and the corresponding Millennium Development Goals (MDGs) were designed to establish a set of target-specific goals that governments would commit to achieving by 2015. The focus of these goals was poverty and the possibility of allowing developing nations access to the funds and expertise of international financial institutions like the World Bank and International Monetary Fund (IMF). Noticeably, the goal of environmental sustainability was by now being directly linked with wider developmental goals, such as poverty alleviation, healthcare, education, social empowerment, and child mortality. (Despite some successes at the end of the first decade, World Bank

59. R. Ciegis, J. Ramanauskiene and B. Martinkus, ‘The Concept of Sustainable Development and its Uses for Sustainability Scenarios’ (2009) 62(2) *Engineering Economics* 28.

60. Vaughan Lowe, ‘Sustainable Development and Unsustainable Arguments’ in Boyle and Freestone (n 41) 19, 26.

61. Freestone (n 47) 218.

62. See, for example, Daniel Barstow Magraw and Lisa D. Hawke, ‘Sustainable Development’, in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 613, 623–25; Lowe (n 60).

63. United Nations Millennium Declaration (n 54).

and IMF stressed that many developing countries were struggling to meet their targets by 2015.)⁶⁴

In 2002, to mark the passing of a decade since the Earth Summit, the UN hosted the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. The conference produced the Johannesburg Declaration and a Plan of Implementation of the World Summit on Sustainable Development.⁶⁵ Following in the footsteps of the MDGs, this document formally acknowledged the social side of environmental degradation, recognising ‘that poverty eradication, changing consumption and production patterns and protecting and managing the natural resource base for economic and social development are overarching objectives of and essential requirements for sustainable development’.⁶⁶ Accordingly, they situated economic development, social development, and environmental protection as the ‘interdependent and mutually reinforcing pillars of sustainable development’, and stressed that these pillars would have to be strengthened at the ‘local, national, regional and global levels’.⁶⁷ But the United States refused to participate at the meeting, significantly weakening the document’s impact.

A decade after WSSD, the UN returned to Brazil to host the Rio+20 Conference on Sustainable Development and renewed its commitment to global sustainability under the aspiration of a global ‘Green Economy’. This term, like sustainable development,

64. See, for example, World Bank and International Monetary Fund (IMF), ‘Global Monitoring Report: The MDGs after the Crisis’ (2010) <<https://www.imf.org/external/pubs/ft/gmr/2010/eng/gmr.pdf>> accessed 21 March 2017; IMF and World Bank, ‘A Review of Some Aspects of the Low-income Country Debt Sustainability Framework’ (5 August 2009) <<https://www.imf.org/external/np/pp/eng/2009/080509a.pdf>> accessed 21 March 2017.

65. WSSD, Report of the World Summit on Sustainable Development (n 53), Chapter 1, Resolution 2, Annex: Plan of Implementation of the World Summit on Sustainable Development.

66. Johannesburg Declaration (n 52), para 11.

67. *Ibid.*, para 5.

has proven controversial for lack of a specific definition, the emergence of parallel terms such as ‘green growth’, ‘low carbon development’, ‘sustainable economy’ and ‘steady-state economy’, as well as little clarity about the kinds of measures and protocols that would count as contributing towards such an economy.⁶⁸ Nevertheless, in 2015, the UN continued to pursue this trajectory by developing the aspirations of such an economy into a set of 17 sustainable development goals (SDGs) to be implemented by the member states by 2030.⁶⁹

Critical Notes

While legal agreements struggle to pin down a working definition of sustainable development, they often underplay how this reconciliation proceeds by facilitating moral and political decisions that cannot be settled by scientific data. Urging careful critique, some scholars are troubled by how ‘dangerously successful’ sustainable development has been, because of the ‘uncritical accumulation of meanings, often contradictory and impractical’, that have characterised its globalisation.⁷⁰ They have also acknowledged that ‘a buzzword such as “sustainability” has a long history of power and exclusion’.⁷¹

68. Sustainable Development Knowledge Platform, ‘Green Economy’ <<https://sustainabledevelopment.un.org/topics/greeneconomy>> accessed 21 March 2017.

69. Sustainable Development Knowledge Platform, ‘Sustainable Development Goals’ <<https://sustainabledevelopment.un.org/sdgs>> accessed 21 March 2017.

70. Timothy O’Riordan and Andrew Jordan, ‘The Precautionary Principle in Contemporary Environmental Politics’ (1995) 4(3) *Environmental Values* 191, 192.

71. Bernhard Gissibl, ‘Forum: The Nature of German Environmental History’ (2009) 27(1) *German History* 113, 130.

With the rising popularity of ecogovernance, monikers such as ‘integrated outcome’⁷² have conveyed the faith in a natural compatibility between environmental protection and economic growth, which may be arrived at through standardised techno-scientific practices.⁷³ The resulting paradigm, often characterised by cultural rationalisation⁷⁴ and a policy-of-finding-compatibility,⁷⁵ involves a series of moral and political choices that may be *certified* as objectively sustainable or not.⁷⁶ Sustainable development is the label under which this paradigm and its underlying assumptions have globalised.

SUSTAINABLE DEVELOPMENT IN INDIA: THE INCORPORATION PROCESS

Sustainability formally entered Indian planning policy through the Sixth Five Year Plan (1980–85) which included a chapter on ‘Environment and Development’. The Plan emphasised the need to focus on ecological preservation and the use of sound scientific knowledge with respect to the administration of a diverse set of activities, from land use and agriculture, to fisheries and mining.

72. Michael Kerr and Marie-Claire Cordonier Segger, ‘Corporate Social Responsibility: International Strategies and Regimes’ in Marie-Claire Cordonier Segger and Christopher Gregory Weeramantry (eds) *Sustainable Justice: Reconciling Economic, Social and Environmental Law* (Martinus Nijhoff Publishers 2005) 135.

73. Timothy W. Luke, ‘Sustainable Development as a Power/Knowledge System: The Problem of “Governmentality”’ in Frank Fischer and Michael Black (eds) *Greening Environmental Policy: The Politics of a Sustainable Future* (Paul Chapman Publishing 1995) 21, 26.

74. Duncan Kennedy, ‘The Role of Law in Economic Thought: Essays on the Fetishism of Commodities’ (1985) 34 *The American University Law Review* 939, 969–70.

75. Luke (n 73) 22–23.

76. Bandopadhyay (n 40) 572–75, 581–82, and *passim*.

O. P. Dwivedi has described the onset of this trend as ‘alarmist’,⁷⁷ but his description offers an accurate sense of the significant shift in the Indian government’s thinking on environmental governance during this time. The Seventh Five Year Plan (1985–90) followed this trend by foregrounding the importance of cooperation between government and civil society in countering environmental degradation, and promoting developmental activities that integrate concerns for ecological harmony. Since then, the Indian government has regularly recognised sustainability as the basis for future developmental goals.⁷⁸

During this period, the Indian Supreme Court began to develop a reputation for being an activist institution,⁷⁹ claiming a leading role in environmental guardianship in India.⁸⁰ The Court’s initial forays into environmental jurisprudence began when it was called on to settle disputes related to the termination of mining leases, signaling the end of a wave of national development projects instituted with scant regard for environmental concerns. Initially, in 1985, the judges reasoned that mining operations could be allowed to a limited extent since they affected both economic and security interests of the government. The accompanying compromise

77. O. P. Dwivedi, ‘India’s Environmental Policies, Programme and Stewardship’, quoted in Shyam Divan and Armin Rosencranz, *Environmental Law and Policy in India* (2nd edition, OUP 2001) 33, 34.

78. National Conservation Strategy and Policy Statement of Environment and Development 1992 (n 16), paras 1.1 and 1.3; National Forest Policy 1988, paras 1.1 and 3.4. Sustainability is also an oft-invoked touchstone in the National Environment Policy 2006 <<http://www.moef.gov.in/sites/default/files/introduction-nep2006e.pdf>> accessed 27 April 2017; the Draft National Forest Policy 2016 <<http://www.indiaenvironmentportal.org.in/files/file/Draft%20National%20Forest%20Policy,%202016.pdf>> accessed 27 April 2017.

79. Upendra Baxi, ‘The Avatars of Indian Judicial Activism: Explorations in the Geographies of [In]justice’ in S. K. Verma *et al.* (eds) *Fifty Years of the Indian Supreme Court, its Grasp and Reach* (OUP 2000) 156.

80. C. L’Heureux-Dubé, ‘Human Rights: A Worldwide Dialogue’ in B. N. Kirpal *et al.* (eds) *Supreme But Not Infallible: Essays in Honour of the Supreme Court of India* (OUP 2000) 214, 223.

required that the government oversee the operations and produce documentation accounting for the ensuing ecological harm.⁸¹

In time, the Court adopted a far stricter position, as, over a series of decisions, it all but halted mining operations across the country.⁸² A major step in this direction was the Supreme Court's proclamation that the constitutional mandate for the protection of life and personal liberty, under Article 21 of the Constitution, included the right of citizens to live in a pollution-free environment,⁸³ as well as the right to development.⁸⁴ Simultaneously, lower courts eagerly adopted the Supreme Court's tenor and reliance on proportionality analysis. For instance, in *Kinkri Devi*, the Himachal Pradesh High Court insisted that if the central and state governments failed to take the long-term view and 'strike a just balance between the tapping of the natural resources ... and the preservation and protection of the ecology', as the Supreme Court had directed, their actions would amount

81. *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1985) 2 SCC 431.

82. *Ambika Quarry Works v. State of Gujarat* (1987) 1 SCC 213; *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1989) Supp (1) SCC 504; *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1989) Supp (1) SCC 537.

83. Much has been written on this development. A few instances will suffice here: *Rural Litigation Kendra* (n 81); *Subhash Kumar v. State of Bihar* (1991) 1 SCC 598, para 7; *Virender Gaur v. State of Haryana and Ors* (1995) 2 SCC 577, para 7. For commentary, Divan and Rosencranz (n 77) 49–57; Geetanjoy Sahu, 'Implications of Indian Supreme Court's Innovations for Environmental Jurisprudence' (2008) 4(1) *Law Environment and Development Journal* 1, 8–9; Lavanya Rajamani, 'The Right to Environmental Protection in India: Many a Slip between the Cup and the Lip?' (2007) 16(3) *Review of European Community and International Environmental Law* 274.

84. For a review of the Indian Supreme Court decisions expanding the scope of Article 21 to include a variety of entitlements and capabilities generally associated with socioeconomic development, see S. Radhakrishnan, 'Development of Human Rights in an Indian Context' (2008) 36(2) *International Journal of Legal Information* 303–31.

to a violation of the fundamental rights conferred by Article 14 and 21 of the Constitution.⁸⁵ In 2000, Justice Bharucha used his minority opinion in *Narmada* to summarise the underlying shift in values and referred to the Guidelines for Environmental Impact Assessment of River Valley Projects issued by the Government in 1985, which stated:

Concern for environmental pollution is rather a recent phenomenon which has been triggered mainly by the backlash effect of accelerated industrial growth in the developed countries. The two major criteria—the project should maximise economic returns and it should be technically feasible—are no longer considered adequate to decide the desirability or even the viability of the project. It is now widely recognised that the development effort may frequently produce not only sought for benefits, but other—often unanticipated—undesirable consequences as well which may nullify the socio-economic benefits for which the project is designed.⁸⁶

Over the years, the Supreme Court's interpretation of sustainable development has been dramatically open-ended.⁸⁷ For instance, in its

85. *Kinkri Devi and Anr v. State of Himachal Pradesh and Ors* (1987) SCC OnLine HP 7, para 8, where the High Court hewed closely to the Supreme Court's reasoning in *Rural Litigation Kendra* (n 81). The judges in *Kinkri Devi* approvingly quoted a statement by Justice Amarandra Nath Sen (who had presided over the *Rural Litigation Kendra* dispute), just prior to his retirement, outlining his commitment:

Industrial development is necessary for economic growth of the country in the larger interests of the nation. If, however, industrial growth is sought to be achieved by haphazard and reckless working of the mines resulting in loss of life, loss of, property, loss of basic amenities like supply of water and creation of ecological imbalance there may ultimately be no real economic growth and no real prosperity. It is necessary to strike a proper balance.

See *Kinkri Devi*, para 7.

86. *Narmada Bachao Andolan v. Union of India* (2000) 10 SCC 664, para 258.

87. Sahu (n 83) 10–19; Florent Pelsy, 'The Blue Lady Case and the International Issue of Ship Dismantling' (2008) 4(2) *Law, Environment and*

decision on the relocation of Asiatic Lions, the Court acknowledged that sustainable development, a narrative that the Supreme Court has often portrayed as reflecting ecocentrism, 'clearly postulates an anthropocentric bias, least concerned with the rights of other species'.⁸⁸ The judges proceeded to criticise anthropocentrism as marked by 'human interest focused thinking that [the] non-human has only instrumental value to humans ... humans take [automatic] precedence and human responsibilities to non-human[s] are based on benefits to humans'.⁸⁹ And yet, in a 2013 decision involving a dispute over the operationalisation of a nuclear power plant in Kudankulam, the Court held: 'Sustainable Development and CSR [corporate social responsibility] are inseparable twins ... not merely human-centric, but ecocentric'.⁹⁰

Sustainable development understood purely in terms of such contradictions is liable to be found meaningless. But, the globalisation of this concept, and its widespread use in Indian environmental governance, warns against such an easy presumption of redundancy. In order to make sense of the judiciary's interpretations, sustainable development must not simply be understood as a legal principle, but rather as a paradigm within which judges repeatedly reorganise competing interests through moral and political choices rationalised by legal argument. The meaning afforded to sustainable development, therefore, is inextricable from the process of dispute resolution through which political actors, like the judiciary, with unique motivations

Development Journal 135; A. Srinivas, 'Polluting Units and Delhi Master Plan: Testimonies of Displaced Workers' (1998) 33(9) *Economic and Political Weekly* 447; S. P. Sathe, 'Judicial Activism: The Indian Experience' (2001) 6(1) *Washington University Journal of Law and Policy* 29, 40; Divan and Rosencranz (n 77) 147; S. Visvanathan, 'Supreme Court Constructs a Dam' (2000) 35(48) *Economic and Political Weekly* 4176.

88. *Centre for Environment Law, WWF-India v. Union of India and Ors* (2013) 8 SCC 234, para 46; See *T. N. Godavarman Thirumulpad v. Union of India and Ors* (2012) 3 SCC 277.

89. *Centre for Environment Law*, *ibid.*, para 46.

90. *G. Sundarrajan v. Union of India and Ors* (2013) 6 SCC 620, para 119.

and interests, present their organisation of competing interests as apolitical and flowing rationally from scientific fact.⁹¹

Accordingly, a large part of the analysis that follows, will unfold through a close reading of the style, rhetoric and reasoning found in some of the most important sustainable development–centric decisions of the Supreme Court over the past 20 years. The decisions reviewed here do not amount to an exhaustive chronology, because, while the principle of sustainable development is cited extensively and across a diversity of judicial decisions, most of these judgments closely mime the interpretive developments achieved in a smaller number of cases by the Supreme Court. These latter cases form the core of this study.

At the time of the Supreme Court’s initial decisions on environmental issues, the field of environmental governance was already populated with a variety of statutes and administrative rules. Early judicial decisions, during the 1980s and 1990s, were accompanied by and often responded to a litany of popular protests against the colonial evacuation of forests and the modern, nationalist dream of damming the nation’s rivers.⁹² In addition, unlike other issues on which the Court has taken the lead, for instance, sexual harassment⁹³ (which everyone can agree needs to be stamped out), it is notoriously difficult to point to an unambiguously correct answer in environmental protection/economic development disputes. Accordingly, where the history of the Supreme Court is replete with instances of activism,⁹⁴ on matters related to environmental

91. Saptarishi Bandopadhyay, ‘Because the Cart Situates the Horse: Unrecognized Movements Underlying the Indian Supreme Court’s Internalization of International Environmental Law’ (2010) 50(2) *Indian Journal of International Law* 204, 226–27, 241–46.

92. Madhav Gadgil and Ramachandra Guha, ‘Ecological Conflicts and the Environmental Movement in India’, in Mahesh Rangarajan (ed) *Environmental Issues in India: A Reader* (Pearson 1997) 385, 393–400.

93. *Vishaka and Ors v. State of Rajasthan and Ors* (1997) 6 SCC 241.

94. Granville Austin, ‘The Supreme Court and the Struggle for Custody of the Constitution’ in Kirpal *et al.* (n 80) 1; Pratap Bhanu Mehta, ‘India’s Judiciary: The Promise of Uncertainty’ in P. Chopra (ed) *Supreme Court*

issues, the judges have carefully justified their use of sustainable development by reinventing the Court's understanding of *gaps* in the law, and by *finding* sustainable development within existing Indian laws. The Court achieved this goal by various permutations of three approaches: *first*, by establishing its ability to access international norms;⁹⁵ *then*, in subsequent cases, by 'isolating'⁹⁶ various principles from existing statutes (or by showing that these principles have found reflection in the Constitution in some form, occasionally supplemented with not-strictly-legal sources);⁹⁷ and, *finally*, by precedential mimicry.

Vellore, the Patriarch

Sustainable development was substantively introduced into Indian environmental jurisprudence in *Vellore*⁹⁸, a suit brought against the

Versus The Constitution: A Challenge To Federalism (Sage Publications 2006) 155.

95. *Vishaka* (n 93); *Gramophone Co. of India Ltd v. B. B. Pandey* (1984) 2 SCC 534; *ADM Jabalpur v. Shiv Kant Shukla* (1976) 2 SCC 521. For a discussion of the Court's arguments in these cases, Bandopadhyay (n 91).

96. Justice B. N. Kirpal, 'Developments in India relating to Environmental Justice' <<http://staging.unep.org/delc/Portals/119/publications/Speeches/INDIA%20.pdf>> accessed 21 March 2017, 5.

97. *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh* (1989) Supp (1) SCC 504, paras 19, 24, where the Court substantiates its consideration of the environmental consequences of mining in the Doon valley region by drawing on poets (Kalidas) and Hindu scripture (the Atharva Veda); *T. N. Godavarman Thirumalpad (through K. M. Chinnappa) v. Union of India and Ors* (2002) 10 SCC 606, paras 14, 15, 28 where the Court references sustainable development from such eclectic sources such as Albert Einstein, Zarathustra, King Ashoka, and the story of a conversation between the Indian Chief of Seattle and the Great White Chief of Washington, when the latter offered to buy the former's lands.

98. *Vellore Citizens' Welfare Forum v. Union of India and Ors* (1996) 5 SCC 647, paras 10–14. *Vellore* was not, chronologically speaking, the first Supreme Court decision to employ sustainable development. In

state of Tamil Nadu in response to reports that tanneries in the state were discharging effluents into the river Palar, a major source of drinking water. In response, the Supreme Court used the frame of sustainable development to conclude that the economic benefits of the leather industry notwithstanding, economic interests could not be allowed to ‘destroy the ecology, degrade the environment and pose as a health-hazard’ to the public at large.⁹⁹

In *Vellore*, judges traced sustainable development to the Stockholm Declaration,¹⁰⁰ and upon quoting the Brundtland Report, concluded that as a ‘balancing concept between ecology and development’, sustainable development had already been accepted ‘as a part of the customary international law’.¹⁰¹ The Court did not enter into a consideration of its reasons for this finding, but did acknowledge that the ‘salient features’ of sustainable development were yet to be agreed upon by jurists.¹⁰² This is an important disclaimer, because back in the mid-1990s,

the preceding year, the Court had decided *State of Himachal Pradesh v. Ganesh Wood Products* (1995) 6 SCC 363 where, in considering the scope of operations for forest-based industries [like the *katha* (catechu extract) industry in that case], the judges emphasised that industries did not have unrestricted rights to conduct operations where resources were scarce. The Court set up this decision by reasoning that sustainable development mandated an accurate accounting of ‘the forest wealth’ to ensure that industries exploiting forest resources did not disturb the ‘required balance’. The judges confirmed sustainable development as the dominant paradigm for considering such disputes, and secured their ability to prioritise between the government’s public interest commitments and its motivation to pursue a policy marked by privatisation and market liberalisation (paras 36–42). The judges’ characterisation of the principle, however, is cursory and largely intended to establish the State’s obligations in relation to sustainability; in other words, from a legal analysis point of view, the decision contributes little to the development of sustainable development jurisprudence.

99. *Vellore*, *ibid.*, para 9.

100. *Ibid.*, para 10

101. *Ibid.*

102. *Ibid.*

sustainable development was not understood as a binding norm.¹⁰³ The judges in *Vellore*, perhaps aware of the tenuous nature of their claims to customary international law, outlined a secondary justification—the Court effectively reasoned that even if principles of sustainable development, polluter pays, and precaution were not yet part of customary international law, when they did eventually achieve such a status, the Court would most likely be able to employ them in its decisions.¹⁰⁴ Anticipating this trend, the Supreme Court established these principles as part of its ratio in *Vellore*, creating a new standard of environmental jurisprudence in India.¹⁰⁵

With respect to the content of sustainable development, in *Vellore*, Justice Kuldeep Singh set the ground rules for future analysis by observing, ‘[t]he traditional concept that development and ecology are opposed to each other is no longer acceptable. “Sustainable Development” is the answer’ to the problem between development and ecology.¹⁰⁶ Viewed through the sustainable development lens,

103. In fact, because of the open-endedness of sustainable development, both Hungary and Slovakia used this concept in support of their respective claims in *Gabčíkovo–Nagymaros* (n 1), para 140, providing the ICJ with an opening to ask the parties to negotiate further towards a mutually satisfactory solution. Following this decision, some environmental law jurists began to propose that sustainable development may have arisen to the status of a customary norm, Philippe Sands, ‘International Courts and the Application of the Concept of “Sustainable Development”’ (1999) 3 *Yearbook of United Nations Law* 389; Patricia Birnie and Alan Boyle, *International Law and the Environment* (2nd edition, OUP 2002) 95–97.

104. *Vellore* (n 98), para 15. Soon after, in *People’s Union for Civil Liberties v. Union of India* (1997) 1 SCC 301, para 22, the judges wrote: ‘It is almost an accepted proposition of law that the rules of customary international law which are not contrary to the municipal law shall be deemed to be incorporated in the domestic law’.

105. *Vellore*, *ibid.*; Ashok H. Desai and S. Muralidhar, ‘Public Interest Litigation: Potential and Problems’ in Kirpal *et al.* (n 80) 159, 172–73, where the authors, in discussing *Vellore*, write: ‘The Court ... drew on the concept of sustainable development ... which had become part of customary international law.’

106. *Vellore* (n 98), para 10.

environmental protection and economic development were, as a matter of policy, no longer perpendicular interests in direct conflict.

Vellore endorsed the Brundtland Commission's definition of sustainable development as that '[d]evelopment that meets the needs of the present without compromising the ability of future generations to meet their own needs',¹⁰⁷ and listed some 'salient principles' of sustainable development 'culled-out' from the Brundtland Report, 'and other international documents'.¹⁰⁸ The Court also noted that the polluter pays principle and the precautionary principle were 'essential features'¹⁰⁹ of sustainable development, and extended customary-norm status to these principles,¹¹⁰ even though the meaning, scope and value of these principles as international legal standards remained contested.¹¹¹ Finally, the Court underwrote its analysis by reading constitutional provisions¹¹² and statutes [the Air Act,¹¹³ Water Act,¹¹⁴ and Environmental (Protection) Act¹¹⁵] to include the polluter pays principle and the precautionary principle as part of Indian environmental jurisprudence.¹¹⁶ The preamble

107. *Ibid.*

108. *Ibid.*, para 11.

109. *Ibid.*

110. By contrast, international tribunals and other dispute-resolution bodies have historically taken a more cautious approach, Birnie and Boyle (n 103) 119; 'New Developments in International Law: Remarks by Daniel Bodansky' in *Proceedings of the American Society of International Law: 85th Annual Meeting* (American Society of International Law 1991) 413–17; C. D. Stone, 'Is There a Precautionary Principle' (2001) 31(7) *Environmental Law Reporter News and Analysis* 10790.

111. *E. C. Measures* (n 56), paras 16, 43, 60; P. Sand, 'The Precautionary Principle: A European Perspective' (2000) 6(3) *Human and Ecological Risk Assessment* 448; Birnie and Boyle (n 102) 118–19.

112. The Court in para 13 of *Vellore* (n 98) references Articles 21, 47, 48A and 51 of the Constitution of India.

113. The Air (Prevention and Control of Pollution) Act 1981.

114. The Water (Prevention and Control of Pollution) Act 1974.

115. The Environment (Protection) Act 1986.

116. *Vellore* (n 98), para 13, 18–21.

and timing of these environment protection statutes indeed attest that they were legislated in furtherance of India's commitments at Stockholm,¹¹⁷ but the Court's analysis does little to establish the import of specific provisions.¹¹⁸

In *Vellore*, the Court never hinted that there was a dearth of applicable legislation on the relevant issues. In other words, there was no perceivable gap along the lines encountered by the Court with respect to the lack of sexual harassment laws (in *Vishaka*), where the Court read international rules into provisions of the Indian Constitution.¹¹⁹ Instead, in *Vellore*, the gap was understood as the inability of the executive and administrative agencies to apply rules that, in the judges' mind, already existed. In *Ganesh Wood Products*, the Supreme Court placed this balancing narrative in the context of the quality of governmental decision-making by requiring that administrative authorities give due importance to existing policies, and stay particularly mindful of ensuring long-term, sustainable use of natural resources.¹²⁰ This trend has continued through the bulk of environmental disputes with the Supreme Court often justifying its decisions on the grounds that the executive agency has failed to implement the relevant legislations.¹²¹

117. Sheila Jasanoff, 'Managing India's Environment' (1986) 28(8) *Environment* 12; Divan and Rosencranz (n 77) 47, 60, 66.

118. For a detailed analysis of the incorporation process, Bandopadhyay (n 90) 204–51.

119. *Vishaka* (n 93), para 7.

120. *Ganesh Wood Products* (n 98), paras 26 and 36.

121. M. P. Jain, 'The Supreme Court and Fundamental Rights' in Verma (n 79) 1, 35–36; *Vimal Bhai & Ors v. Union of India & Ors* (2009) SCC OnLine Del 289, noting the judges' dissatisfaction with the Ministry of Environment and Forests for failing to give adequate form and authority to NEAA. See also Ritwick Dutta, 'Access to Justice Victory in India' The Access Initiative Blog (14 February 2009) <<http://www.accessinitiative.org/blog/access-justice-victory-india>> accessed 23 March 2017. For a more extensive review of this trend in the Supreme Court's decisions in environmental cases, see Bandopadhyay (n 91).

Life-cycle after Vellore

Vellore is the patriarch from which a standardised, sustainable development–centric jurisprudence of the Supreme Court flows, via a tightly knit array of precedents. For instance, in *Jayal*,¹²² the Court viewed the construction of a dam as a sign of wholesome development and defended this position by proclaiming that ‘sustainable development principle is a sine qua non for the maintenance of the symbiotic balance between the rights to environment and development’.¹²³ Similarly, in *Bombay Dyeing*,¹²⁴ the Court described sustainable development as a fundamental part of Indian law. In *Kenchappa*,¹²⁵ on the other hand, the judges reviewed a variety of international instruments, related documents and commentary,¹²⁶ before turning to their earlier decisions in *Vellore*¹²⁷ and *Essar*,¹²⁸ to confirm the legitimacy and meaning of sustainable development. *Research Foundation 2005*,¹²⁹ *Intellectuals*

122. *N. D. Jayal and Anr v. Union of India and Ors* (2004) 9 SCC 362.

123. *Ibid.*, para 25.

124. *Bombay Dyeing & Mfg Co. Ltd v. Bombay Environment Action Group & Ors* (2006) 3 SCC 434, para 252.

125. *Karnataka Industrial Areas Development Board v. Sri. C. Kenchappa and Ors* (2006) 6 SCC 371, paras 49–51; the judges quote from *Essar Oil Ltd v. Halar Utkarsh Samiti & Ors* (2004) 2 SCC 392 while pointing out that the excerpt from *Essar* is a direct quote from *Indian Council for Environmental Action v. Union of India* (1996) 5 SCC 281.

126. *Kenchappa*, *ibid.*, paras 41–65.

127. *Ibid.*, paras 66.

128. *Ibid.*, paras 48–51.

129. *Research Foundation for Science Technology National Resource Policy v. Union of India and Anr* (2005) 10 SCC 510 (*Research Foundation 2005*), para 16, where the Court returns to *Vellore* to explain that the precautionary principle and polluter pays principle have already been ‘held to have become part of our law’, and the Court reiterates its own comments from an earlier order (2003) in this same dispute, and then refers to *A. P. Pollution Control Board v. Prof. M.V. Nayudu (Retd.) and Ors* (1999) 2 SCC 718, which once again affirms *Vellore* (n 98).

*Forum*¹³⁰ and *Milk Producers*¹³¹ (each of which follows *Kenchappa*), are all part of a long series of Supreme Court decisions that plainly accept the meaning and legitimacy of sustainable development as established in *Vellore*.¹³²

Multivalent Readings of Sustainable Development

Since the late 1990s, the Supreme Court has often harnessed the vagueness inherent in sustainable development to arrive at a variety of conclusions.

At a formal level, in 1995, the Court extended the meaning of sustainable development, in accordance with Principle 3 of the Rio Declaration, to acknowledge the relevance of the notion of intergenerational equity,¹³³ but did not supply specifics as to how it may be applied to the dispute. The Court would return to this concept of equity, in *Indian Council for Enviro-legal Action*,¹³⁴ where the judges again stressed the importance of sustainable development, writing:

While economic development should not be allowed to take place at the cost of ecology or by causing widespread

130. *Intellectuals Forum, Tirupathi v. State of Andhra Pradesh and Ors* (2006) 3 SCC 549 which references *Essar* (n 125), *Indian Council for Enviro-Legal Action* (n 125), *Nayudu* (n 129), *M. C. Mehta v. Union of India* (1997) 2 SCC 653, *Ganesh Wood Products* (n 98), and *Narmada* (n 86).

131. *Milk Producers Association, Orissa and Ors v. State of Orissa and Ors* (2006) 3 SCC 229, para 16, sources *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388 (public trust doctrine), *Ganesh Wood Products* (n 98) (intergenerational equity), and *Vellore* (n 98) (precautionary principle).

132. *M. C. Mehta v. Union of India and Ors* (1997) 2 SCC 411 (*Calcutta Tanneries* case), para 18; *Kamal Nath*, *ibid.*, para 37; *Jayal* (n 122), paras 22 and 25; *M. C. Mehta v. Union of India* (1997) 2 SCC 353 (*Taj Trapezium* case), paras 32 and 33; *Research Foundation 2005* (n 129), para 16; *Nayudu* (n 129), para 31; *S. Jagannath v. Union of India* (1997) 2 SCC 87, para 49; *Bombay Dyeing* (n 83), para 253.

133. *Ganesh Wood Products* (n 98), paras 42 and 51.

134. *Indian Council for Enviro-legal Action* (n 125).

environment destruction and violation; at the same time, the necessity to preserve ecology and environment should not hamper economic and other developments. Both development and environment must go hand in hand, in other words, there should not be development at the cost of the environment and vice versa, but there should be development while taking due care and ensuring the protection of environment.¹³⁵

Against this background, the Court acknowledged that since future generations would face the effects of environmental degradation initiated in the present, environmental statutes must be enforced keeping future interests in mind.¹³⁶ The Court's reasoning here was in keeping with its earlier decision ordering the closure of tanneries in Kanpur found to be polluting the Ganges, despite the resulting unemployment.¹³⁷ In its *Research Foundation 2007* decision,¹³⁸ on the other hand, the Court felt that sustainable development demanded that the struggling ship-breaking industry of Alang, Gujarat, be allowed to operate in order to secure the employment of over 700 workmen, and roughly 40,000 others directly or indirectly dependent on this industry¹³⁹—even at the risk of exposing the workforce and the wider community to the polychlorinated biphenyls (PCBs) and asbestos present within the ship in question, the *Blue Lady*.

As a matter of legal interpretation, the *Research Foundation 2007* decision has been criticised for employing sustainable development incorrectly and inconsistently, particularly when read against the 2003 ship-breaking decision that prioritised the precautionary principle over economic growth.¹⁴⁰ For the purposes of following the development of sustainable development, however, it is also important to note the Court's legal interpretation was, as in *Ganesh*

135. *Ibid.*, para 31.

136. *Ibid.*, para 26.

137. *M. C. Mehta v. Union of India and Ors* (1987) 4 SCC 463.

138. *Research Foundation for Science Technology and Natural Resource Policy v. Union of India* (2007) 15 SCC 193 (*Research Foundation 2007*).

139. Pelsy (n 87) 137.

140. *Ibid.*, 141, 142, citing *Research Foundation 2005* (n 129).

Wood Products,¹⁴¹ designed to elaborate on India's political economy; as the Court clarifies:

India after globalisation is an emergent economy along with Brazil, Russia and China. India has economic growth of above 9%. However, that growth is lopsided. A large section of the population lives below poverty line. India has the largest number of youth in the world. Unemployment is endemic ...

... When we apply the principle of sustainable development, we need to keep in mind the concept of development on one hand and the concepts like generation of revenue, employment and public interest on the other hand. This is where the principle of proportionality comes in ...¹⁴²

In employing proportionality in *Research Foundation 2007*, the Supreme Court invoked its earlier 2002 decision in *Godavarman*, where the judges emphasised:

Where the commercial venture or enterprise would bring in results which are far more useful for the people, difficulty of a small number of people has to be bypassed. The comparative hardships have to be balanced and the convenience and benefit to a larger section of the people has to get primacy over comparatively lesser hardship.¹⁴³

141. *Ganesh Wood Products* (n 98).

142. *Research Foundation 2007* (n 138), paras 11 and 12. The Supreme Court's language has grown standardised and trickled down to High Courts across the country: *People United for Better Living in Calcutta—Public and Anr v. State of West Bengal and Ors* AIR 1993 Cal 215; *National Highways Authority of India v. The Secretary of Government, Public Works Department and Ors*, WP Nos. 1856–1858/2013, Order dated 6 January 2014, Madras High Court.

143. *T. N. Godavarman Thirumulpad v. Union of India and Ors* (2002) 10 SCC 606, para 35. Similarly in *Goa Foundation and Anr v. Konkan Railway Corporation* AIR 1992 Bom 471, para 6, the Bombay High Court, in considering the need to clear forests to facilitate a railway project, explained that 'no development is possible without some adverse effect upon the ecology and environment but the projects of public utility cannot be abandoned and it is necessary to adjust the interest of the people as well as the necessity to maintain the environment. The balance has to be struck

And finally, when applying the principle of proportionality in *Research Foundation 2007*, the scales were ultimately tipped by the judges' faith in technical standards, '[a]s stated', the judges wrote, '85% of asbestos is in the form of ACM [asbestos-containing materials] in panels which is reusable. Therefore, the report provides State-of-the-Art mechanism which is the key element of "sustainable development"'.¹⁴⁴

In its use of sustainable development, the Supreme Court speaks in multiple registers: legal, political and techno-scientific. Legal analysis substantiated through techno-scientific data is most prominently on display when the Court invokes the precautionary principle. The techno-scientific register is also, often, the hinge around which political and socioeconomic interests are resolved. Judging the validity of one interpretation of the precautionary principle over another is beyond the scope of this chapter. I will focus, instead, on the Supreme Court's development of the relationship between sustainable development and scientific assessments, paying particular attention to the way in which this relationship articulates the epistemology of ecological threats.

The Court has consistently described the precautionary principle as a significant component of the sustainable development scheme.¹⁴⁵ In *Taj Trapezium*, involving a dispute as to whether foundries, chemical industries, and refineries were damaging the Taj Mahal,¹⁴⁶ judges applied the reversed burden of proof (held in *Vellore* to be a part of the precautionary principle),¹⁴⁷ thereby requiring the coke/coal industries to show that their operations were environmentally benign. The Court considered affidavits by the Gas Authority of India Ltd., Oil and Natural Gas Commission

between the two interests and this exercise must be left to the persons who are familiar and specialized in the field.'

144. *Research Foundation 2007* (n 138), para 13.

145. *Vellore* (n 98), para 11; *M. C. Mehta v. Union of India* (2002) 4 SCC 356, para 9 (the CNG case involving the problem of vehicular pollution).

146. *Taj Trapezium* case (n 132), para 4.

147. *Ibid.*, para 32. See *Vellore* (n 98), para 11.

and Indian Oil Corporation, and relied heavily on reports by the National Environmental Engineering Research Institute (NEERI), and the recommendations of the Vardharajan Committee, to conclude that it had been proven ‘beyond doubt that the emissions generated by the use of coke/coal by the industries’ were responsible for polluting the ambient air.¹⁴⁸ The judges stated that atmospheric pollution near the Taj Mahal must be ‘eliminated at any cost. Not even one percent chance can be taken when—human life apart—the preservation of a prestigious monument like the Taj is involved ...’¹⁴⁹ Accordingly, the Court ordered 292 industries (out of the 511 implicated) that were using coke/coal as fuel source to cease operations, and outlined a procedure for them to switch technologies (to gas) or be relocated. Ostensibly, the Court’s decision in favour of environmental protection was tipped by a mixture of techno-scientific data, expert recommendations and, ultimately, precautionary regard for a cultural icon.

In 1999, in its assessment of water pollution in *Nayudu*, the Supreme Court noted that the precautionary principle has led to the creation of a reversed burden of proof.¹⁵⁰ The judges quoted Principle 15 of the Rio Declaration, writing that ‘[i]n other words, the inadequacies of science is [sic] the real basis that has led to the precautionary principle of 1982’,¹⁵¹ and also outlined the importance of technical expertise to environmental disputes, recommending the inclusion of a mixed group of scientists and jurists to administrative and appellate authorities that hear such matters.¹⁵²

The following year, in its decision in *Narmada Bachao Andolan v. Union of India*,¹⁵³ the Supreme Court was asked to restrain the

148. *Ibid.*, para 33.

149. *Ibid.*

150. *Nayudu* (n 129), paras 36–38; *Jeet Singh Kanwar and Anr v. Ministry of Environment and Forests and Ors*, Appeal No. 10/2011(T), judgment dated 16 April 2013, NGT (Principal Bench), para 25.

151. *Nayudu* (n 129), paras 33–34.

152. *Ibid.*, para 47.

153. *Narmada* (n 86).

construction of the Sardar Sarovar dam project on the Narmada river on the grounds that the project would have an irreversible adverse impact on the local ecology, and that the project violated the right to life of the agrarian and indigenous tribes being displaced by the submergence of their lands.

In its judgment, the Court continues to display a near-absolute faith in governmental scientific and administrative committees, finding in the very existence of such authorities proof that sustainable development is being pursued responsibly. The Court also aggregates a multitude of human, political issues related to community displacement—loss of land used for subsistence farming, and the end of entire cultures and lifestyles—to a battle between decontextualised statistical data.¹⁵⁴ The sway of judicial rhetoric is so bold that a variety of dissenting reports (by the World Bank's Morse Commission) and foreign judicial decisions¹⁵⁵ fail to make a dent in the sustainable development calculus.

However, perhaps given the long trajectory of the dispute, and the political and economic stakes involved, judges in *Narmada* were not content to rest on their enduring trust in official experts, administrative committees, and government-sponsored scientific data. Their consideration of scientific evidence was laced with liberal ideological considerations, and the decision in favour of the government was justified by drawing legalistic, and not strictly scientific, distinctions between the contentions of the disputing parties. In their decision, judges referenced *Vellore* as saying that the precautionary principle and the corresponding shift in the burden of proof may be applicable when the risk of harm can be identified.¹⁵⁶ Further, they summed that sustainable development

154. For a thorough critique of the majority decision in *Narmada*, see Visvanathan (n 87); Justice Bharucha's minority (dissenting) opinion in *Narmada* (n 86).

155. *Tennessee Valley Authority v. Hiram G. Hill* 437 United States 153 (1978); *Environmental Defense Fund v. Corps of Engineers of US Army* 325 Federal Supplement 749 (1971), cited by counsel for the petitioners.

156. *Narmada* (n 86), para 122.

itself only comes into play, 'when the effect of the project is known' because '[s]ustainable development means what type or extent of development can take place which can be sustained by nature/ecology with or without mitigation'.¹⁵⁷ Specifically, the Court felt that the threat must emanate from a polluting industry which it defined narrowly, stating, 'In the present case we are not concerned with the polluting industry which is being established. What is being constructed is a large dam. The dam is neither a nuclear establishment nor a polluting industry'.¹⁵⁸

In other words, for the Court, irreversible adverse environmental impact only included some formal 'pollution' (like nuclear waste) and not the generic destruction of ecological habitats (for instance, by submergence), which the Court sums up simply as a 'change of environment'.¹⁵⁹ By understanding the consequences of all dams as neutral or apolitical changes, the judges undermine the value of contrary scientific data, and place their faith in a generalised Nehruvian modernism,¹⁶⁰ writing,

India has an experience of over 40 years in the construction of dams. The experience does not show that construction

157. *Ibid.*, para 123.

158. *Ibid.*, para 124. The Court has made a similar narrowing move in *Susetha v. State of Tamil Nadu* (2006) 6 SCC 543 arguing that the fundamental duty to protect the natural environment, including water sources, extended to natural water sources, but not artificial ones.

159. *Narmada* (n 86), para 124, the judges write: 'The construction of a dam undoubtedly would result in the change of environment but it will not be correct to presume that the construction of a large dam like the Sardar Sarovar will result in an ecological disaster.'

160. The Court's characterisation of the history of dams and their consequences in India is particularly skewed; it not only neglects accounts of the damage caused by such projects, but also ignores over 40 years of popular resistance against such projects. See, for example, Walter Fernandes and Enakshi Ganguly-Thukral (eds) *Development and Rehabilitation* (Indian Social Institute 1988); Edward Goldsmith and Nicholas Hildyard, *The Social and Environmental Effects of Large Dams* (Wade Bridge Ecological Centre 1984); Enakshi Ganguly-Thukral (ed) *Big Dams, Displaced People* (Sage 1992).

of a large dam is not cost-effective or leads to ecological or environmental degradation. On the contrary there has been ecological upgradation with the construction of large dams. What is the impact on environment with the construction of a dam is well known in India and, therefore, the decision in *A.P. Pollution Control Board case* will have no application in the present case.¹⁶¹

The *Narmada* decision is also interesting for its treatment of Environmental Impact Assessments (EIAs), which are universally held as crucial for the pursuit of the broad scheme of sustainable development.¹⁶² In *Narmada*, the petitioner asked the Court to note the decision of the US District Court in *Sierra Club et v. Robert F. Froehlke*,¹⁶³ where the Court granted an injunction on dam construction for failure to comply with disclosure requirements under the United States National Environmental Policy Act 1969, despite the fact that a substantial amount of work had already been completed—a situation that closely mimicked the situation of the Sardar Sarovar dam on the Narmada river. The Indian Supreme Court rejected the analogy on two grounds—the first was technical in that, back in 1987, when the Sardar Sarovar project received environmental clearance, there was ‘no obligation to obtain any statutory clearance’, and that clearance ‘was essentially administrative in nature’.¹⁶⁴ The broader justification was:

... There are different facets of environment and if in respect of a few of them adequate data was not available it does not mean that the decision taken to grant environmental clearance was in any way vitiated. The clearance required further studies to be undertaken and we are satisfied that this has been and is being done. Care for the environment is an ongoing process and the system in place would ensure that ameliorative

161. *Narmada* (n 86), para 124.

162. Rio Declaration (n 14), Principle 17; EP Act; Indian Planning Commission, Seventh Five Year Plan (1985–90). The importance of the EIA is universally accepted in judicial decisions in India.

163. 350 b F Supp 1280 (1973).

164. *Narmada* (n 86), para 126.

steps are taken to counter the adverse effect, if any, on the environment with the construction of the dam.¹⁶⁵

Such a description is of particular concern because environmental impact assessments are often about ameliorating environmental damage rather than preventing it, because such assessments are only performed *after* economists and policymakers have decided what investments to make.¹⁶⁶ As one review of EIAs in India puts it, '[o]verall, EIA is used presently as a project justification tool rather than as a project planning tool to contribute to achieving sustainable development'.¹⁶⁷ This conclusion finds support from the growing criticism of the Ministry of Environment, Forest and Climate Change (MoEFCC) for approving projects with only a cursory review of EIAs that have time and again been found to be grossly inadequate when not blatantly fraudulent.¹⁶⁸

The modern-statist progress narrative displayed in the *Narmada* decision grows particularly strenuous with respect to the rehabilitation and resettlement of indigenous populations, whose role in sustainable development is emphasised by the Rio Declaration:

165. *Ibid.*, para 127.

166. Brown (n 30) 77.

167. J. K. Panigrahi and S. Amirapu, 'An Assessment of EIA System in India' (2012) 35 *Environmental Impact Assessment Review* 23.

168. See, for example, *Sterlite Industries India Ltd v. Union of India and Ors* (2013) 4 SCC 575, paras 13–19; Neema Pathak Broome *et al.*, 'An Analysis of International Law, National Legislation, Judgements, and Institutions as they Interrelate with Territories and Areas Conserved by Indigenous Peoples and Local Communities' (2012) 13 *Natural Justice Report*, September <<http://naturaljustice.org/wp-content/uploads/2015/09/Asia-Regional-India.pdf>> accessed 2 December 2016, 11; Neeraj Vagholikar, 'Dams and Environmental Governance in North-east India' in *India Infrastructure Report* (2011) 360; Manju Menon and Kanchi Kohli, 'Environmental Decision-Making: Whose Agenda?' (2007) 42(26) *Economic and Political Weekly* 2490; for a careful survey of the environmental compliance and review process, see Shibani Ghosh, 'Demystifying the Environmental Clearance Process in India' (2013) 6(3) *NUJS Law Review* 433.

Indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.¹⁶⁹

To the majority in the *Narmada* decision, however, sustainable development with respect to indigenous people must be determined under the terms of the larger project of modernisation involving, first and foremost, the homogenisation (or mainstreaming) of their way of life.¹⁷⁰ In this sense, *Narmada*, one of the Supreme Court's most powerful decisions involving sustainable development, is not only a window into the bifurcation between environmental protection and economic development, but also between the interests of the liberal administrative state and its internally disenfranchised citizens.

Sustainable Development as Something-familiar

Since *Narmada*, the Supreme Court and various High Courts have regularly invoked sustainable development to a variety of ends, from setting stipulations on bauxite mining in the Niyamgiri Hills of Odisha,¹⁷¹ iron ore mining in Goa,¹⁷² to copper smelting in Tamil Nadu,¹⁷³ to name but a few. A review of these decisions indicates that the Court's jurisprudence on sustainable development has reached a plateau of sorts and while judicial orders may greatly alter the balance of interests in a given dispute, the Court's interpretations do little more to develop or clarify the underlying notion. This

169. Rio Declaration (n 14), Principle 22.

170. *Narmada* (n 86), paras 149, 174.

171. *T. N. Godavaraman Thirumulpad v. Union of India and Ors* (Vedanta Alumina Ltd) (2008) 2 SCC 222; in this respect see also the Supreme Court's Orders of 8 August 2008 in *T. N. Godavarman Thirumulpad v. Union of India and Ors*, WP (C) No. 202/1995.

172. *Goa Foundation v. Union of India and Ors* (2014) 6 SCC 738.

173. *Sterlite* (n 168).

is not necessarily a critique of the Supreme Court but rather an acknowledgement of the limitations of sustainable development itself. However, these decisions do signal a clear shift away from the abolitionist attitude of the Supreme Court in the 1980s, when mining operations across the country were strictly regulated.

In *Sterlite*, for instance, the Court responded to a variety of charges against Sterlite Industries and the Tamil Nadu Pollution Control Board (that the smelting plant was being built within areas earmarked as ecologically sensitive; that the government had too-easily agreed to reduce the width of the statutorily mandated 'green belt' surrounding Sterlite's facilities from 250 metres to 25 metres; and that Sterlite had misrepresented and suppressed materials facts before the Court), by making a cursory reference to sustainable development before settling the matter in favour of Sterlite through a discussion of classical notions of judicial review, precluding the Court from second guessing governmental decisions. On the other hand, when the Court makes more than a casual reference to sustainable development, for instance in the *Vedanta Alumina Ltd* case and *Goa Foundation*, a currently popular solution is to allow the disputed activity to proceed, provided a certain portion of financial profits are contributed towards environmental protection. The precise variations in the Court's reasoning are beyond the scope of this chapter,¹⁷⁴ but the visible trend lies in the regular and rhetorical use of the principle of sustainable development and subsidiary notions (of precaution and inter/intragenerational equity), as a matter of course.

In speaking to this normalisation of sustainable development, we cannot ignore the significance of the National Green Tribunal (NGT). Established in 2010, the Tribunal reflects the Supreme Court's frequent insistence that environmental disputes be heard by specialised, fast-track tribunals comprised of jurists and scientific experts.¹⁷⁵ Unsurprisingly, the statute establishing this body

174. See Bandopadhyay (n 91).

175. See, for example, *Nayudu* (n 129); *Indian Council for Enviro-legal Action* (n 125); *M. C. Mehta v. Union of India* (1987) 1 SCC 395.

explicitly requires that members of the bench apply the principle of sustainable development in their assessment of disputes.¹⁷⁶

By some accounts, NGT decisions in recent years have taken the wider ecological and social impact of developmental projects seriously. They have done so by being noticeably attentive to the technical aspects of proposed projects, particularly in relation to EIAs (perhaps owing to the presence of technical experts on the bench).¹⁷⁷ In some decisions, the Tribunal has scrutinised EIAs to assert the need for meaningful public participation, and emphasised the project proposer's onus to dispel apprehensions and objections to development.¹⁷⁸ The Tribunal has also been outspoken about the need for regulators to pay greater attention to the plight of people likely to be most directly affected by the project.¹⁷⁹ This attitude of inclusiveness shows a welcome awareness of the social and cultural impact of environmental decision-making. However, such gestures should be regarded with caution since they can also be found across the Supreme Court's extensive invocations of sustainable development.

For the most part, as with High Court decisions across the country, the Tribunal's use of sustainable development closely mimics the rhetoric of the Supreme Court, usually culminating in a judicial declaration that a given activity is (or is not) sustainable,¹⁸⁰ or even 'within the permissible limits of sustainable development'.¹⁸¹

176. NGT Act s 20.

177. Nupur Chowdhury, 'Sustainable Development as Environmental Justice' (2016) 51(26–27) *Economic and Political Weekly* 84, 89.

178. See, for example, *M. P. Patil v. Union of India*, Appeal No. 12/2012, judgment dated 13 March 2014, NGT (Principal Bench), paras 68–89.

179. Chowdhury (n 177) 90–91.

180. See, for example, *Sudiep Shrivastava v. State of Chhattisgarh and Ors*, Appeal No. 73/2012, judgment dated 24 March 2014, NGT (Principal Bench), paras 26–28; *Sarang Yadwadkar and Ors v. Commissioner Pune Municipal Corporation*, OA No. 2/2013, order dated 11 July 2013, NGT (Principal Bench).

181. *Rana Sengupta v. Union of India and Ors*, Appeal No. 54/2012, judgment dated 22 March 2013, NGT (Principal Bench), para 27.

While it may be still be too early to offer a map of the NGT's overall record, it is worth noting that the Tribunal frequently relies on the Supreme Court's treatment of sustainability in *Narmada* and, like that Court, slips into glorifying the automatic wisdom of the sustainable development calculus—for instance, in a 2015 decision, while delineating the scope of development on the slopes of the Ganges in the state of Uttarakhand, the Tribunal observed that 'the Principle of Sustainable Development has an inbuilt element of reasonableness or doctrine of balancing'.¹⁸² The problem here is that while sustainable development does indeed prioritise balancing as a dispute resolution strategy, the Supreme Court's record in performing this feat is evidence that the process itself is in no way synonymous with a tendency towards reasonableness. Nor for that matter is reasonableness itself apolitical.

CONCLUSION

Within treaties and before international dispute resolution tribunals, sustainable development has led a conflicted life—steadily gaining power, but still invoked with caution. The Indian Supreme Court's rhetoric reveals that it understands this scheme to be quite open-ended, and often wields the resulting power expansively and instrumentally. Vagueness has given courts tremendous leeway, not only in terms of the use of this concept, but also by progressively lowering lawyers' and citizens' expectations of the standards that courts are required to satisfy in order to legitimise their proclamations. But vagueness of interpretation is not a sin unto itself—it plays the important role of keeping the field of legal argumentation open. The instrumental use of sustainable development, on the other hand, explains how the Supreme Court can understand sustainable development as ecocentric one

182. *Indian Council for Enviro-legal Action v. National Ganga River Basin Authority and Ors*, OA No. 10/2015 and 200/2014, order dated 10 December 2015, NGT (Principal Bench), para 73.

moment, and anthropocentric in the next.¹⁸³ Instrumental power is attractive and often leads to the courts ignoring how the flexible narrative of sustainable development shapes power-relations—not only between litigants, but also between litigants and the court. By understanding sustainable development, after Brundtland, as purely about ‘needs’,¹⁸⁴ the judiciary has picked and chosen particular instances when an environmental or infrastructure/developmental agenda is of greatest, or often, ‘national’ importance. Governmental expert committees, ‘official’ techno-scientific knowledge, fragments of mainstream (Hindu) cultural history, the interests of urban citizens, and a modernist vision of the future serve as handmaidens to this approach to sustainability that necessarily negates as much as it affirms.

The Indian Supreme Court and its sustainable development jurisprudence are, of course, creatures of the time and culture they function within; how we understand development¹⁸⁵ necessarily refracts what we consider to be ‘sustainable’ development.¹⁸⁶ With the best of intentions, the judges in *Jayal* use Amartya Sen’s ‘Development as Freedom’ as their touchstone. They argue that ‘[t]he right to development cannot be treated as a mere right to economic betterment or cannot be limited as a misnomer to simple

183. See, for example, *Animal Welfare Board of India v. A. Nagaraja and Ors* (2014) 7 SCC 547.

184. For a critique, see Amartya Sen, ‘Why We Should Preserve the Spotted Owl’ (2004) 26(3) *London Review of Books* 10.

185. Broome *et al.* (n 168) 19, write:

The model of ‘development’ that our societies, economies and politics are governed by mandates maximum use of resources in minimum time. This is a model where costs and benefits are weighed only in financial terms, directly contradicting the spirit and principles of sustainability or nature conservation. The current model of development believes in absolute preservation of nature in small islands and maximum extraction for human use everywhere else.

186. For a statistical disaggregation of Indian Supreme Court decisions between 1980–2010, see Geetanjoy Sahu, ‘Why the Underdogs Came Out Ahead’ (2014) 49(4) *Economic and Political Weekly* 52.

construction activities. The right to development encompasses much more than economic well-being, and includes within its definition the guarantee of fundamental human rights'. Immediately after, however, the Court concludes, '[o]f course, construction of a dam or a mega project is definitely an attempt to achieve the goal of wholesome development'.¹⁸⁷ The history of big dams across the world and Professor Sen's own thoughts¹⁸⁸ should give us pause.

187. *Jayal* (n 122), para 24.

188. See, for example, *Sen* (n 184).

FOUR

The Polluter Pays Principle

Scope and Limits of Judicial Decisions

LOVLEEN BHULLAR*

The polluter pays principle forms an integral component of environmental law jurisprudence at the international, regional, and domestic levels. The widely accepted formulation of the principle requires that the polluter, rather than the government or members of the public, should bear the cost of pollution.¹ While the principle is widely recognised, its content and scope form the subject matter of considerable debate and discussion. As a result, different meanings have been attributed to the principle in different contexts.² The intended function of the principle in a given context, whether redistributive, preventive or curative, also influences its

*I would like to thank Dr Sujith Koonan and Shibani Ghosh for their insights and advice on the finalisation of this chapter.

1. Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3rd edition, OUP 2009) 322.

2. Hans Christian Bugge, 'The Principles of Polluter Pays in Economics and Law' in Erling Eide and Roger van der Bergh (eds) *Law and Economics of the Environment* (Juridisk Forlag 1996) 53.

meaning.³ Further, the application of the polluter pays principle depends upon the identification of the polluter, the circumstances in which the polluter's responsibility to pay is triggered and the recipients of the payment—individuals and/or the government—and the determination of what is to be paid.

The polluter pays principle has been a part of the domestic environmental jurisprudence in India for several years. Judicial decisions have explicitly or implicitly referred to the principle while discussing the responsibility of an existing or potential polluter, and the judiciary has adjudicated cases on this basis. Yet neither its conceptual basis nor its interpretation by the judiciary has been examined in sufficient detail. This chapter attempts to fill this gap.

The next section briefly describes the development of the 'polluter pays principle', as a principle of environmental economics and as a legal principle. We then examine and analyse the legal basis for the incorporation of the polluter pays principle into domestic environmental law by the Supreme Court of India and its relationship with the absolute liability principle. Next, we focus on the different issues that arise in the context of operationalising the principle while implementing the decisions of the Supreme Court, High Courts, and the National Green Tribunal (NGT). This is followed by brief concluding remarks.

POLLUTER PAYS PRINCIPLE: FROM ECONOMICS TO LAW

The origin of the polluter pays principle can be traced to the economic theory of externalities.⁴ The theory is based on the idea that the production and/or consumption of goods or services may

3. Nicolas de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (OUP 2002) 35–37; Hans Christian Bugge, 'The Polluter Pays Principle: Dilemmas of Justice in National and International Contexts' in Jonas Ebbesson and Phoebe Okowa (eds) *Environmental Law and Justice in Context* (CUP 2009) 411.

4. A. C. Pigou, *The Economics of Welfare* (2nd edition, Macmillan 1924).

result in pollution or environmental harm or damage ('externalities') but often these costs are not reflected in the market price of the goods or services in question. This distorts price signals and results in inefficient economic choices. Further, instead of the polluter, public authorities or members of the public have to bear the (social and environmental) costs of pollution. The polluter pays principle is based on the idea of cost allocation and cost internalisation, that is, the external costs of production and/or consumption of goods or services should be allocated to the polluter who is responsible for the pollution rather than to the government or to members of the public.⁵ This is expected to increase the cost, and reduce consumption, of pollution-intensive products.⁶

The shift of the polluter pays principle from economic theory to practice initially took place in the context of the introduction of strict environmental measures on chronic pollution, in member countries of the Organization for Economic Cooperation and Development (OECD).⁷ The OECD first identified the features of the 'so-called Polluter-Pays Principle' in 1972.⁸ Two years later,

5. Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (CUP 2012) 228; de Sadeleer (n 3) 21.

6. Charles S. Pearson, 'Testing the System: GATT + PPP = ?' (1994) 27(3) *Cornell International Law Journal* 553, 555.

7. This led to complaints from industries about high costs of compliance and negative effects on competitiveness and forced governments to either help them cover costs of compliance or impose similar costs on imports through tariffs. This led to widespread concern about proliferation of environmental subsidies and tariffs and severe distortion of competition. See Candice Stevens, 'Interpreting the Polluter Pays Principle in the Trade and Environment Context' (1994) 27(3) *Cornell International Law Journal* 577, 580.

8. OECD, 'Recommendation of the Council on Guiding Principles Concerning International Economic Aspects of Environmental Policies' (26 May 1972) OECD Doc C(72)128, reprinted in 11 ILM 1172 (1972) (1972 OECD Recommendation) Annex, para 4. It states:

The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce natural resources and to avoid distortions in international trade and

the OECD Council reaffirmed this principle as a ‘fundamental principle’.⁹ However, the principle ‘was not intended to eliminate all forms of pollution’ or ‘to oblige polluters to assume the full consequences of their acts’.¹⁰ The reduction of pollution beyond a certain level was considered neither practical nor necessary in view of the costs involved.¹¹ Further, the polluter was not required to ‘pay’ anything to anyone.¹² This formulation is described as partial internalisation of environmental costs by the polluter.¹³ In this form, neither prevention or control of pollution, nor the imposition of liability for pollution was envisaged.

Subsequently, the scope of the principle was extended so that the operator (potential polluter) bears the cost of ‘reasonable measures’, which are introduced by the public authority to prevent

investment is the so-called ‘Polluter-Pays Principle’. This principle means that the polluter should bear the expenses of carrying out the above-mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment.

Commentators credit this Recommendation with the first appearance of the polluter pays principle in a legal context. See Stevens, *ibid.*, 580; de Sadeleer (n 3) 26; Jonathan Remy Nash, ‘Too Much Market? Conflict between Tradable Pollution Allowances and the “Polluter Pays” Principle’ (2000) 24(2) *Harvard Environmental Law Review* 465, 468.

9. OECD, ‘Recommendation of the Council on the Implementation of the Polluter-Pays Principle’ (14 November 1974) OECD Doc C(74)223, reprinted in 14 ILM 234 (1975), para I(1). See also OECD, ‘Recommendation of the Council on the Use of Economic Instruments in Environmental Policy’ (31 January 1991) OECD Doc. C(90)177/Final (1991 OECD Recommendation).

10. de Sadeleer (n 3) 27.

11. 1972 OECD Recommendation (n 8), para 3.

12. Stevens (n 7) 579.

13. de Sadeleer (n 3) 27.

and control accidental pollution from hazardous installations.¹⁴ OECD also recommended the internalisation of the cost of damage arising from pollution, thus marking a shift towards full-cost internalisation.¹⁵ This trend is also reflected in the initial development of the polluter pays principle in the European Community (later European Union or EU).¹⁶

At the international level, one of the earliest references to the polluter pays principle, albeit implicit, is in the Brundtland Report of 1987, which suggested that the ‘environmental costs of economic activity’ can be “‘internalized”—paid by the enterprise’.¹⁷ This reflects the formulation of the polluter pays principle in the OECD recommendations. However, the polluter pays principle ‘secured international support as an environmental policy’¹⁸ for the first

14. OECD, ‘Recommendation of the Council Concerning the Application of the Polluter-Pays Principle to Accidental Pollution’ (7 July 1989) OECD Doc C(89)88/Final, reprinted in 28 ILM 1320 (1989).

15. 1991 OECD Recommendation (n 9).

16. For soft law instruments, see, for example, Council and Governments of the Member States Declaration, of 22 November 1973, on the programme of action of the European Communities on the environment (OJ C 112, 20. 12. 1973) 1. For binding legal instruments, see, for example, Single European Act (OJ L 169, 17. 02. 1986) 1, Article 25; consolidated version of the Treaty Establishing the European Community (OJ C 325, 24. 11. 2002) 33, 107–08, Article 174(2); Consolidated version of the Treaty on the Functioning of the European Union, 13 December 2007, 2008/C 115/01, Article 191(2). For *ex-ante* measures, see, for example, Directive of the European Parliament and of the Council 2008/98/EC of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22. 11. 2008) 3. For *ex-post* measures to address unavoidable pollution in case of accidents and other environmental disasters, see, for example, Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56, 357.

17. World Commission on Environment and Development, *Report of the World Commission on Environment and Development: Our Common Future* (OUP 1987), Chapter 8, para 53.

18. Birnie, Boyle and Redgwell (n 1) 322.

time during the United Nations Conference on Environment and Development (UNCED) held in 1992.¹⁹ Principle 16 of the Rio Declaration, which has been described as the most important and far-reaching international statement of the fundamental principles of environmental law,²⁰ reads as follows: ‘National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment’.²¹

This formulation of the polluter pays principle is neither absolute, nor does it impose legally binding obligations on national authorities.²² The principle is expressed in qualified and aspirational terms (‘should endeavour’, ‘in principle’); it lacks the normative character of a rule of law.²³ However, it does state that the polluter

19. UN Conference on Environment and Development (UNCED), ‘Rio Declaration on Environment and Development’ (14 June 1992) UN Doc A/CONF. 151/26 (Vol I) Resolution 1, Annex I, reprinted in 31 ILM 874 (1992) (Rio Declaration). For a commentary on the negotiating history of the Rio Declaration, see Chee Yoke Ling, *The Rio Declaration on Environment and Development: An Assessment* (Third World Network 2012) 50.

20. Nash (n 8) 471.

21. See also Priscilla Schwartz, ‘Principle 16’ in Jorge E Viñuales (ed) *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015) 429.

22. de Sadeleer (n 3) 43. See also Alan Boyle and David Freestone (eds) *International Law and Sustainable Development* (OUP 1999) 4.

23. See Vaughan Lowe, ‘Sustainable Development and Unsustainable Arguments’ in Boyle and Freestone (n 22) 19. See also *North Sea Continental Shelf Cases (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands)* (Judgment) [1969] ICJ Rep 3, para 72. Cf *Case concerning the Auditing of Accounts between The Kingdom of The Netherlands and the French Republic pursuant to the Additional Protocol of 25 September 1991 to the Convention on the Protection of the Rhine against Pollution by Chlorides of 3 December 1976*, Arbitral Award of 12 March 2004, Permanent Court of Arbitration, para 103.

should bear the ‘cost of pollution’, which has been interpreted to reflect a shift towards full internationalisation of environmental costs.²⁴

Thus, the polluter pays principle has been interpreted to include an obligation to pay for the prevention and control of pollution, and liability in respect of damages.²⁵ It incorporates measures for the prevention of further pollution and the reduction and control of past and existing pollution, as well as imposition of liability for damages resulting from past pollution.

DEVELOPMENT OF THE POLLUTER PAYS PRINCIPLE IN INDIA

The Supreme Court of India has expressly invoked the polluter pays principle by relying on the understanding of the principle in other jurisdictions and/or in international environmental law, which has been discussed in the previous section. However, the first point of entry of the principle into domestic environmental jurisprudence has not received much attention. This section first examines two decisions of the Supreme Court that serve as the starting point to understand the source of the polluter pays principle. While applying the polluter pays principle, in addition to issuing directions to the polluter to undertake measures for prevention and control of pollution, the judiciary has grappled with the issue of liability for pollution and payment of damages or compensation—to injured persons and/or for restoration of the damaged environment. Therefore, the second part of this section reviews the invocation of the absolute liability principle by the judiciary.

24. de Sadeleer (n 3) 43.

25. See Sanford E. Gaines, ‘The Polluter-Pays Principle: From Economic Equity to Environmental Ethos’ (1991) 26 *Texas International Law Journal* 463, 482–83 [in the context of the OECD]. The principle of prevention has been described as a ‘prudent complement to the polluter pays principle’. See de Sadeleer (n 3) 61.

Locating the Source of the Polluter Pays Principle

The polluter pays principle was explicitly relied on for the first time in domestic environmental law by the Supreme Court in *Indian Council for Enviro-legal Action v. Union of India and Ors.*²⁶ The case concerned the adverse environmental and health impacts of water and soil pollution in Bichhri village and surrounding villages in the Udaipur district in the state of Rajasthan, as a result of the dumping of untreated wastewater and highly toxic sludge, particularly iron-based and gypsum-based, resulting from the past production of H acid by chemical industries.

Relying on an Article published in an academic journal, which discussed the development of the polluter pays principle in the OECD and the European Community,²⁷ the Court observed that the principle ‘has now come to be accepted universally as a sound principle’,²⁸ and it has gained almost universal recognition.²⁹ In other words, the Court appears to have incorporated the polluter pays principle into domestic law as a general principle of law prevalent in other systems,³⁰ rather than as a principle of

26. (1996) 3 SCC 212 (*Bichhri*).

27. Carolyn Shelbourn, ‘Historic Pollution: Does the Polluter Pay?’ (1994) *Journal of Planning and Environmental Law* 703. The judgment of the Court quotes certain passages of the article. See *Bichhri* (n 26), para 67. Some portions of this excerpt from the Article have been subsequently attributed to the Court itself. See, for example, *Karnataka Industrial Areas Development Board v. C. Kenchappa* (2006) 6 SCC 371, para 81. In this judgment, the Court also attributed the observations of the Court on the polluter pays principle in *Bichhri* to the author of the journal article, para 80. See also Shubhankar Dam and Vivek Tewary, ‘Polluting Environment, Polluting Constitution: Is A “Polluted” Constitution Worse than a Polluted Environment?’ (2005) 17(3) *Journal of Environmental Law* 383, 387.

28. *Bichhri* (n 26), para 67.

29. *Ibid.*, para 69(V).

30. Michael R. Anderson, ‘International Environmental Law in Indian Courts’ (1998) 7(1) *Review of European Community and International Environmental Law* 21, 26. See also Daniel Bodansky and Jutta Brunnée,

international environmental law. It has also been observed that the polluter pays principle, as stated in *Bichhri*, ‘is much closer to the ordinary, common-sense meaning of the term “polluter pays”’.³¹

The Supreme Court explicitly invoked the polluter pays principle for the second time in *Vellore Citizens’ Welfare Forum v. Union of India and Ors.*³² The case concerned pollution caused by the discharge of untreated effluent by tanneries and other industries in the state of Tamil Nadu into river Palar and on land, which contaminated surface water and groundwater, the main sources of water supply to the residents of the area. Two observations can be made in respect of the Court’s reliance on two different sources of the polluter pays principle: domestic law (the Constitution of India and environmental statutes) and international law (custom).

First, unlike in *Bichhri*,³³ the Court relied on the constitutional mandate to protect and improve the environment to hold that the polluter pays principle is part of domestic environmental law.³⁴ This is in line with the Court’s history of broad interpretation of constitutional provisions. Insofar as environmental statutes are

‘The Role of National Courts in the Field of International Environmental Law’ (1998) 7(1) *Review of European Community and International Environmental Law* 11, 16.

31. D. Shanmuganathan and L. M. Warren, ‘Status of Sustainable Development as a Principle of National and International Law: The Indian Approach’ (1997) 9(2) *Journal of Environmental Law* 387, 399.

32. (1996) 5 SCC 647.

33. In *Bichhri*, the Court referred to Article 48A and Article 51A(g) of the Constitution as well as to environmental statutes, but there was no attempt to read the polluter pays principle into them. See *Bichhri* (n 26), paras 49–53.

34. *Vellore* (n 32), para 13. This finding of the Court was reiterated in *Kenchappa* (n 27), para 82; *Research Foundation for Science Technology Natural Resource Policy v. Union of India and Anr* (2005) 10 SCC 510 (Research Foundation I), para 16; *Tirupur Dyeing Factory Owners’ Association v. Noyyal River Ayacutdars Protection Association* (2009) 9 SCC 737, para 23. See also *Hindustan Coca-Cola Beverages Pvt. Ltd v. West Bengal Pollution Control Board and Ors*, Appeal No. 10/2011, judgment dated 19 March 2012, NGT (Principal Bench).

concerned, there is no direct reference to the polluter pays principle in the Water (Prevention and Control of Pollution) Act 1974 (Water Act) and the Environment (Protection) Act 1986 (EP Act), which were enacted by Parliament in order to implement the decisions of the United Nations Conference on the Human Environment of 1972 (where the polluter pays principle was not mentioned) and in response to the Bhopal gas tragedy of 1984, respectively. However, in *Vellore*, 'in view of' the statutory provisions, that is the Water Act, EP Act and the Air (Prevention and Control of Pollution) Act 1981 (Air Act), the Court had 'no hesitation in holding' that the polluter pays principle is 'part of the environmental law of the country'.³⁵

On the one hand, this approach of the Court raises some concerns.³⁶ For example, the penalty provisions of domestic environmental statutes do not support the implementation of the polluter pays principle in its broad sense because they prescribe payment of fines and imprisonment rather than compensation for restitution of the damaged environment.³⁷ Further, the statutory limitation on the amount of fine may not reflect the nature and extent of pollution and damage to the environment. On the other hand, the Court's reading of the polluter pays principle into the provisions of these statutes may be justified on the ground that the statutes prescribe standards for prevention and control of pollution, and the polluter is required to bear the cost of compliance with the statutes. In this respect, domestic environmental laws partly mirror

35. *Vellore* (n 32), paras 13 and 14.

36. Shanmuganathan and Warren (n 31) 399 ['not entirely convincing']; Dam and Tewary (n 27) 391 ['The judiciary's use of law to import legal principles into our environmental jurisprudence (read environmental statutes) without any precedent does not augur well for the stated objective of legal stability.']. See also Saptarishi Bandopadhyay, 'Because the Cart Situates the Horse: Unrecognized Movements Underlying the Indian Supreme Court's Internalization of International Environmental Law' (2010) 50(2) *Indian Journal of International Law* 204, 226 and 230.

37. See EP Act, s 15; Water Act ss 41–45A; Air Act ss 37–39.

the polluter pays principle in its narrow sense, as envisaged in the early OECD recommendations.³⁸

Second, the Court considered the international law dimension of the polluter pays principle. It held that sustainable development ‘has been accepted as a part of the customary international law though its salient features have yet to be finalized by the international law jurists’.³⁹ The Court then identified the polluter pays principle as one of the ‘salient principles’ and ‘essential features’ of sustainable development. Some commentators have taken these observations of the Court to mean that it considered the polluter pays principle to be part of customary international law.⁴⁰ But the next observation of the Court is significant. It observed:

Even otherwise once these principles are accepted as part of the Customary International Law there would be no difficulty in accepting them as part of the domestic law. It is almost an accepted proposition of law that the rules of Customary International Law which are not contrary to the municipal law shall be deemed to have been incorporated in the domestic law and shall be followed by the courts of law ...⁴¹

38. See 1972 OECD Recommendation (n 8).

39. *Vellore* (n 32), para 10. According to Article 38(1) of the Statute of the International Court of Justice, ‘international custom’ should constitute ‘evidence of a general practice accepted as law’. The creation of customary international law must be supported by evidence of the fulfillment of any of the characteristic authorities, such as instances of State practice, decisions by international tribunals, treaties or other forms of *opinio juris*, commentary, etc. For an exposition of the classic understanding of customary international law, see Ian Brownlie, *Principles of Public International Law* (5th edition, Clarendon Press 1998) 4–11; Malcolm N. Shaw, *International Law* (6th edition, CUP 2008) 72–92.

40. See Anderson (n 30) 25. According to Bodansky and Brunnée, in *Vellore*, the Court considered the polluter pays principle to be customary international law, although it is still soft law, and incorporated it into domestic environmental law. See Bodansky and Brunnée (n 30) 15–16.

41. *Vellore* (n 32), para 15. In support of the ‘accepted proposition of law’, the Court referred to some of its previous decisions.

The use of the phrases ‘once these principles are accepted’ and ‘there would be no difficulty’ suggest that the Court did not hold that the polluter pays principle was by then a part of customary international law and, therefore, it could incorporate it in domestic law. Instead, it envisaged its incorporation in domestic law in the future—once the principle is accepted as customary international law. It is pertinent to mention that the polluter pays principle has still not achieved the status of a generally applicable rule of customary international law.⁴²

In *Vellore*, the Court also observed that the polluter pays principle has been held to be a ‘sound principle’ in *Bichhri*.⁴³ However, in *Bichhri*, the Court had actually stated that the polluter pays principle has ‘now come to be accepted universally as a sound principle’ based on a journal article, which refers to the adoption of the principle by the OECD and its incorporation by the European Community (two regional systems).⁴⁴ Further, in *Vellore*, although the Court referred to the conventions and non-binding documents signed during UNCED in 1992, it did not refer to any of its outputs, including Principle 16 of the Rio Declaration (which explicitly relates to the polluter pays principle) or the relevant provisions of Agenda 21.

Nevertheless, both of these decisions have been relied upon in a number of subsequent decisions.⁴⁵ In *Research Foundation II*,

42. Birnie, Boyle and Redgwell (n 1) 38.

43. *Vellore* (n 32), para 12. But in *Kenchappa* (n 27) the Court observed that the polluter pays principle was held to be a sound principle in *Vellore*, *ibid.*, para 82.

44. *Bichhri* (n 26), para 67.

45. See *M. C. Mehta v. Union of India* (1997) 3 SCC 715 (*Badkhal and Surajkund Lakes* case), para 8; *S. Jagannath v. Union of India* (1997) 2 SCC 87, para 49; *M. C. Mehta v. Union of India* (1997) 2 SCC 411 (*Calcutta Tanneries* case), para 18; *M. C. Mehta v. Union of India* (1997) 2 SCC 353 (*Taj Trapezium* case), para 32; *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388 (*Kamal Nath I*), para 37; *Tirupur* (n 34), para 23; *Bittu Sehgal and Anr v. Union of India and Ors* (2001) 9 SCC 181, para 15; *Research Foundation I* (n 34), para 16; *Research Foundation for Science Technology*

the Court specifically relied on Principle 16 of the Rio Declaration for support but ‘[a]part from polluter pays principle’,⁴⁶ which is discussed separately. This appears to suggest that according to the Court, there is a distinction between the polluter pays principle and Principle 16 of the Rio Declaration, but there is no substantive discussion of this observation in the decision. In *Kenchappa*, the Court referred to the Rio Declaration generally, without explicitly mentioning Principle 16 of the Rio Declaration, and it traced the foundation of the polluter pays principle to its previous judgments in *Bichhri* and *Vellore*.⁴⁷ Broadly, therefore, the polluter pays principle has been incorporated into domestic environmental jurisprudence.

Application of the Absolute Liability Principle

In the context of environmental pollution, liability rules can perform a curative or preventive function. The curative function is performed when the polluter is held responsible for environmental damage and for payment of compensation to victims.⁴⁸ Liability rules perform a preventive function when the probability of damages incentivises measures to reduce or preempt environmental damage.⁴⁹

The nature of liability may be fault-based or no-fault liability. In the case of fault-based liability, harm results from non-compliance with regulatory requirements, or the breach of a general duty of care (also known as negligence). However, the affected party is required to prove the fault of the polluter, which is a heavy burden to discharge. Further, the polluter is not liable to pay damages for

Natural Resource Policy v. Union of India and Anr (2005) 13 SCC 186 (*Research Foundation II*), paras 26, 33, 34 and 35.

46. *Research Foundation II*, *ibid.*, para 30.

47. *Kenchappa* (n 27), paras 80–82 and 99.

48. de Sadeleer (n 3) 37.

49. Kathleen Segerson, ‘Liability for Environmental Damages’ in Henk Folmer and Gabel H. Landis (eds) *Principles of Environmental and Resource Economics: A Guide for Students and Decision-makers* (Edward Elgar Publishing 2000) 420, 421.

environmental harm, which is neither reasonably foreseeable nor avoidable.⁵⁰ In contrast, no-fault or strict liability is based on the rule laid down in *Rylands v. Fletcher*.⁵¹ There is no requirement to prove the polluter's fault. However, the application of the rule is subject to a number of exceptions.⁵² Further, the liability may be limited in amount and the definition of damage tends to be narrow.

In India, the polluter was held liable for the damage resulting from its activities, for instance, as a remedy in tort law, much before the express incorporation of the polluter pays principle into domestic environmental jurisprudence.⁵³ Pollution also falls under public nuisance, which is broadly defined as an unreasonable interference with a general right of the public and, therefore, the provisions relating to public nuisance in civil and criminal laws are also relevant.⁵⁴

The absolute liability principle was developed by a Constitution bench of the Supreme Court in *M. C. Mehta and Anr v. Union of India and Ors* (the *Oleum Gas Leak* case), a case concerning leakage of oleum gas from a unit of Shriram Foods and Fertiliser Industries

50. de Sadeleer (n 3) 50. See also Lucas Bergkamp, *Liability and Environment* (Kluwer Law International 2001).

51. (1868) LR 3 HL 330. Blackburn J. enunciated the principle thus:

We think that the true rule of the law is, that the person who, for his own purposes, brings on his lands and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and if he does not do so, is prima facie answerable for all the damages which is the natural consequence of its escape.

52. The exceptions are an act of God, an act of a third party, plaintiff's own fault, plaintiff's consent, natural use of land and exclusion of rule by statute or statutory authority.

53. See *J. C. Galstam v. Dunia Lal Seal* (1905) 9 CWN 612; *Dr Ram Baj Singh v. Babulal* (1981) SCC OnLine All 556; *M/s Mukesh Textile Mills (P) Ltd v. HR Subramanya Sastry* (1986) SCC Online Kar 211.

54. A public nuisance is a criminal offence under Section 268 of the Indian Penal Code 1860 and Sections 133–144 of the Code of Criminal Procedure 1973. Civil remedies (in the form of a declaration, or injunction, or both) are available under Section 91 of the Code of Civil Procedure 1908.

on 4 and 6 December 1985 (almost a year after the Bhopal gas tragedy), which affected several persons and killed one person.⁵⁵ The Court held:

... where an enterprise is engaged in a hazardous or inherently dangerous activity and harm results to anyone on account of an accident in the operation of such hazardous or inherently dangerous activity resulting, for example, in the escape of toxic gas the enterprise is strictly and absolutely liable to compensate all those who are affected by the accident and such liability is not subject to any of the exceptions which operate vis-à-vis the tortious principle of strict liability under the rule in *Rylands v. Fletcher*.⁵⁶

The Court further observed:

... the measure of compensation ... must be correlated to the magnitude and capacity of the enterprise because such compensation must have a deterrent effect. The larger and more prosperous the enterprise, the greater must be the amount of compensation payable by it for the harm caused on account of an accident in the carrying on of the hazardous or inherently dangerous activity by the enterprise.⁵⁷

It is pertinent to mention that following the Bhopal gas tragedy of 2/3 December 1984, questions were raised about the extent of liability of corporations in the event that any injurious liquid or gas escapes, on account of negligence or otherwise, and the remedies to secure payment of damages to the affected persons. The absolute liability principle was applied by the High Court of Madhya Pradesh to support the award of interim compensation to the victims of the Bhopal gas tragedy. However, the judgment was never implemented because of the final settlement between the parties.⁵⁸ In a case challenging the validity of the Bhopal Gas Leak Disaster (Processing of Claims) Act 1985 before the Supreme

55. (1987) 1 SCC 395.

56. *Ibid.*, para 31.

57. *Ibid.*, para 32.

58. See *Union Carbide Corporation v. Union of India* (1988) SCC OnLine MP 41.

Court, the Court refused to apply the principle because of the perceived difficulty in the acceptance of this yardstick—domestically and internationally.⁵⁹ However, Justice K. N. Singh, in his separate judgment, assumed that Union Carbide Corporation had accepted its liability while entering into the settlement.⁶⁰ Subsequently, in *Union Carbide Corporation and Ors v. Union of India and Ors*, the petitioners requested the Court to apply the principle of absolute liability instead of the principle of strict liability in cases relating to the Bhopal gas tragedy.⁶¹ But, the Court held the law declared in the *Oleum Gas Leak* case to be obiter.⁶²

Later, the judiciary explored the relationship between the polluter pays principle and the absolute liability principle. In *Bichhri*, for instance, after opining that ‘any principle evolved in this behalf [i.e. to determine the liability of the polluters] should be simple, practical and suited to the conditions obtaining in this country’,⁶³ the Court relied on the absolute liability principle as laid down in the *Oleum Gas Leak* case.⁶⁴ The Court held that the polluting industries are:

absolutely liable to compensate for the harm caused by them to the villagers in the affected area, to the soil and to

59. See *Charan Lal Sahu and Ors v. Union of India and Ors* (1990) 1 SCC 613, para 122 (Chief Justice Mukharji for himself and Saikia J.) and para 156 (concurring opinion of Ranganathan J. for himself and Ahmadi J.)

60. *Ibid.*, para 135.

61. (1991) 4 SCC 584, para 201 [‘The petitioners had urged that the principles of the liability and the standards of assessment of damages in a toxic mass tort arising out of a hazardous enterprise should be not only on the basis of absolute liability—nor merely on *Rylands v. Fletcher* principle of strict liability—not admitting of any exceptions but also that the size of the award be proportional to the economic superiority of the offender, containing a deterrent and punitive element.’].

62. *Ibid.*, paras 14–15 (concurring opinion of Chief Justice Ranganath Misra).

63. *Bichhri* (n 26), para 65.

64. *Ibid.*, paras 59–60. The Court disagreed with the concurring opinion of Chief Justice Ranganath Misra in *Charan Lal Sahu* (n 59), paras 14–15.

the underground water and hence, they are bound to take all necessary measures to remove the sludge and other pollutants lying in the affected area ... and also to defray the cost of the remedial measures required to restore the soil and the underground water sources.⁶⁵

The Court concluded that the polluter pays principle is stated in 'absolute' terms in the *Oleum Gas Leak* case.⁶⁶ This suggests that the Court recognised the distinction between the absolute liability principle or 'no-fault' liability, which applies to inherently dangerous or hazardous activities, and the polluter pays principle, which applies more broadly to different cases of pollution.⁶⁷ However, in *Vellore*, after referring to its previous opinion expressed in *Bichhri* that 'any principle evolved in this behalf should be simple, practical and suited to the conditions obtaining in this country',⁶⁸ the Court went on to hold:

... The 'Polluter Pays' principle as interpreted by this Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the

65. *Bichhri* (n 26), para 66. However, the implementation of the decision left a lot to be desired. In this context, in *Indian Council for Environmental Action v. Union of India and Ors* (2011) 8 SCC 161, para 4, the Court observed:

... This case is a classic illustration where even after a decade-and-a-half of the pronouncement of the judgment by this Court based on the principle of 'polluter pays', till date the polluters (industries concerned in this case) have taken no steps to ecologically restore the entire village and its surrounding areas or complied with the directions of this Court at all. The orders of this Court were not implemented by keeping the litigation alive by filing interlocutory and interim applications even after dismissal of the writ petition, the review petition and the curative petition by this Court.

66. *Bichhri* (n 26), para 69(V). See also Anderson (n 30) 27.

67. Shyam Divan and Armin Rosencranz, *Environmental Law and Policy in India* (2nd edition, OUP 2002) 590.

68. *Vellore* (n 32), para 12 referring to *Bichhri* (n 26), para 65.

process of 'Sustainable Development' and as such polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology.⁶⁹

Vellore appears to have blurred the distinction between different types of polluting activities and endorsed the application of the absolute liability principle as an integral component of the polluter pays principle, so long as the polluting activity results in harm or damage.⁷⁰ The understanding of the polluter pays principle in *Vellore*, which extends to the cost of remediation of environmental damage, also goes beyond the formulation in international environmental law, which generally limits the polluter's liability.⁷¹ A number of subsequent decisions have applied the principle of absolute liability to make the polluter pay for pollution, without determining whether or not the polluting substance or industry is inherently dangerous or hazardous in nature. However, in *Research Foundation II*, a case concerning hazardous waste oil, after observing that 'in India the liability to pay compensation to affected persons is strict and absolute',⁷² the Court did not apply the absolute liability principle. Therefore, it is possible that the Court did not intend to apply the absolute liability principle to all polluting activities.

OPERATIONALISING THE POLLUTER PAYS PRINCIPLE

In order to operationalise the polluter pays principle, it is essential to identify the polluter, the situations in which the principle will be triggered, the authority that will be responsible for undertaking the assessment of environmental harm and determination of

69. *Ibid.*, para 12.

70. See also *The All India Skin and Hide Tanners and Merchants Association v. The Loss of Ecology (Prevention and Payment of Compensation) Authority and Ors* (2010) SCC OnLine Mad 1179, para 9; Anderson (n 30) 27; Divan and Rosencranz (n 67) 590.

71. See Patricia Birnie and Alan Boyle, *International Law and the Environment* (2nd edition, OUP 1992) 109. See also Anderson (n 30) 27.

72. *Research Foundation II* (n 45), para 31.

damages payable by the polluter and the extent of, or the manner in which, damages will be paid by the polluter, etc. This section addresses each of these requirements based on an examination of selected decisions of the Supreme Court, as well as the more recent directives of the NGT.

Who is the Polluter?

The polluter is normally understood as the person or entity responsible for the polluting activity. Even in India, the Court has defined the polluter as the producer of goods.⁷³ However, in a significant departure from the practice in other jurisdictions as well as international environmental law, the courts in India, especially the NGT, have played an important role in expanding the traditional definition of the polluter to include other persons/entities within its scope. For example, in a case concerning disposal of debris and construction waste on the banks of the river Yamuna, the polluter included the contractor and the truck owner who were responsible for dumping, as well as the person whose property created the waste.⁷⁴

In some cases, the NGT has held government departments and officials directly responsible for pollution. This includes municipal authorities whose inaction led to environmental degradation and/or pollution within the definition of polluter. In *Invertis University and Ors v. Union of India and Ors*, for example, the municipal body was directed to pay compensation for restitution of the solid waste site to its original condition, and to prevent further damage to

73. *Ibid.*, para 29.

74. *Manoj Misra v. Union of India and Ors*, OA No. 6/2012, order dated 22 July 2013, NGT (Principal Bench). See also *M/s Jaiprakash Power Ltd v. State of Himachal Pradesh and Ors*, CWP No. 843/2011, order dated 29 July 2013, NGT (Principal Bench); *Abhishek Rai v. State of Himachal Pradesh and Ors*, Application No. 256/2013 in CWPIIL No. 28/2011, order dated 17 September 2013, NGT (Circuit Bench at Shimla).

the environment.⁷⁵ In *Dr Karan Singh v. State of Himachal Pradesh and Ors*,⁷⁶ a case concerning open burning of municipal wastes, a compensatory cost was imposed on the Municipal Council, which was subsequently recoverable from all the concerned officers and the contractor. In *Rohit Choudhary v. Union of India and Ors*, the Ministry of Environment and Forests (MoEF), Government of India and the Government of Assam were considered as polluters for permitting unregulated quarrying and mining activities in and around the area of Kaziranga National Park.⁷⁷ In *M/s Cox India Ltd v. M. P. Pollution Control Board and Anr*, the regional officer of the State Pollution Control Board (SPCB) was treated as a polluter because of his failure to furnish correct information about the condition of the distillery unit for rectified spirit, which prevented the NGT from taking appropriate action to prevent pollution.⁷⁸ In the *Art of Living* case, the NGT imposed fines on the regulatory authorities for dereliction of their statutory duty in allowing an event on the Yamuna floodplains that resulted in environmental damage.⁷⁹

The public has also been considered as the polluter in some cases. In *Gaurav Jain v. State of Punjab and Ors*,⁸⁰ for example, the NGT 'indicated' that the authorities will be at liberty to ask for payment of money from the entire population generating municipal

75. Application No. 185/2013, order dated 24 October 2013, NGT (Principal Bench), para 45(iv).

76. CWP No. 6114/2012, order dated 30 July 2013, NGT (Circuit Bench at Shimla).

77. Application No. 38/2011, judgment dated 7 September 2012, NGT (Principal Bench), para 35.

78. Application No. 10/2013, judgment dated 9 May 2013, NGT (Central Zone Bench), para 27. See also *Abhishek Rai* (n 74).

79. *Manoj Misra v. Delhi Development Authority and Ors*, OA No. 65/2016, order dated 9 March 2016, NGT (Principal Bench) (*Art of Living* case). The Delhi Development Authority was directed to pay Rs 5 lakhs while the Delhi Pollution Control Committee was directed to pay Rs 1 lakh.

80. OA No. 106/2013, order dated 3 September 2013, NGT (Principal Bench).

solid waste, in order to generate funds for effective execution of municipal solid waste disposal works. In *Subhas Datta v. Union of India and Ors*,⁸¹ a committee was set up to *inter alia* determine whether it would be appropriate for the authorities to collect fee for environmental pollution caused by the residents of, and visitors to, Puri.

Courts have applied the polluter pays principle regardless of the socioeconomic background of the polluters. Another way of interpreting this is that courts have followed their pre-conceived notion of who is polluting more or less. In *Wazirpur Bartan Nirmata Sangh v. Union of India and Ors*,⁸² for example, the pollution and ecological problems resulting from the unhygienic conditions created by the 'encroachers' or squatters on public land was the reason for directing their displacement. Similarly, the order of the NGT in *Saloni Singh and Anr v. Union of India and Ors*, which requires any person found defecating on the railway track or on the railway properties to pay Rs 5,000 per offence in accordance with the polluter pays principle,⁸³ identifies the poor people, who engage in the practice of open defecation on the railway tracks, as polluters.

In some cases, the government pays instead of the polluter where the polluter fails to pay or is unable to pay and it is necessary to compensate the victims immediately.⁸⁴ The government can subsequently recover the amount from the polluter.⁸⁵ Such substitution may be necessary in some cases, to ensure timely payment of compensation to victims and/or environmental restoration. In *Indian Council for Enviro-legal Action*, for example, the

81. OA No. 110/2013, order dated 22 October 2013, NGT (Principal Bench).

82. (2002) SCC Online Del 1335.

83. OA No. 141/2014, order dated 18 December 2014, NGT (Principal Bench).

84. Barbara Luppi, Francesco Parisi and Shruti Rajagopalan, 'The Rise and Fall of the Polluter-pays Principle in Developing Countries' (2012) 32 *International Review of Law and Economics* 135, 136.

85. See also Water Act s 33(4); Air Act s 22A(4).

Supreme Court directed the state government to pay the portion of the total amount of compensatory damages that the polluting industries were directed to pay to the villagers for loss suffered as a result of damage to crops.⁸⁶ In another case, the Supreme Court had imposed a liability on the polluters (importers of hazardous waste oil in the garb of lubricating oil) towards the cost of incineration.⁸⁷ However, on account of non-payment of this cost by the polluters, the Court ordered the customs department to pay the cost and recover it from the importers later.⁸⁸

Environmental harm or damage is not confined to polluting activities; the unbridled consumption of natural resources is also a problem.⁸⁹ This includes mining activities, use of biological resources, etc. In such situations, the polluter pays principle may be renamed as the ‘user pays principle’. Courts in India have accommodated this variation of the polluter pays principle. In *Nature Lovers Movement v. State of Kerala and Ors*,⁹⁰ for example, the Kerala High Court applied the polluter pays principle and directed the state government to determine the quantum of injury and compensation payable by occupants/encroachers in respect of forest lands sought to be regularised.

Triggering the Polluter Pays Principle

Generally, the application of the polluter pays principle is contingent upon a polluting activity (or emission). The principle may be invoked in different situations: (i) when an established threshold

86. In *Indian Council for Enviro-legal Action and Ors v. Union of India and Ors* (2007) 15 SCC 633, para 8, the discharge of untreated industrial effluents into the Nakkavagu by the polluting industries resulted in pollution of subsoil water.

87. *Research Foundation II* (n 45), para 25.

88. *Research Foundation for Science v. Union of India* (2005) 13 SCC 671, para 1.

89. de Sadeleer (n 3) 42.

90. (1999) SCC OnLine Ker 191, para 101.

in the form of prescribed standards for the receiving environment is exceeded but does not result in damage; (ii) when an emission exceeds the prescribed standards and results in damage; (iii) when an emission does not exceed the prescribed standards but nevertheless results in damage; (iv) when there is a risk of potential negative environmental impact, irrespective of compliance with prescribed standards; (v) when there are no prescribed standards,⁹¹ etc.

The occurrence of harm or the existence of damage has been identified as a precondition for the application of the polluter pays principle in some cases. In *Deepak Nitrite v. State of Gujarat*,⁹² for example, the Supreme Court clarified that ‘compensation to be awarded must have some broad correlation not only with the magnitude and capacity of the enterprise but also with the harm caused by it’.⁹³ After restating the ‘legal position’ that ‘if there is a finding that there has been degradation of environment or any damage caused to any of the victims by the activities of the industrial units certainly damages have to be paid’, the Court held that it would not be correct ‘to say that mere violation of the law in not observing the norms would result in degradation of environment’.⁹⁴ Similarly, in *Hindustan Coca-Cola*, the NGT observed that the assessment of damage and the amount required to rectify the damage were preconditions, before imposing a liability on the polluter.⁹⁵

In some cases, courts have issued directions to the potential polluter to pay the amount of damages in advance, that is, before the actual occurrence of environmental pollution. In *M. C. Mehta and Anr v. Union of India and Ors*, for instance, the Court allowed

91. See, for example, *Indian Council for Enviro-legal Action v. Ministry of Environment and Forests and Ors*, OA No. 170/2014, judgment dated 10 December 2015, NGT (Principal Bench) [recognising the absence of domestic law for the regulation of HCFC-22 and HFC-23].

92. (2004) 6 SCC 402.

93. *Ibid.*, para 6.

94. *Ibid.*

95. *Hindustan Coca-Cola* (n 34), para 27.

the company's caustic chlorine plant to be restarted, subject to fulfillment of certain directions, including the deposit of a bank guarantee, which could be encashed, wholly or in part, and utilised for payment of compensation, in case escape of chlorine gas within a three-year period results in death or injury to any workman or to any person(s) living in the vicinity of the plant.⁹⁶ Similarly, in some cases, the NGT has directed the alleged polluter to deposit an amount in advance in order to remedy or compensate for future pollution.⁹⁷

Some SPCBs require polluting industries to post a bank guarantee, to ensure the implementation of corrective actions in accordance with the negotiated compliance schedule. The posting of the bank guarantee is a condition precedent for renewal of consent to operate. However, there are no standard procedures to determine the amount of bank guarantee, the amount of forfeiture in case of non-compliance, or the use of the forfeited amount.⁹⁸ Significantly, many of the SPCBs believe that existing laws do not allow a bank guarantee and its wide use must be preceded by a legal clarification.⁹⁹

Forfeiture of the bank guarantee by the Delhi Pollution Control Committee was challenged before the High Court of Delhi. The Court held that the power to issue directions under Section 33A of the Water Act does not confer the power to levy any penalty, by requiring the industry to furnish a bank guarantee and making the grant of consent to establish under the Water Act conditional upon payment of such payments and furnishing of such bank

96. (1986) 2 SCC 176, para 20(11).

97. See *Rudresh Naik v. Goa Coastal Zone Management Authority*, Appeal No. 20/2013, judgment dated 16 May 2013, NGT (Principal Bench); *Vithal Gopichand Bhungase v. The Gangakhed Sugar and Energy Ltd and Ors*, MA No. 37/2013, judgment dated 20 December 2013, NGT (Western Zone Bench).

98. See Centre for Science and Environment (CSE), 'Filling the Blanks: A Discussion Paper on Strengthening Environmental Governance' (CSE 2014) 14–15.

99. *Ibid.*, 15.

guarantees.¹⁰⁰ The NGT has held that the bank guarantee was not penal in nature but was clearly compensatory in its character, and ensured prevention and control of pollution and restoration of environment.¹⁰¹ Subsequently, the Tribunal has held:

... the SPCB cannot use the BG as a penal measure against any non-compliance, but can seek/invoke the BG for ensuring time-bound and well defined substantial improvements in the pollution control system. In simple words, the BG regime shall not be used or rather misused as ‘pollute and pay’. Nor the BG regime can be used as substitute for the legal action against the non-compliance as per the provisions of [the environmental laws] ... Neither the BG can be taken as penalty or compensation for pollution. Wherever the Board requires a unit to furnish bank guarantee for compliance of conditions of consent order, installation of anti-pollution devices and ensuring that it is a pollution-free unit, then, in such cases, the Board should ensure that its order provides for a ‘time targeted action plan’. In default of which and upon inspection, such bank guarantee would be liable to be invoked/encashed for environmental compensation and restoration purposes.¹⁰²

Even where the occurrence of harm or the existence of damage is a precondition, the courts do not discuss the threshold of harm that will result in the application of the polluter pays principle. However, it is clear that the principle has not been invoked in the case of *any* or *every* instance of environmental harm or damage resulting from the pollution. In most cases, the application of the principle by the courts has been pursuant to a finding of ‘some’

100. *Splendor Landbase Limited v. Delhi Pollution Control Committee* (2010) SCC OnLine Del 3466, paras 58–64. See also *Delhi Pollution Control Committee v. Splendor Landbase Ltd* (2012) SCC OnLine Del 400 (Division Bench), para 37.

101. See *State Pollution Control Board, Odisha v. M/s Swastik Ispat Pvt. Ltd* Appeal No. 68/2012, judgment dated 9 January 2014, NGT (Principal Bench), para 51.

102. See *Tarun Patel v. Chairman, Gujarat Pollution Control Board and Ors*, OA No. 34/2013, judgment dated 1 April 2014, NGT (Western Zone Bench), para 32.

environmental harm or damage. This suggests that the courts are applying an implicit threshold of harm. The nature of the activity and the 'public interest' involved in its continuation also influences the determination of acceptable risk and, therefore, the threshold of harm, which becomes unacceptable.

However, the existence of damage as a precondition to trigger the polluter pays principle fails to take into account situations where the risk of environmental degradation or pollution necessitates the application of the precautionary principle,¹⁰³ and/or the principle of prevention.¹⁰⁴ For instance, in the *Art of Living* case, instead of applying the precautionary principle or the principle of prevention and stopping the event on the Yamuna floodplain, the NGT permitted the organisers to proceed with the event, on the condition that they would deposit Rs 5 crores as compensation for potential environmental damage.¹⁰⁵ This represents a significant step backward as it does not encourage the (potential) polluter to adopt preventive or precautionary measures before the pollution occurs.

But in some cases, the polluter pays principle and the other principles have been applied in tandem. In *Research Foundation II*, for example, the Supreme Court observed that 'the producer of goods or other items should be responsible for the cost of preventing or dealing with any pollution that the process causes. This ... covers cost incurred in avoiding pollution and not just those related to remedying any damage.'¹⁰⁶ The Court then limited and distinguished its observation in *Deepak Nitrite*, that 'to say that mere violation of the law in not observing the norms would result in degradation of environment would not be correct'.¹⁰⁷ It observed that *Deepak Nitrite* did not lay down a proposition that the application of the polluter pays principle requires actual

103. de Sadeleer (n 3) 40–41.

104. *Ibid.*, 61.

105. *Art of Living* case (n 79), para 7.

106. *Research Foundation II* (n 45), para 29.

107. *Deepak Nitrite* (n 92), para 6.

environmental degradation. The Court distinguished the case before it on the ground that the offending activities (that is, import of hazardous waste oil in the garb of lubricating oil) had the potential to degrade the environment.¹⁰⁸ In contrast, in *Deepak Nitrite*, the Court was dealing with the discharge of effluents by industries into the effluent treatment project in excess of the prescribed parameters.¹⁰⁹

More generally, the main issue raised in a number of cases relating to environmental pollution is the non-implementation of the provisions of the existing environmental legislation that require the polluter/potential polluter to construct and operate effluent/sewage treatment plants, or to install and operate pollution control equipment. In these cases, courts have directed the existing or potential polluter to pay by directing them to construct/install and operate the necessary plants/equipment, in order to prevent and control pollution.¹¹⁰ In this form, the Court employs the polluter pays principle to ensure compliance with statutory duties.

Assessment of Loss and Determination of Compensation

Courts have invoked the polluter pays principle to hold the polluter liable for payment of damages and/or compensation in a number of cases. This has to be followed by the onerous task of assessment of loss, and determination, imposition, and recovery of the amount from the polluter.

The first question relates to the competence of the judiciary to undertake such an assessment. In a number of cases, the Supreme Court has not itself undertaken the task of assessment of the loss resulting from the polluting activity and determination of the

108. *Research Foundation II* (n 45), para 30 [‘The observations ... is [sic] evidently confined to the facts of that case’].

109. *Deepak Nitrite* (n 92), para 1.

110. See, for example, *Bichhri* (n 26); *Vellore* (n 32).

amount payable by the polluter for reversing the environmental/ecological damage and the compensation payable by the polluter to the victims (individuals and families). In *Bichhri*, in a footnote, the Court briefly raised the question of its own competence to impose and recover cost of all measures, including remedial measures (or award damages against private parties), in order to ensure observance of law and its orders as a part of enforcement of fundamental rights, but it did not express any final opinion.¹¹¹ However, the Court does not appear to have ruled out the possibility that it can award damages.¹¹² Nevertheless, it directed the central government (through the MoEF) to undertake this function in the exercise of its powers under Section 3(3) of the EP Act.¹¹³ Insofar as the task of awarding damages for loss suffered by the villagers in the affected area is concerned, the Court left it open to the villagers or any organisation on their behalf to institute civil suits for this purpose.¹¹⁴ However, the judiciary has awarded damages in other cases.¹¹⁵

The same approach has been followed in other cases where the Court has directed the central government to establish an authority, which is required to implement the polluter pays principle.¹¹⁶ In

111. *Bichhri* (n 26), para 60.

112. The Court observed: 'Be that as it may we are of the considered opinion that even if it is assumed (for the sake of argument) that this Court cannot award damages against the respondents ...', *ibid.*, para 60.

113. *Ibid.*, para 70. The Court derived its authority to issue the necessary directions to the central government from its earlier decision in *Indian Council for Enviro-legal Action v. Union of India* (1995) 3 SCC 77. See *ibid.*, para 60.

114. *Ibid.*, para 70(3).

115. See, for example, *M. C. Mehta v. Kamal Nath and Ors* (2000) 6 SCC 213 (*Kamal Nath II*), paras 9 and 24; *Vijay Singh Puniya v. State of Rajasthan* (2003) SCC Online Raj 87, paras 30 and 31.

116. For example, the Court's directions led to the constitution of the Loss of Ecology (Prevention and Payment of Compensation) Authority for the State of Tamil Nadu *vide* Notification No. S.O.671 (E), dated 30 September 1996 [*Vellore* (n 32), paras 15, 17 and 18]; the Aquaculture Authority *vide* Notification No. S.O. 88(E), dated 6 February 1997

some cases, courts have directed the state government to appoint an authority or commissioner for this purpose.¹¹⁷ In most of these cases, the authority prepares the statement showing the total amount to be recovered, the names of the polluters from whom the amount is to be recovered, the amount to be recovered from each polluter, the persons to whom the compensation is to be paid, and the amount payable to each of them. Then the collector/district magistrate of the area concerned is responsible for recovering the amount from the polluters, if necessary as arrears of land revenue, and its disbursement to the affected individuals and families.¹¹⁸

In *Janardan Kundalikrao Pharande v. Ministry of Environment and Forests and Ors*,¹¹⁹ after admitting that it lacked any mechanism to quantify the loss caused to the fertility of the agricultural lands of the villagers in the area, the NGT directed the collector to constitute a committee for this purpose. Here too the question of the competence of the authority to implement the polluter pays principle can be raised.

(*Jagannath* (n 45), para 52); and the Dahanu Taluka Environment Protection Authority *vide* Notification No. S.O. 884(E), dated 19 December 1996 (*Bittu Sehgal* (n 45), para 17). See Geetanjoy Sahu and Armin Rosencranz, 'Court-appointed Monitoring Committees: The Case of the Dahanu Taluka Environment Protection Authority' (2009) 5(2) *Law, Environment and Development Journal* 185; Geetanjoy Sahu, 'Implementation of Environmental Judgments in Context: A Comparative Analysis of Dahanu Thermal Power Plant Pollution Case in Maharashtra and Vellore Leather Industrial Pollution Case in Tamil Nadu' (2010) 6(3) *Law, Environment and Development Journal* 335. The Madras High Court ordered the winding up of the Loss of Ecology (Prevention and Payment of Compensation) Authority for the State of Tamil Nadu in April 2016 and transferred all the pending cases to the NGT's Southern Zone Bench in Chennai. See *Vellore Citizens' Welfare Forum and Ors v. Union of India and Ors* (2016) SCC OnLine Mad 1881.

117. See, for example, *Calcutta Tanneries* (n 45), para 20(14); *Ishwar Singh v. State of Haryana and Ors* (1995) SCC OnLine P&H 717, para 39(5).

118. See *Vellore* (n 32); *Jagannath* (n 45); *Bittu Sehgal* (n 45).

119. Application No. 7/2014, judgment dated 16 May 2014, NGT (Western Zone Bench), paras 49 and 51(5).

The process of assessment of loss and determination of compensation is subject to a number of additional difficulties.¹²⁰ One is the difficulty associated with identification of polluters and victims where their number is large. In order to address some of these concerns, in some cases, the amount of compensation has been apportioned among the polluters.¹²¹ The methodology applied for valuation, exclusion of certain types of damages and the adequacy of compensation are also thorny issues. In a 2013 decision of the NGT, a direction of the SPCB to the polluting industry to form an expert committee to ‘resolve the matter of damage compensation by mutual understanding with affected farmers’, instead of referring the matter to a district level compensation committee set up for such purposes, pursuant to an order of the High Court, was held to be bad in law.¹²² However, instead of questioning the formula derived by the polluting industry’s expert committee for this purpose or directing that an independent enquiry should be conducted, the NGT directed the collector and district magistrate to verify whether all the victims had been duly compensated as per this formula.

What Does the Polluter Pay?

The polluter pays principle is based on the premise of making the polluter pay for pollution. As previously mentioned, what the

120. Asha Krishnakumar, ‘An Award and Despair’ (2002) 19(16) *Frontline* <<http://www.frontline.in/static/html/fl1916/19160930.htm>> accessed 4 April 2017; L. Venkatachalam, ‘Damage Assessment and Compensation to Farmers: Lessons from Verdict of Loss of Ecology Authority in Tamil Nadu’ (2005) 40(15) *Economic and Political Weekly* 1556.

121. See, for example, *Ramdas Janardan Koli and Ors v. Secretary, Ministry of Environment and Forests and Ors*, OA No. 19/2013, judgment dated 27 February 2015, NGT (Western Zone Bench), paras 67–70.

122. *Vajubhai Arsibhai Dodiya and Ors v. Gujarat Pollution Control Board and Ors*, Application No. 64/2012, judgment dated 31 October 2013, NGT (Western Zone Bench), para 21.

polluter is actually asked to pay depends on the meaning attributed to the principle and its intended function. The non-curative or redistributive function of the polluter pays principle requires the polluter to internalise the social cost borne by the public authorities for prevention and control of pollution.¹²³ Accordingly, in *Research Foundation II*, the importer of hazardous waste was held liable to pay the amounts to be spent by the government for destroying the goods.¹²⁴ Akin to the partial-cost internalisation approach towards the polluter pays principle, courts have also directed the polluting industry to adopt pollution prevention and control technologies.¹²⁵ The curative function of the polluter pays principle involves payment of damages or compensation to victims of pollution, as well as for environmental damages. This subsection will deal with this function of the principle in the Indian context.

Damage or Compensation to Victims of Pollution and Environmental Restoration

In a number of cases, courts have adopted the full internalisation of costs approach, which requires the polluter to pay damages or compensation to the victims of pollution and to meet the expenses of environmental restoration.¹²⁶ It is now settled law in India

123. de Sadeleer (n 3) 35.

124. *Research Foundation II* (n 45), para 39.

125. *Calcutta Tanneries* (n 45), paras 18–20.

126. In some cases, the two terms—damages and compensation—are used interchangeably, while in others, damages are payable for environmental degradation while compensation is payable to the victims of pollution (individuals or families). More recently, the term ‘environmental compensation’ has been used instead of damages for environmental degradation/restoration. See, for example, the decision of the NGT in *Kallpavalli Vrishka Pempakamdarula Paraspara Sahayaka Sahakara Sangam Ltd and Ors v. Union of India and Ors*, OA No 92/2013, judgment dated 25 August 2015, NGT (Principal Bench), para 29(i), where the applicants’ claim for compensation was rejected, but the respondents were directed to pay environmental compensation of Rs 50 lakhs to the SPCB.

that the ‘one who pollutes the environment must pay to reverse the damage caused by his acts’.¹²⁷ In *Research Foundation II*, the Supreme Court held that this includes direct cost to the people or property and full environmental cost (tangible and intangible).¹²⁸ However, the calculation of the amount payable by the polluter to the victim is often a very complex process.

In some cases, courts have applied the ‘percentage of gross turnover’ formula to determine the quantum of compensation payable by the polluter.¹²⁹ The Supreme Court has acknowledged that this formula ‘may be a proper measure’ in a given case because ‘the method to be adopted in awarding damages on the basis of “polluter-to-pay” principle has got to be practical, simple, and easy in application’.¹³⁰ However, the usefulness of this formula may be undermined where courts include polluters with different annual turnovers within the same band for the purpose of determination of liability, that is, they are required to pay the same amount irrespective of differences in their annual turnover.¹³¹ The formula may also fail to have the requisite deterrent effect on polluters if the ‘percentage of gross turnover’ awarded as damages is not

127. See *Vellore* (n 32); *Kamal Nath I* (n 45), para 38 and 39(3); *Kamal Nath II* (n 115), para 24; *Calcutta Tanneries* (n 45), para 19.

128. *Research Foundation II* (n 45), para 29.

129. *Pravinbhai Jashbhai Patel and Anr v. State of Gujarat and Ors* (1995) 36(2) GLR 1210. See also *Deepak Nitrite Ltd v. Ajit B. Padiwal* (1997) 1 Guj LR 1062. The Supreme Court allowed an appeal against this order but for different reasons. See *Deepak Nitrite* (n 92).

130. *Deepak Nitrite* (n 92), para 6. The language reflects the earlier observation of the Court in *Bichhri* (n 26) where it applied the absolute liability principle to implement the polluter pays principle.

131. In *Puniya*, for instance, all the printing and dyeing units with different gross annual turnover, but within the same band determined by the Single Judge of the Rajasthan High Court, had been directed to pay the same pollution fine. However, the Division Bench of the High Court varied the formula for determining the amount payable by the industrial units and ordered each of the units to pay 15 per cent of their turnover. See *Puniya* (n 115).

high enough. Further, in some cases, it may be difficult to access information about the annual turnover of the polluting industry.¹³²

It appears that in a number of cases, the curative dimension of the polluter pays principle is completely sidelined and it is applied in a manner to avoid addressing the question of liability altogether. For example, in some cases, courts have directed the polluter to pay lump sum compensation (Rs 1 lakh or Rs 5 lakhs)¹³³ while in other cases, a daily penalty amount is imposed.¹³⁴ This is a regressive approach because it fails to even hold the polluter strictly liable for the pollution.

The determination of the full environmental cost of pollution involves calculation of the market value of natural resources and valuation of environmental damages, which is a very difficult task. In most cases involving environmental pollution, the scope of liability of the polluter is often limited to some tangible environmental costs. For instance, the polluter pays principle underpins the calculation of a 'net present value' (NPV) for the diversion of forestland for non-forest purposes (depending upon the area and density of land in question), as recommended by the Court in *T. N. Godavarman Thirumulpad v. Union of India and*

132. In *Rajiv Narayan v. Union of India and Ors*, MA No. 44/2013, in OA No. 36/2012, order dated 12 September 2013, NGT (Principal Bench), the NGT directed the alleged polluting industry responsible for groundwater pollution in Noida to show its annual turnover for the last ten years with profit and loss statement. On 20 September 2013, the Supreme Court stayed this order for a period of 10 weeks on the ground that the NGT does not have the right to issue such a direction. This order of the Supreme Court is referred to in *Rajiv Narayan v. Union of India and Ors*, MA No. 762/2014 in MA No. 44/2013 in OA No. 36/2012, judgment dated 13 January 2015, NGT (Principal Bench), para 11.

133. See, for example, *Manoj Misra* (n 74); *Abhishek Rai* (n 74); *Invertis University* (n 75); *Karan Singh* (n 76).

134. See, for example, *Noyyal River Ayacutdars Protection Association v. Government of Tamil Nadu* (2006) SCC OnLine Mad 1192. The High Court of Madras directed the polluting industries to pay a fine on *pro rata* basis until they stopped pollution (by achieving zero liquid discharge by a specified date).

*Ors.*¹³⁵ The Court further recommended that the NPV as well as payments received towards compensatory afforestation, additional compensatory afforestation, penal compensatory afforestation or catchment area treatment plan, have to be deposited with the Compensatory Afforestation Planning and Management Authority (CAMPA) and used for specific activities.¹³⁶

The full internalisation of costs approach suffers from a number of limitations. Although decisions refer to reversing the damage and restoration of the environment, this is not possible in the case of irreversible damage. A preventive and anticipatory approach or a precautionary approach is more appropriate here.¹³⁷ The assessment of damage can take very long.¹³⁸ In the absence of verification mechanisms, it is not possible to determine whether the restoration has actually taken place.

135. IA No. 566 in WP (C) No. 202/1995, order dated 29 October 2002, Supreme Court cited in *T. N. Godavarman Thirumulpad (87) v. Union of India and Ors* (2006) 1 SCC 1, paras 12 and 14.

136. *Ibid.* This formed the basis for the grant of clearance by the MoEF to M/s Sterlite (parent company of Vedanta) for diversion of forest land to undertake mining of bauxite ore on the Niyamgiri hills in the state of Odisha. See *T. N. Godavarman Thirumulpad v. Union of India and Ors* (2008) 2 SCC 222 and *T. N. Godavarman Thirumulpad v. Union of India and Ors* (2008) 9 SCC 711.

137. See de Sadeleer (n 3) 44.

138. In the *Art of Living* case (n 79), for example, the NGT directed a committee to assess the environmental damage caused to the Yamuna floodplain and the cost of rehabilitation on 26 October 2016. See Press Trust of India, 'Expert Committee Seeks More Time to Quantify Damages by Art of Living' (30 September 2016) <<http://www.ndtv.com/india-news/expert-committee-seeks-more-time-to-quantify-damages-by-art-of-living-1468674>> accessed 7 April 2017. The committee finally submitted its report on 12 April 2017. See Nikhil M. Ghanekar, 'NGT panel recommends Art of Living pay Rs 42 crore for damaging Yamuna floodplains' *Daily News and Analysis* (New Delhi) (13 April 2017) <<http://www.dnaindia.com/india/report-ngt-panel-recommends-art-of-living-pay-rs-42-crore-for-damaging-yamuna-floodplains-2399422>> accessed 30 April 2017.

Punitive or Exemplary Damages

The primary objective of punitive or exemplary damages is to punish the polluter and to deter the polluter as well as others from causing pollution in the future. Punitive or exemplary damages are different from compensation to victims of pollution and/or damages for restoration of the damaged ecology. But a polluter can be held liable to pay both types of damages.¹³⁹ In *M. C. Mehta v. Kamal Nath and Ors*, the Supreme Court considered the aim and purpose of exemplary damages to be ‘almost similar’ to the purpose of punishment (in the nature of fine or imprisonment or both) under domestic environmental laws.¹⁴⁰ The Court imposed exemplary damages on the polluter, which were to be used by the state government for flood protection works in the area affected by pollution.¹⁴¹

The Supreme Court has identified the nature and extent of the offending activity, nature of the offending party, and intention behind such activity as the basis of the levy of exemplary and/or penal damages.¹⁴² In *Sterlite Industries (India) Ltd v. Union of India and Ors*,¹⁴³ the Court referred to its decision in the *Oleum Gas Leak* case, and after considering the magnitude, capacity, and prosperity of the appellant-company, held it liable to pay a compensation of Rs 100 crores for polluting the environment in the vicinity of its copper smelter plant, and for operating the plant without a renewal of the consents by the SPCB for a long period.

139. In *Kamal Nath II*, the polluter was directed to show cause as to why exemplary damages should not be awarded in addition to damages/compensation for restoration of the damaged ecology. See *Kamal Nath II* (n 115), para 24.

140. (2002) 3 SCC 653, para 9.

141. *Ibid.*, para 8.

142. *Research Foundation II* (n 45), para 31. However, in this case, the Court did not consider it necessary to examine this aspect in depth in the absence of a clear finding.

143. (2013) 4 SCC 575.

The Court also emphasised the deterrent effect of the payment on the appellant-company.¹⁴⁴ Similarly, in *Him Privesh Environment Protection Society and Anr v. State of Himachal Pradesh and Ors*,¹⁴⁵ the factors considered by the High Court of Himachal Pradesh while assessing damages included the deterrent effect on the polluter as well as other companies, that the polluter should feel the pinch of the damages and the net worth of the polluter. The Court imposed damages/penalty of Rs 100 crores as a proportion of the total cost of the project (approximately 25 per cent) on the polluter. The Court also considered the blatant falsehoods of the polluter as a factor in the assessment of damages.¹⁴⁶

Pollution Fine

There is a distinction between a fine or penalty, which can be imposed after the commission of an offence punishable under a statute is established, and damages or compensation payable in accordance with the polluter pays principle. Although the Supreme Court directed the polluter to show cause why a pollution fine should not be imposed in *Kamal Nath I*,¹⁴⁷ it was subsequently held that a pollution fine cannot be imposed under writ jurisdiction; the fine can be imposed only if it is prescribed in a statute, the polluter is guilty of contravention of its provisions and the polluter is found

144. *Ibid.*, paras 46–47.

145. (2012) SCC OnLine HP 2690. See also *Krishna Kant Singh v. National Ganga River Basin Authority*, MA No. 879/2013 and 403/2014, judgment dated 16 October 2014, NGT (Principal Bench). According to the NGT, '[c]onsidering the magnitude of the pollution caused by the unit, its capacity and prosperity responsibility of the unit to pay compensation cannot be disputed', para 51.

146. *Him Privesh*, *ibid.*, paras 100 and 106. For instance, the polluter had made false statements for obtaining environmental clearance for all its projects, it was put in possession of the land without any legal order or authority, etc.

147. *Kamal Nath I* (n 45), para 39(4).

guilty after fair trial in a competent court.¹⁴⁸ In *Calcutta Tanneries*, however, the Court imposed a pollution fine on the polluters in addition to compensation.¹⁴⁹

In some cases, courts have applied the polluter pays principle and directed the polluter to pay a 'pollution fine' to compensate affected persons and to cover the cost of restoring the damaged ecology for its period of operation.¹⁵⁰ In these cases, courts may not be applying the term 'pollution fine' *stricto sensu*, as understood in statutory enactments. However, the imposition of such a pollution fine may provide the necessary impetus for the polluters to undertake measures to prevent future pollution, thus performing an important function of the polluter pays principle.

Limits of the Polluter Pays Principle: Pay and Pollute Principle and Utilisation of the Payment

In the 1990s, during the period immediately following the Rio Conference, in a number of cases where the polluter pays principle was expressly invoked, while the Supreme Court acknowledged the importance of the polluting industries in the generation of foreign exchange and employment (directly and in ancillary industries), it finally gave precedence to environmental considerations.¹⁵¹ The Supreme Court has also clarified that the principle does not

148. *Kamal Nath II* (n 115), paras 17–19 and 22. See also *M/s DVC Emta Coal Mines Limited v. Pollution Control Appellate Authority (WB) and Ors*, Appeal No. 43/2012, judgment dated 15 March 2013, NGT (Principal Bench).

149. *Calcutta Tanneries* (n 45), para 20(17).

150. See *Vellore* (n 32), para 21. See also *Puniya* (n 115); *Indian Asthama Care Society and Anr v. State of Rajasthan and Ors* RLW 2008 (1) Raj 472.

151. In *Bichhri* (n 26), the pollutant (H acid) was manufactured for export exclusively, while in *Vellore* (n 32) and *Tirupur* (n 34), the polluting industry (leather and garments, respectively) generated considerable foreign exchange and employment.

mean that the polluter can 'pollute and pay'.¹⁵² In *Pravinbhai*, for instance, the High Court of Gujarat observed that this would 'legalise the violation, which is impermissible'.¹⁵³ However, in a large number of cases, courts have invoked the polluter pays principle to impose a fine on the polluter, or to ask him/her to pay damage or compensation for environmental degradation, but then allowed the polluting industry to continue its operations. For instance, in *Sterlite*, even after accepting that the appellant/polluter had misrepresented and suppressed material facts in its petition, the Court observed that the closure of its plant would be against public interest.¹⁵⁴ Similarly, in *Him Privesh*, the Court noted that the damages should not bring the polluter to a halt.¹⁵⁵

The manner in which the polluter pays principle is interpreted in such decisions is likely to set a precedent, which may lead to further pollution or environmental harm in the future. Such an approach runs contrary to the preventive aspect of the polluter pays principle.

Moreover, compensation to victims does not always take the form of disbursement of monies directly to them. Instead the amount collected from the polluter may be utilised for works of socioeconomic upliftment of the villages, and for the betterment of their educational, medical, and veterinary facilities and agriculture and livestock,¹⁵⁶ the creation of common facilities such as schools, hospitals, community halls, tube wells, etc., and improvement of

152. *Research Foundation II* (n 45), para 29.

153. *Pravinbhai* (n 129), para 108.

154. *Sterlite* (n 143), para 48. The 'considerations of public interest' identified by the Court included: substantial contribution to copper production in India, which is used in defence, electricity, automobile, construction and infrastructure, etc.; employment to large number of people, directly as well as through contractors; support to ancillary industries; generation of revenue for central and state governments; and contribution to 10 per cent of the total cargo volume of Tuticorin port.

155. *Him Privesh* (n 145), para 106.

156. *Pravinbhai* (n 129), para 135C(xii).

the ecology and environment;¹⁵⁷ or the construction of common effluent treatment plants (CETPs) in order to prevent further damage to the ground water and to arrest use of untreated water for growing crops and vegetables.¹⁵⁸ Instead of payment of monetary compensation, courts may also impose other pollution prevention and control measures. For example, the NGT has ordered the polluter to plant trees in some cases.¹⁵⁹ Such judicial directions may or may not contribute to the curative function of the polluter pays principle, if the actual victims of pollution are not adequately compensated. Such instances may also highlight the insufficient focus on the justice dimensions of the polluter pays principle.

CONCLUSION

The polluter pays principle forms part of the toolkit to address the problems of environmental pollution in India. The Supreme Court of India has read the principle into domestic law, including the Constitution and environmental legislation. In this regard, the Court has been influenced by the development of the principle within the OECD/European Community (regional level) and at the UNCED (international level). However, the principle does not lend itself to direct application or enforcement in domestic laws; it requires interpretation and implementation by the judiciary.

The nature, scope, and content of the principle are illustrated by its varied application by the courts, including the NGT more recently. On the one hand, the flexible approach of the judiciary, for example, to expand the definition of the polluter and the application of the absolute liability principle in certain situations, has contributed to the development of the principle. On the other

157. *Him Privesh* (n 145), paras 103–06.

158. *Puniya* (n 115), para 31.

159. See, for example, *Devendra Kumar v. Union of India and Ors*, Application No. 91/2012, order dated 14 March 2013, NGT (Principal Bench), para 12(4); *Cox India* (n 78), para 34(4).

hand, contradictory case law on similar issues co-exists, depending, *inter alia*, on the nature of the polluter and the manner in which the judiciary reconciles conflicting interests.

The ability of the principle to perform its preventive function depends on the severity of the amount of compensation/damage to be paid by the polluter, and the ability of the principle to ensure long-term deterrence and not just to compensate for the immediate damage caused; in other words, the cost of compliance should be higher than the cost of non-compliance. However, the principle, as applied by the courts in India, does not often result in the imposition of severe penalty and its deterrent effect is limited. Non-implementation of judicial orders or delay in their implementation also needs to be examined.

Finally, the judiciary appears to have paid more attention to the curative dimension of the principle. But even here, the obstacles relating to the assessment of damages, the insufficiency of the damages awarded by the courts, and the purposes for which they may be utilised may limit the ability of the principle to provide justice to the victims of pollution, including the environment. In some situations, the application of the principle may actually cause injustice to certain sections of the population, for example, where the slum dwellers or the poor 'polluters' are removed from their homes or where the closure of polluting industries results in loss of livelihood without redress. The justice/(in)justice dimensions of the principle in the Indian context require further scrutiny.

FIVE

The Precautionary Principle

LAVANYA RAJAMANI

India has a wide array of environmental laws,¹ an extensive network of environmental governance institutions,² a vibrant and demanding civil society, and one of the most environmentally sensitive judiciaries in the world. India has a dedicated National Green Tribunal (NGT),³ in operation since 2010. And, India was one of the first jurisdictions to embrace an environmental right.⁴ It is widely believed to have, more than any other jurisdiction, ‘fostered an extensive and innovative jurisprudence on environmental

1. For a list of relevant legislations, see the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, website <<http://www.moef.nic.in/>> accessed 7 February 2017.

2. See, for example, the website of the Central Pollution Control Board, Government of India <www.cpcb.nic.in/> accessed 7 February 2017.

3. See the NGT website <<http://greentribunal.gov.in/>> accessed 7 February 2017.

4. The Supreme Court of India traces in *A. P. Pollution Control Board II v. Prof. M. V. Nayudu and Ors* (2001) 2 SCC 62, paras 6 and 7, the origins of environmental rights in India to *Bandhua Mukti Morcha v. Union of India* (1984) 3 SCC 161, para 10. See Chapter 1 of this volume by Lovleen Bhullar.

rights'.⁵ Indian courts have held the principles of precaution, polluter pays and intergenerational equity as well as the public trust doctrine as integral to the corpus of Indian law.⁶ This seemingly progressive stance on environmental protection, for which India is often feted internationally, however, hides many flaws in judicial approach and reasoning, which in turn has resulted in the faltering development of environmental jurisprudence, imprecise rights, poorly articulated principles, and the idiosyncratic application of both rights and principles.⁷ The adoption of the precautionary principle into Indian law, and its subsequent development and application by the Indian courts over the years, presents a revealing case study of this phenomenon.

This chapter will begin by exploring the conceptual underpinnings of the precautionary principle as laid out in international legal instruments, both soft and hard law, as well as

5. Michael R. Anderson, 'Individual Rights to Environmental Protection in India' in Alan Boyle and Michael R. Anderson (eds) *Human Rights Approaches to Environmental Protection* (OUP 1996) 199.

6. *Vellore Citizens' Welfare Forum v. Union of India and Ors* (1996) 5 SCC 647, paras 10 and 11; *Karnataka Industrial Areas Development Board v. C. Kenchappa and Ors* (2006) 6 SCC 371, para 66; *Research Foundation for Science Technology and Natural Resources Policy v. Union of India and Anr* (2005) 13 SCC 186, para 26; *S. Jagannath v. Union of India* (1997) 2 SCC 87, paras 49 and 50; *Indian Council for Enviro-legal Action and Ors v. Union of India and Ors* (1996) 3 SCC 212, para 67; *M. C. Mehta v. Union of India* (1997) 2 SCC 411 (*Calcutta Tanneries case*), para 19; *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388 (*Kamal Nath I*), para 25, 37 and 38; *M. C. Mehta v. Kamal Nath and Ors* (2000) 6 SCC 213 (*Kamal Nath II*), para 10; *Intellectuals Forum, Tirupathi v. State of Andhra Pradesh and Ors* (2006) 3 SCC 549, paras 74, 75 and 76; *State of Himachal Pradesh and Ors v. Ganesh Wood Products and Ors* (1995) 6 SCC 363, paras 42 and 51; *M. C. Mehta v. Union of India and Ors* (1997) 2 SCC 353 (*Taj Trapezium case*), paras 30 and 32; *Narmada Bachao Andolan v. Union of India and Ors* (2000) 10 SCC 664, para 123.

7. Lavanya Rajamani, 'The Right to Environmental Protection in India: Many a Slip between the Cup and the Lip' (2007) 16(3) *Review of European, Comparative and International Environmental Law* 274.

statements of international dispute settlement bodies. In particular, this chapter will consider the multiple definitions and legal status of this principle. This backdrop will enable a better appreciation of the Indian cases, several of which gloss over the many definitional and interpretational contestations at the heart of this principle, and attribute a level of normative status and gravitas to it that international courts and tribunals have been reluctant to attribute. The Indian courts have, however, developed an indigenous jurisprudence and understanding of the precautionary principle in the past two decades that is of considerable salience, and merits an analysis on its terms. This chapter will seek to engage in such an analysis.

In order to engage in an analysis of the precautionary principle as it has developed indigenously, this chapter will survey key cases in the Indian judiciary (Supreme Court, High Courts and the NGT) that were either decided on the basis of, or that referred to the precautionary principle, with a view to distilling the key elements of this principle in its application in Indian courts, and to consider the extent to which the case law expands our understanding of the precautionary principle. In this context, the chapter will address the following key questions: Does case law define and circumscribe the precautionary principle, and provide it with greater specificity and concreteness? Does case law reflect a guarded use of this principle in distinctive situations of potential serious/irreversible damage and scientific uncertainty, or does case law fold the precautionary principle into the notion of prevention? More broadly, does case law develop a consistent line of jurisprudence on this principle?

This chapter will proceed to consider if an indigenous version of the precautionary principle can be said to exist, and if yes, what it is and what accounts for it. And, finally, this chapter will consider the consequences that attach to such a method of developing environmental jurisprudence in India, including, albeit briefly, the influence that such jurisprudence on the precautionary principle has on the development of the principle/norm of precaution in international law.

It is worth recording a few caveats at the outset. This chapter does not judge or ascribe value to case law based on the outcomes reached in particular cases. Rather, it seeks to examine the rigour, quality and consistency of the judicial reasoning that accompanied the invocation and application of the precautionary principle in particular cases. This approach may seem counter-intuitive, but is taken for three reasons. First, judging outcomes is a subjective and value-laden exercise. Reasonable judges, lawyers, and litigants will often disagree over the outcome of a case. Second, there is tremendous inherent value in the consistent and coherent development and application of principles. Ronald Dworkin has argued persuasively that judicial decisions, as political decisions, attract the doctrine of political responsibility—judges must only make such decisions as they can justify within a political theory that also justifies the other decisions they propose to make or have made.⁸ This doctrine condemns ‘intuitionistic’⁹ decision-making and demands articulate consistency.¹⁰ Judges have a responsibility, thus, to reach consistent and defensible decisions. And, it is worth exploring whether judges have demonstrated such responsibility in relation to their use of the precautionary principle. Third and finally, this approach is desirable even from the narrow instrumental perspective of filling a gap in the literature. The (limited) literature that exists on Indian environmental principles focusses on outcomes, and the use of particular principles, to enable and justify seemingly desirable outcomes, rather than the means or method of reaching outcomes.

8. Ronald Dworkin, *Taking Rights Seriously* (7th imp., Duckworth 1994) 87.

9. John Rawls, *A Theory of Justice* (HUP 1971).

10. Dworkin (n 8) 87–88.

THE PRECAUTIONARY PRINCIPLE IN INTERNATIONAL LAW

Definition

Although there are many definitions of precaution, and versions of the precautionary principle,¹¹ the most cited and least controversial is the definition in the Rio Declaration. Indeed the Indian Supreme Court drew on elements of the Rio definition of ‘precaution’ while adopting it into domestic law.¹² The Rio Declaration provides:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.¹³

The precautionary principle changes the role, as David Freestone observes, of scientific data in environmental cases.¹⁴ Once a threat to the environment has been identified, action should be taken

11. Precaution has been characterised by some as an approach and by others as a principle. While this does not have any legal consequences, it does reflect a divergence of views on the status and effect of this principle. This chapter will use the term ‘principle’ in referring to precaution. See Cass Sunstein, ‘Beyond the Precautionary Principle’ (2003) The University of Chicago John M. Olin Law and Economics Working Paper No. 149, 2, 9–15 <http://www.law.uchicago.edu/files/files/149.crs_.precaution-new.pdf> accessed 8 February 2017; Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3rd edition, OUP 2009) 136, 152, 155.

12. *Vellore* (n 6), para 10.

13. UN Conference on Environment and Development (UNCED), ‘Rio Declaration on Environment and Development’ (14 June 1992) UN Doc A/CONF. 151/26 (Vol I) Resolution 1, Annex I, reprinted in 31 *ILM* 874 (1992) (Rio Declaration), Principle 15.

14. David Freestone, ‘The Road from Rio: International Environmental Law After the Earth Summit’ (1994) 6(2) *Journal of Environmental Law* 193, 211.

to abate environmental interference, even though there may be scientific uncertainty as to the effects of the activities.¹⁵ Science is still relevant and influential in the identification of the risk, in that there must be scientific basis for predicting environmental damage. However, science, in particular the lack of certainty in relation to it, should not be determinative in responding to that risk.

The precautionary principle has received widespread recognition in international environmental law since it first found expression in the 1982 World Charter for Nature. It finds reflection, *inter alia*, in the 1992 Framework Convention on Climate Change,¹⁶ 1992 Convention on Biological Diversity,¹⁷ 1995 Fish Stocks Agreement,¹⁸ 2000 Biosafety Protocol,¹⁹ and 2001 Persistent Organic Pollutants Convention.²⁰ The precautionary principle is frequently invoked in cases before international courts and tribunals.²¹ It has also been incorporated into numerous

15. *Ibid.*

16. United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107, reprinted in 31 ILM 849 (1992), Article 3(3).

17. Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79, 143, reprinted in 31 ILM 818 (1992), preamble.

18. United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, 'Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks' (8 September 1995) UN Doc A/CONF.164/37, Article 6.

19. Cartagena Protocol on Biosafety to the Convention on Biological Diversity (adopted 29 January 2000, entered into force 11 September 2003) 39 ILM 1027 (2000), Article 10(6).

20. Stockholm Convention on Persistent Organic Pollutants (POPs) (adopted 22 May 2001, entered into force 17 May 2004) 40 ILM 532 (2001), Article 8(7).

21. See, for example, *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan)* (Provisional Measures, order dated 27 August 1999) <www.itlos.org/fileadmin/itlos/documents/cases/case_no_3_4/

national and regional legislations,²² and invoked in countless domestic courts.

Prevention and Precaution

This steady rise of the precautionary principle is a characteristic feature of the latest phase in the global evolution of approaches designed to counteract ecological damage. Early phases were characterised by *ad hoc* reactive responses to readily apparent and indeed overwhelming environmental and public-health hazards.²³ In the next phase, regulators took on board ‘preventive measures’ premised on risks that were certain to eventuate. And, the latest phase is characterised by ‘precautionary measures’ taken in circumstances where damage has not yet occurred, and indeed

Order.27.08.99.E.pdf> accessed 11 February 2017, para 80; *MOX plant (Ireland v. United Kingdom)* (Provisional Measures, order dated 3 December 2001) <www.itlos.org/fileadmin/itlos/documents/cases/case_no_10/Order.03.12.01.E.pdf> accessed 11 February 2017, para 84; *Land reclamation by Singapore in and around the Straits of Johor (Malaysia v Singapore)* (Provisional Measures, order dated 8 October 2003) ITLOS Reports 2003, 10, 26 (para 99); WTO, *EC Measures concerning Meat and Meat products (Hormones)-Report of the Appellate Body* (16 January 1998) WT/DS26/AB/R and WT/DS48/AB/R [123] <www.wto.org/english/tratop_e/dispu_e/hormab.pdf> accessed 11 February 2017; WTO, *European Communities: Measures Affecting the Approval and Marketing of Biotech Products-Reports of the Panel* (29 September 2006) WT/DS291/R, WT/DS292/R and WT/DS293/R [7.89]; *Case concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment) [2010] ICJ Rep 14, 61 (para 164).

22. See, for example, India [National Green Tribunal Act 2010 (NGT) s 20], Canada (Canadian Environmental Protection Act 1999 s 2(1)(a)); Australia (Environment Protection and Biodiversity Conservation Act 1999 s 391), European Union (Consolidated Version of the Treaty on the Functioning of the European Union [26 October 2012] OJ C 326/47 (TFEU), Article 191).

23. Nicolas de Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (OUP 2002), Chapter 3.

where there is no irrefutable proof that it will occur.²⁴ Some scholars see this progression as evidence of a genuine paradigm shift.²⁵ Prevention is based on the concept of certain risk. Precaution is not premised on a perfect understanding of any given risk, rather it is sufficient that a risk be suspected, conjectured, or feared.²⁶ Precaution is triggered by risk potential, and it often requires a risk analysis.²⁷ Since precaution leaves behind the realm of rational certainty, precaution necessarily gives rise to controversy and its application to conflict.²⁸

In international law, precaution and prevention are considered two distinct principles²⁹ (unlike in EU law where they operate along a continuum³⁰). These two notions are, however, closely related. The Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (ITLOS), in its Advisory Opinion, held that precaution and prevention form part of the obligation of due diligence:

The due diligence obligation of the sponsoring States requires them to take all appropriate measures to prevent damage that might result from the activities of contractors that they sponsor. This obligation applies in situations where scientific evidence concerning the scope and potential negative impact

24. Ibid.

25. See Arie Trouwborst, *Evolution and Status of the Precautionary Principle in International Law* (Kluwer 2002).

26. de Sadeleer (n 23) 91–223.

27. See, for example, the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (15 April 1994) 1867 UNTS 493, Article 5(7).

28. de Sadeleer (n 23).

29. Arie Trouwborst, 'Prevention, Precaution, Logic and Law: The Relationship between the Precautionary Principle and the Preventative Principle in International Law and Associated Questions' (2009) 2(2) *Erasmus Law Review* 105; Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (3rd edition, CUP 2012) 200, 217.

30. See, for example, André Nollkaemper, *The Legal Regime for Transboundary Water Pollution* (Martin Nijhoff/Graham and Trotman 1993) 72.

of the activity in question is insufficient but where there are plausible indications of potential risks.³¹

Precaution, it seems, cannot be limited to activities that are recognised as involving a significant risk of harm. Rather it extends to taking appropriate measures to identify activities that involve a significant risk of harm,³² even if there is lack of full scientific certainty.

Interpretation

There are several open questions in relation to the interpretation, effect, and legal status of precaution. In relation to the interpretation of this principle, it is unclear what degree of risk triggers application of this principle, what specific action should be taken when the application of this principle is triggered, and the extent to which cost plays a role in the choice of measures to be taken in response to the risk.³³ The imprecision along all these axes can lead to uncertainty in outcomes.

It is also unclear what consequences the application of this principle has for the burden of proof in discrete cases. In stronger

31. *Responsibilities and Obligations of States Sponsoring Person and Entities with Respect to Activities in the Area* (Advisory Opinion, order dated 1 February 2011) ITLOS Reports 2011, 10 (Advisory Opinion) 42–43 (paras 115 and 117).

32. International Law Commission, 'Report of the International Law Commission on the Work of its 53rd Session' (23 April–1 June and 2 July–10 August 2001) UN Doc A/56/10, Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries (2001) 154.

33. See Jonathan Wiener, 'Precaution' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 597, 603. See generally for an earlier comprehensive discussion of the elements of the precautionary principle, John S. Applegate, 'The Taming of the Precautionary Principle' (2002) 27 *William and Mary Environmental Law and Policy Review* 13.

versions of this principle, the potentially risky activity is banned until the proponent of the activity demonstrates that it poses no (or acceptable) risk.³⁴ In these versions, the burden of proof shifts to the proponent of the activity to demonstrate that the activity is benign, and a standard of proof—acceptable risk, no risk, etc.—is set.³⁵ This is the most controversial version of the precautionary principle. Cass Sunstein, the most vocal of the principle's sceptics, argues that the strong version which shifts the burden of proof to those who create potential risks—innovators, entrepreneurs, developers and such like—to establish that a particular activity is risk-free before it is allowed to proceed, is deeply problematic.³⁶ Such an interpretation and application, he argues, could stifle innovation and creativity, hamper scientific and technological advancements and arguably result in regulatory paralysis.³⁷ The strong version of the precautionary principle does not find wide support in international law.³⁸ In the final judgment of the *Pulp Mills* case, the International Court of Justice (ICJ) noted, 'while a precautionary approach may be relevant in the interpretation and application of the treaty agreed between both states, it does not follow that it operates as a reversal of the burden of proof'.³⁹ The Indian courts, as we shall see, citing international law, have adopted the strong version of the precautionary principle.

34. Wiener, *ibid.*, 606.

35. *Ibid.*

36. See Sunstein (n 11).

37. See *ibid.* See also Lucas Bergkamp, 'Understanding the Precautionary Principle (Part II)' (2002) 2 *Environmental Liability* 67–81.

38. Earlier studies have found that the strong versions of the precautionary principle occur in instruments that are aspirational, rather than binding, or are entered into among relatively homogenous states, or relate to particular hazardous activities. See, for example, Applegate (n 33); Deborah Katz, 'The Mismatch between the Biosafety Protocol and the Precautionary Principle' (2001) 13 *Georgetown International Environmental Law Review* 949.

39. *Pulp Mills* case (n 21) 61, para 164.

Where the precautionary principle has been legislated into international, national or regional instruments, the instruments in question offer greater precision in relation to the degree of risk that triggers application of the principle, specific action to be taken in response, the role that cost plays, and the burden of proof.⁴⁰ This is not the case, however, under Indian law, since the only legislative occurrence of the precautionary principle merely exhorts the NGT to take precaution into account in passing orders,⁴¹ leaving its interpretation and application to the judiciary.

Legal Status

International legal status of this principle is still in evolution. International courts and tribunals have remained cautious about declaring that the principle has acquired customary status,⁴² only going so far as to suggest that there is a trend towards making precaution part of custom. In the 2011 Advisory Opinion, the Seabed Disputes Chamber of ITLOS noted that ‘the precautionary approach has been incorporated into a growing number of international treaties and other instruments, many of which reflect the formulation of Principle 15 of the Rio Declaration. In the view of the Chamber, this has initiated a trend towards making this approach part of customary international law.’⁴³

40. See, for example, TFEU (n 22), Article 191, and Commission, ‘Communication from the Commission on the precautionary principle’ COM/2000/0001 final <<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52000DC0001&from=EN>> accessed 9 February 2017.

41. NGT Act s 20.

42. The ITLOS refers to ‘prudence and caution’ in the *Mox Plant* case and *Southern Bluefin Tuna* cases (n 21), without an explicit reference to the principle or its status. In the *Beef Hormones* case (n 21), the WTO Appellate Body opined that the precautionary principle was not yet a principle of customary international law, and in the *EC Biotech* case (n 21), the Appellate Body side-stepped the issue.

43. Advisory Opinion (n 31), para 135.

THE PRECAUTIONARY PRINCIPLE IN INDIAN LAW

Context

Turning to Indian law, it is worth noting first that the Supreme Court extended the fundamental right to life and liberty under Article 21, to cover a ‘right of enjoyment of pollution-free water and air’,⁴⁴ over two decades ago. And that a vast, if not robust, jurisprudence exists today on the environmental right in India.⁴⁵ Second, the precautionary principle forms part of a set of principles that the Indian courts weave together to operationalise the environmental right and reach decisions in environmental cases. Indian courts have embraced certain principles of international and foreign environmental law—some established and others nascent—to be ‘essential features of sustainable development’,⁴⁶ ‘imperative for preserving ecology’,⁴⁷ and ‘part of the environmental law of India’.⁴⁸ These principles include the precautionary principle,⁴⁹ polluter pays principle,⁵⁰ public trust doctrine,⁵¹ principle of intergenerational equity,⁵² and principle

44. *Subhash Kumar v. State of Bihar and Ors* (1991) 1 SCC 598, para 7. See also *M. C. Mehta v. Union of India* (1992) 3 SCC 256, para 2; *Virender Gaur v. State of Haryana* (1995) 2 SCC 577, para 7.

45. Bhullar (n 4). See also Rajamani (n 7).

46. *Vellore* (n 6), para 11.

47. *Karnataka Industrial Areas Development Board* (n 6), para 77.

48. *Research Foundation for Science Technology and Natural Resources Policy* (n 6), para 26.

49. *Vellore* (n 6), para 11; *S. Jagannath* (n 6), para 49. See also *Karnataka Industrial Areas Development Board* (n 6), paras 77–79.

50. *Indian Council for Enviro-legal Action* (n 6), para 67. See also *Calcutta Tanneries* case (n 6), para 19; *Kamal Nath II* (n 6), para 10.

51. *Kamal Nath I* (n 6), para 25. See also *Intellectuals Forum* (n 6), paras 74, 75 and 76.

52. *Ganesh Wood Products* (n 6), paras 42 and 51.

of sustainable development.⁵³ The Court requires these principles to be ‘applied in full force for protecting the natural resources of this country’.⁵⁴ Together these principles, considered ‘inseparable ingredients of our environmental jurisprudence’,⁵⁵ are intended to breathe life into the environmental right in India. A subset of these principles—the principles of sustainable development, precaution, and polluter pays—are required statutorily to be taken into account by the NGT in passing any order, decision, or award.⁵⁶

An analysis of any of these principles, as other chapters of this volume demonstrate, reveal inconsistencies in judicial reasoning, but the precautionary principle, perhaps more than others, presents an interesting case study. First, few courts, except for the Indian, have directly applied the precautionary principle as a rule of international law in domestic litigation.⁵⁷ Second, the precautionary principle, for all its imprecision, has acquired particular, albeit contested, meaning in international law, and it arguably lends itself more readily to an assessment of whether it has been properly (or not) applied in domestic litigation. Third, the Supreme Court in the *Vellore* case⁵⁸ adopted the controversial strong version of the precautionary principle into Indian law. This case is oft cited in the academic literature and is universally admired as a landmark judgment illustrative of the creativity, intellectual openness, and mettle of Indian Courts. Fourth, in nearly two decades, the Indian courts have, arguably, developed their own distinct version of this

53. *Vellore* (n 6), para 10. See also *Taj Trapezium* case (n 6), paras 30 and 32; *Narmada Bachao Andolan* (n 6), para 123.

54. *Intellectuals Forum* (n 6), para 81.

55. *N. D. Jayal v. Union of India* (2004) 9 SCC 362, para 25.

56. NGT Act s 20.

57. Chris Tollefson and Jamie Thornback, ‘Litigating the Precautionary Principle in Domestic Courts’ (2008) 19 *Journal of Environmental Law and Practice* 34, 40 (noting that one prominent exception to this rule is the *Vellore* case).

58. *Vellore* (n 6).

principle, and thus the *Vellore* case, as well as the case law it has spawned, merits careful scrutiny.

Definition

In *Vellore*, the Supreme Court identified three elements to the precautionary principle. The first is that ‘[e]nvironmental measures—by the State Government and the statutory authorities—must anticipate, prevent and attack the causes of environmental degradation’.⁵⁹ The second, borrowing from the Rio principle⁶⁰ formulation, is that ‘[w]here there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation’.⁶¹ The third element shifts the burden of proof to the developer/industrialist.⁶² The first element, by itself, reflects the principle of prevention. The second captures the essence of the precautionary principle—a step beyond mere prevention.⁶³ And, the third element flags the precautionary principle, as conceived of by the Court, as the strong version. Although inspired in part by the Rio principle, these elements are now part of domestic law, and derive their force and influence from domestic law.

The *Vellore* case is telegraphic in its treatment of the precautionary principle. It does not raise or address any of the interpretational questions that plague the precautionary principle. It does not clarify what degree of risk triggers application of this principle, what specific action should be taken when the application of this principle is triggered, and the extent to which cost plays a role in the choice of measures to be taken in response to the risk.

59. *Ibid.*, para 11.

60. Rio Declaration (n 13), Principle 15.

61. *Vellore* (n 6), para 11. Note the deletion of the term ‘cost-effective’ that occurs in the Rio definition from which this is drawn.

62. *Ibid.*

63. See Sunstein (n 11).

Precaution or Prevention: The Role of Science, Risk and Uncertainty

The *Vellore* case did not lend itself on the facts to an application of the precautionary principle as defined by the Court. Although there is no consensus definition of the precautionary principle in the literature, at the core of this principle is the notion, as we have seen earlier, that ‘decision makers should act in advance of scientific certainty to protect the environment’.⁶⁴ The case was brought before the Court by a citizens’ group to compel governmental agencies to exercise their statutory powers and take action against 900 odd tanneries that were discharging untreated effluent, contrary to existing environmental laws.⁶⁵ On the facts there was no ‘threat’ of damage, there was serious and in some cases irreversible damage. There is neither ‘scientific uncertainty’ at play, nor any question of postponing measures to prevent environmental degradation. The existing laws prohibited such discharge, and the regulatory authorities had attempted over the previous 10-year period, to persuade the tanners to construct effluent treatment plants and control their pollution. The facts that led to the *Vellore* case are an instance of inadequate governmental action in the face of serious pollution and obvious damage. Since the Court merely recited the chosen elements of the precautionary principle before declaring it to be part of both domestic environmental law and arguably of custom, it is unclear how the Court perceived the engagement of the precautionary principle on the facts. It could, of course, be argued that the Court’s reference to the precautionary principle is mere obiter. If not for the fact, that the Court, *inter alia*, directed the relevant authority ‘to implement the “precautionary principle” and the “polluter pays” principle’.⁶⁶

64. Andrew Jordan and Timothy O’ Riordan, ‘The Precautionary Principle in Contemporary Environmental Politics’ (1995) 4(3) *Environmental Values* 191, 194. See also de Sadeleer (n 23).

65. *Vellore* (n 6), paras 1 and 4.

66. *Ibid.*, para 27.

In subsequent judgments, the Court, while reciting the principle approvingly, uses it to emphasise the need for scientific inputs before adjudicating complicated issues of pollution to environment,⁶⁷ or to advocate general ‘precautionary measures’.⁶⁸ It has also, in several cases, highlighted the first element of the Court’s definition, namely ‘[e]nvironmental measures must anticipate, prevent, and attack the causes of environmental degradation’.⁶⁹

Few of the Indian cases deal with suspected risks.⁷⁰ Most of the cases that cite the precautionary principle, use it to support a position that reflects the intuitive good sense that it is better to be

67. See *A. P. Pollution Control Board v. Prof. M.V. Nayudu and Ors* (1999) 2 SCC 718. The Court in paras 26 to 34 traced the development of the precautionary principle, and identified the ‘uncertainty of science in the environmental context’ as the real basis of the principle. The Court proceeded after a lengthy explanation of this principle to use it primarily to highlight the value of technical inputs, and to recommend the addition of technical and judicial members on environmental appellate authorities and tribunals. This is another judgment that merits more considered analysis for, although it fleshes out the precautionary principle, it uses ‘inadequacies’ and ‘uncertainties’ of science interchangeably.

68. *T. N. Godavarman Thirumulkpad v. Union of India and Ors* (2006) 1 SCC 1, para 3 (advocating ‘all precautionary measures when forest lands are sought to be directed for non forest use’); see also *Karnataka Industrial Areas Development Board* (n 6), para 100.

69. *Karnataka Industrial Areas Development Board* (n 6), paras 77, 78 and 94.

70. The Supreme Court in *N. D. Jayal*, following *Narmada* also held that the precautionary principle was not engaged as there was ‘no difference of opinion among the experts’. See *N. D. Jayal* (n 55), para 21. Justice Dharmadhikari (dissenting) emphasised ‘scientific uncertainty’, but used the precautionary principle to support additional safeguards to ensure the safety of the Tehri dam located in an earthquake prone zone in the Himalayan valleys, *ibid.*, paras 120–28. The issue, however, was not one of scientific uncertainty, but of the need for and feasibility of (for want of competent expertise in India) conducting the 3D non-linear analysis on the dam.

safe than sorry.⁷¹ Those cases that use the precautionary principle to suggest more are, in reality, engaging the principle of prevention. For instance, in *A. P. Pollution Control Board II v. Prof. M.V. Nayudu and Ors*, the Supreme Court considered whether a hazardous industry should be permitted to establish itself within 10 km of reservoirs used for drinking water. The Court noted that '[t]his is exactly where the 'precautionary principle' comes into play. The chance of an accident, within such close proximity of the reservoirs cannot be ruled out ...'.⁷² While the Court did seek to establish the level of acceptable societal risk to be taken in the context of drinking water, this is not a case involving 'scientific uncertainty'. There is an element of uncertainty or chance here—the accident may or may not happen—but there is no scientific uncertainty as to the consequences, should the accident occur. This is, in essence, an illustrative use of the principle of prevention, not precaution.

Another case in point is *M. C. Mehta v. Union of India and Ors (Taj Trapezium case)*,⁷³ where the Supreme Court ordered 292 industries in the vicinity of the Taj Mahal to change their fuel use from coke/coal to natural gas, so as to protect the Taj. The Court raised several important issues but did not address them. First, the Court noted that 'atmospheric pollution in TTZ [Taj Trapezium] has to be eliminated at any cost',⁷⁴ signalling that cost-effectiveness is not an issue when where the interest sought to be protected

71. See, among others, *Court on its own motion v. Union of India* (2013) 3 SCC 247 (citing precaution as a reason for passing directions to protect the environment and make better arrangements in relation to the Amarnath yatra); *M. Palaniswamy v. State of Tamil Nadu* (2012) SCC OnLine Mad 2125 (the Madras High Court citing the precautionary principle as justification for upholding additional government licensing requirements to prevent illegal mining); *Om Prakash Bhatt v. State of Uttar Pradesh* (1996) SCC OnLine All 608 (the Allahabad High Court holding that hotels and tourist lodges are required to follow the precautionary principle in choosing sites).

72. *A. P. Pollution Control Board II* (n 4), para 64.

73. *Taj Trapezium case* (n 6), paras 34 and 35.

74. *Ibid.*, para 33.

is sufficiently important. In its words, '[n]ot even one per cent chance can be taken when—human life apart—the preservation of a prestigious monument like the Taj is involved'.⁷⁵ The Court did not elaborate on the question of costs, in particular on the nature of the harm that would justify an 'at any cost' response, and whether its assessment would be different if the costs were borne by the State or by private parties. The Court also held that the 'onus of proof is on industry to show that its operation with the aid of coke/coal is environmentally benign'.⁷⁶ This, like in other cases, is a high standard of proof, and will be discussed later. The Court added, however, that '[i]t is, rather, proved beyond doubt that the emissions generated by the use of coke/coal by the industries in TTZ are the main polluters of the ambient air'.⁷⁷ The Court asserts rather than argues the engagement of the precautionary principle and, therefore, brings it to bear in this case which does not rest on scientific data. Next, although the onus of proof is shifted to the industry, the Court cursorily makes a finding that it had been proven beyond doubt that the industries were the main polluters.⁷⁸ Yet, if the impacts are proven beyond doubt, the engagement of the precautionary principle itself is questionable.

In a similar vein, most High Court cases that refer to the precautionary principle do so to support the use of precautionary measures in the face of certain (not uncertain) environmental harm. In very few cases is 'scientific uncertainty', in relation to the impacts, at issue. To take a representative sample, in *Ramgopal Estates v. State of Tamil Nadu*,⁷⁹ the Madras High Court applied the precautionary principle to require a proposed petrochemical park to conform to certain conditions laid down by the Government and National Environmental Engineering Research Institute (NEERI),

75. Ibid.

76. Ibid.

77. Ibid.

78. Ibid.

79. *Ramgopal Estates v. State of Tamil Nadu* (2007) SCC OnLine Mad 220.

so as to mitigate environmental impacts. The Kerala High Court in *Soman v. Geologist*⁸⁰ held that mining companies are obliged on the basis of the precautionary principle and polluter pays principle to fill mining pits once mining reaches groundwater level. In *Smoke Affected Resident's Forum v. MCGM*,⁸¹ the Bombay High Court applied the precautionary principle to require a particular model of taxis to convert to compressed natural gas (CNG)/liquefied petroleum gas (LPG) or be phased out, as this is necessary to protect the health of Mumbai citizens. The certainty of impacts was not in question in any of these cases; rather these cases considered possible responses to predictable, proven and certain harms.

The cases before the NGT follow this trend. For instance, in *Jeet Singh Kanwar v. MoEF and Ors*,⁸² NGT quashed an environmental clearance for a coal-based thermal power plant on the grounds, *inter alia*, that the MoEF had not properly considered the precautionary principle. In NGT's view, had the MoEF done so, it would not have granted a clearance due to the excessive pollution caused in the nearby areas by the use of coal as a fuel.⁸³ In this case, as in other Supreme Court and High Court cases, the NGT is not dealing with uncertain impacts—pollution caused by coal is well documented—but rather with possible responses to proven harms. In reality, this too is an exercise of the preventive principle. Indeed, in *Sarang Yadwadkar and Ors v. The Commissioner, Pune Municipal Corporation and Ors*,⁸⁴ the NGT defines the precautionary principle as the principle of prevention. The NGT notes that 'the principle of precaution involves anticipation of environmental harm and taking measures to avoid it or to choose the least environmentally harmful

80. *Soman v. Geologist* (2004) SCC OnLine Ker 510.

81. *Smoke Affected Residents Forum v. Municipal Corporation of Greater Mumbai and Ors* (2002) SCC OnLine Bom 372.

82. *Jeet Singh Kanwar v. MoEF and Ors*, Appeal No. 10/2011 (T), judgment dated 16 April 2013, NGT (Principal Bench).

83. *Ibid.*, para 24.

84. *Sarang Yadwadkar and Ors v. the Commissioner, Pune Municipal Corporation and Ors*, Application No. 2/2013, judgment dated 11 July 2013, NGT (Principal Bench).

activity'.⁸⁵ Similarly in *S. P. Muthuraman and Ors v. Union of India*, NGT notes that the 'precautionary principle is a proactive method of dealing with the likely environmental damage', and that 'the purpose should be to avert major environmental problem before the most serious consequences and side effects would become obvious'.⁸⁶ In other words, 'the precautionary principle is a tool for making better health and environmental decisions' as 'it aims to prevent at the outset rather than manage after the fact'.⁸⁷

In *M/s Sterlite Industries (India) Ltd Thoothukudi v. The Chairman Tamil Nadu Pollution Control Board, Chennai*,⁸⁸ the NGT identified the essentials for the invocation of the precautionary principle as: '(a) [t]here should be an imminent environmental or ecological threat in regard to carrying out of an activity or development; (b) [s]uch a threat should be supported by reasonable scientific data; and (c) [t]aking precautionary, preventive or prohibitory steps would serve the larger public and environmental interest'.⁸⁹ Although precaution here too is conflated with prevention—with no explicit requirement for scientific uncertainty as to the harm or serious/irreversible damage in this list of essentials—the invocation of the precautionary principle is gradually being interpreted to require a robust base of evidence on which environmental decision-making can be built. In the case of *Shoba Phadanvis v. State of Maharashtra*, in the context of protecting forest cover by prohibiting and preventing illegal cutting and smuggling of seasonal wood, the Tribunal asked the state government to present necessary data, reports, and action

85. *Ibid.*, para 30.

86. *S. P. Muthuraman and Ors v. Union of India*, OA No. 37/2015, judgment dated 7 July 2015, NGT (Principal Bench), para 158.

87. *Ibid.*

88. *M/s Sterlite Industries (India) Ltd Thoothukudi v. The Chairman Tamil Nadu Pollution Control Board, Chennai*, Appeal No. 22/2013 (SZ) and Appeal No. 23/2013 (SZ), judgment dated 8 August 2013, NGT (Principal Bench).

89. *Ibid.*, para 122.

plan based on the 'precautionary principle'.⁹⁰ In *Samta and Anr v. MoEF and Ors*,⁹¹ NGT interpreted the precautionary principle as requiring a proper prior assessment of environmental impacts, before grant of an environmental clearance. It is evident thus that NGT is beginning to interpret the principle so as to require a robust evidence base for appropriate decisions to prevent environmental harm.

Although the vast majority of the case law interprets precaution in a broad fashion, blending precaution and prevention, and diluting the requirement for either potential irreversible damage and/or scientific uncertainty, a narrower interpretation of the precautionary principle is evident in some cases after *Vellore*, notably in *Narmada Bachao Andolan*.⁹² The Supreme Court noted that the principle is not engaged 'where the effect on ecology or environment of setting up of an industry is known'.⁹³ Instead 'what has to be seen is that if the environment is likely to suffer, then what mitigative steps can be taken to off set the same'.⁹⁴ In other words, where the effects of a project are known, it is not precaution but the principle of sustainable development that comes into play.⁹⁵ This presumably then engages a balancing exercise between the environmental and social costs of the activity and development imperatives. Needless to say, there are multiple risks associated with large dam projects, but the Court here, interpreting precaution narrowly, asks in not so many words if the extent of damage likely to be inflicted is unknown or known. If it is known, then other principles such as sustainable development should play a role in the decision-making.

90. *Shoba Phadanvis v. State of Maharashtra*, Application No. 135(THC)/2013, judgment dated 13 January 2014, NGT (Western Zone Bench).

91. *Samta and Anr v. MoEF and Ors*, Appeal No. 9/2011, judgment dated 13 December 2013, NGT (Southern Zone Bench).

92. *Narmada Bachao Andolan* (n 6), paras 122 and 123.

93. *Ibid*, para 123.

94. *Ibid*.

95. *Ibid*.

In *Democratic Youth Federation of India v. Union of India*,⁹⁶ the Supreme Court created a committee to consider the harmful impacts of the pesticide endosulfan (a risk assessment, as it were) and in the meantime, in light of the precautionary principle, the Court banned its use. This judgment adopts a strong version of the principle, but in launching a risk assessment, and banning the use of endosulfan in the interim, it engages the precautionary principle under conditions of scientific uncertainty in relation to impacts.

In *Bhanwar Singh v. Union of India*,⁹⁷ the Rajasthan High Court sought to protect the Chittorgarh Fort, by halting all blasting and mining activities within a 10-km radius of the Fort. Notwithstanding conflicting expert reports, the Court invoked the precautionary principle and argued, *inter alia*, that there is 'cogent material available on record' that shows that blasting and mining operations have caused damage to the fort structures, and that in the case of such monuments of national importance, 'no chance even one per cent can be taken'.⁹⁸ Although the Court did not explicitly address the issue of 'scientific uncertainty' as an element of the precautionary principle, in the face of conflicting scientific evidence, it applied the principle to decide in favour of protecting the environment and architectural heritage.

In *Bombay Environmental Action Group v. State of Maharashtra*,⁹⁹ the Bombay High Court held that in relation to the construction of a flyover, the precautionary principle has no applicability. The Court came to this conclusion, first, because there is no scientific uncertainty regarding the environmental impact of building the flyover, and second, because a flyover is not itself a polluting industry and thus if it results in increased vehicular traffic and more air pollution, it cannot be attributed to the flyover. Such

96. *Democratic Youth Foundation of India v. Union of India* (2011) (15) SCC 530.

97. *Bhanwar Singh v. Union of India* (2012) SCC OnLine Raj 1703.

98. *Ibid.*, paras 97 and 99.

99. *Bombay Environmental Action Group v. State of Maharashtra* (2001) SCC OnLine Bom 399.

cases, however, which consider if scientific uncertainty exists before engaging the precautionary principle, are few and far between.

Precaution, Sustainable Development and Polluter Pays

In the *Vellore* case, the Supreme Court held that the precautionary principle and polluter pays principle are ‘essential features of sustainable development’.¹⁰⁰ In the subsequent case of *Research Foundation for Science Technology and Natural Resource Policy v. Union of India*,¹⁰¹ the Court, while considering application of the precautionary principle to the enterprise of ship breaking at Alang in Gujarat, cited *T. N. Godavarman Thirumalpad v. Union of India and Ors*¹⁰² approvingly. The Court noted that ‘while applying the concept of “sustainable development” one has to keep in mind the “principle of proportionality” based on the concept of balance. It is an exercise in which we have to balance the priorities of development on one hand and environmental protection on the other hand’.¹⁰³ The notion of proportionality, albeit a different understanding of it, finds resonance in the expression of the precautionary principle in EU law. In EU law, the notion of proportionality is engaged in relation to the response measures that need to be taken to address the identified risk potential—the more serious and likely the risks, the greater the need for measures to be taken.¹⁰⁴ This is not the context in which the *Godavarman* Court raises or the

100. *Vellore* (n 6), para 11.

101. (2007) 15 SCC 193, para 10.

102. (2002) 10 SCC 606.

103. *Research Foundation for Science Technology and Natural Resource Policy* (n 101).

104. Commission of the European Communities, ‘Communication from the Commission on the Precautionary Principle, Brussels’ COM (2000) 1 final t 18.

Research Foundation Court cites the proportionality principle.¹⁰⁵ In introducing the environment–development balance into the application of the precautionary principle, the Court drained the precautionary principle of particular meaning, and made these discrete (albeit related) notions fungible. This is evident not just in the application of the precautionary principle in the *Vellore* case but also in case law to follow. Most of the case law treats these principles, among others, as interchangeable and fungible, pulling precaution out of the mix only to justify preventive action.

NGT, for instance, frequently invokes and conflates precaution with the polluter pays principle.¹⁰⁶ In *Rayons Enlighting Humanity and Anr v. Ministry of Environment and Forests and Ors*, NGT, referring to the precautionary principle, fined a polluting plant and directed the ‘taking [of] all measure which are necessary for the purpose of restoration of environment and the precautions which would help in preventing further degradation of environment and damage to public health’.¹⁰⁷ The invocation of the precautionary principle in relation to ‘restoration’ is revealing, as the precautionary principle arguably applies where there are threats of serious or ‘irreversible’ damage. The ‘threats’ in this case have come to pass, and the damage has been done but is presumably not ‘irreversible’, hence the possibility of restoration. The NGT has also used these

105. See also *T. N. Godavarman Thirumulkpad v. Union of India and Ors* (2011) 7 SCC 338, para 119.

106. See, for example, *Hindustan Coco Cola Beverages Pvt. Ltd v. Member Secretary, West Bengal PCB and Ors*, Appeal No. 10/2011, judgment dated 19 March 2012, NGT (Principal Bench). See also *M/s Goodwill Plastic Industries and Anr v. Union Territory Chandigarh and Anr*, Application No. 26/2013 (THC), judgment dated 8 August 2013, NGT (Principal Bench).

107. *Rayons Enlighting Humanity and Anr v. Ministry of Environment and Forests and Ors*, OA No. 186/2013, judgment dated 24 October 2013, NGT (Principal Bench), para 44.

two principles—precaution and polluter pays—to justify bank guarantees in the context of environmental compliance.¹⁰⁸

The NGT also frequently melds the principles of precaution and sustainable development.¹⁰⁹ For instance, in *S. P. Muthuraman and Ors*, NGT noted that ‘the principle of sustainable development by necessary implication requires due compliance to the doctrine of balancing and precautionary principle’.¹¹⁰ In this case, the precautionary principle was cited as part of the rationale for striking down MoEF office memoranda that allowed the grant of environmental clearances in cases where construction activity had commenced without obtaining the requisite clearances before hand. The NGT noted that the ‘precautionary principle may lose its material relevancy where the projects have been completed and even irreversible damage to the environment and ecology has been caused’.¹¹¹ In *Gurpreet Singh Bagga v. Ministry of Environment*, the NGT opined that one of the fundamental bases of the precautionary principle is that ‘all steps should be taken to protect the environment while permitting sustainable development’.¹¹² Such melding of the principles of sustainable development and precaution, as discussed earlier, imports into the application of the precautionary principle a ‘balancing’ exercise—a balancing between development, ecological, and social imperatives. The role that the various elements of precaution occasionally asserted by

108. See *State Pollution Control Board, Odisha v. Swastik Ispat Pvt. Ltd.*, Appeal No. 68/2012 and 69/2012, judgment dated 09 January 2014, NGT (Principal Bench).

109. *National Green Tribunal Bar Association v. Ministry of Environment and Forests and Ors*, MA No. 685/2013 and MA No. 708/2013 in OA No. 171/2013, judgment dated 28 November 2013, NGT (Principal Bench).

110. *S. P. Muthuraman* (n 86), para 158.

111. *Ibid.*

112. *Gurpreet Singh Bagga v. Ministry of Environment and Forests*, OA No. 184/2013, judgment dated 18 February 2016, NGT (Principal Bench), para 94.

the courts—scientific uncertainty, irreversible damage, burden of proof—play in this balancing exercise, remains unclear.

In addition to the polluter pays and sustainable development principles, NGT also melds the precautionary principle with the principle of intergenerational equity. It has argued, for instance, that ‘it is better to take precaution today than suffer the consequences tomorrow’ and that ‘public health and the future of the coming generations’ required the activity in question to be moved from the sensitive site.¹¹³ Indeed, the NGT has noted the need to analyse all these principles in an ‘esemplastic’ fashion (that is, pulling together diverse elements into a unified whole).¹¹⁴

Finally, it is also worth noting that NGT, like the Supreme Court and High Courts, interprets the precautionary principle as expanding its jurisdiction. For instance, in the *Goa Foundation and Anr v. Union of India and Ors*, the NGT noted that ‘an anticipated or likely injury to environment can be a sufficient cause of action, partially or wholly, for invoking the jurisdiction of the Tribunal’.¹¹⁵ And ‘inaction in the facts and circumstances of a given case could itself be a violation of the precautionary principle, and therefore bring it within the ambit of jurisdiction of the Tribunal,

113. *Rayons Enlighting Humanity and Anr v. Ministry of Environment and Forests and Ors*, Application No. 86/2013, judgment dated 18 July 2013, NGT (Principal Bench), paras 47 and 48. See also *Sarang Yadwadkar* (n 84), para 29; *The Sarpanch Grampanchayat and Ors v. MoEF*, Appeal No. 3/2011, judgment dated 12 September 2011, NGT (Principal Bench), para 17.

114. *Court on its own motion v. State of Himachal Pradesh and Ors*, Application No. 237(THC)/2013 (CWPIIL No. 15/2010) and Application No. 238(THC)/2013 (CWP No. 5087/2011) and Application No. 239(THC)/2013 (CWP No. 5088/2011), judgment dated 6 February 2014, NGT (Principal Bench), paras 15 and 19.

115. *Goa Foundation and Anr v. Union of India and Ors*, MA No. 49/2013 in Application No. 26/2012, judgment dated 18 July 2013, NGT (Principal Bench), para 42. See also *Vitthal Gopichand Bhungase v. The Ganga Sugar Energy Ltd and Ors*, MA No. 37/2013, judgment dated 20 December 2013, NGT (Western Zone Bench).

as defined under the NGT Act'.¹¹⁶ The jurisdiction of the NGT extends to civil cases where a substantial question relating to the environment is involved, arising out of the implementation of the listed environmental statutes,¹¹⁷ as well as cases challenging certain regulatory approvals.¹¹⁸ Although the NGT is required to apply the precautionary principle in reaching decisions,¹¹⁹ this principle is neither relevant nor necessary in the context of its exercise of jurisdiction, which in any case is extensive.

Burden and Standard of Proof

A final element of the precautionary principle, as defined by the Supreme Court in the *Vellore* case, is that it shifts the burden of proof to the industrialist to demonstrate that the proposed activity is 'environmentally benign'.¹²⁰ It does so without a discussion of the possible adverse consequences of such a reversal of the burden of proof, namely that it could potentially lead to a chilling effect on technological innovation and industrial activity. Interestingly, later Supreme Court and High Court cases assert that 'unless an activity is proved to be environmentally benign in real and practical terms, it is to be presumed to be environmentally harmful'.¹²¹ Industrialists are required to discharge their burden by showing the absence of a 'reasonable ecological or medical concern'.¹²² If 'insufficient evidence is presented by them to alleviate concern about the level of uncertainty, then the presumption should

116. *Goa Foundation*, *ibid.*

117. NGT Act s 14.

118. *Ibid.*, s 16.

119. *Ibid.*, s 20.

120. *Vellore* (n 6), para 11.

121. *M. C. Mehta v. Union of India and Ors* (2002) 4 SCC 356 (*Delhi Vehicular Pollution* case), para 10; *Smoke Affected Residents Forum* (n 81), para 19; *P.K. Nayyar and Ors v. Union of India and Ors* (2013) SCC OnLine Del 201, para 11.

122. *A. P. Pollution Control Board* (n 67), para 39.

operate in favour of environmental protection'.¹²³ The NGT has also similarly interpreted the precautionary principle as requiring the project proponent to prove that the project will not cause 'any injurious effects' on the environment. It rationalises this reversal of the burden of proof on grounds of fairness, in that in its absence, the 'common citizen' would be required to provide scientific and technological data in order to preserve *status quo* and protect the environment.¹²⁴ Some High Court cases add a further element to the standard of proof. The Kerala High Court in *Sujatha v. Prema*¹²⁵ identified the standard of proof as the 'risk of harm to the environment or to human health that has to be decided in public interest and according to a reasonable person's test'.

The task of proving an activity environmentally benign, whether on a reasonable person's test or purely on scientific data, is problematic, in part because the issue is misconceived. The real question is not whether the activity is benign—few are—but whether the activity has any redeeming social benefit, and if yes, how it might be balanced with the risks it entails, and what steps may be taken to limit its environmental impact. Intriguingly, the *Vellore* Court, after engaging the precautionary principle and shifting the burden of proof to the industrialist to demonstrate that the activity is benign, proceeds to engage in a delicate balancing exercise between competing interests. In subsequent cases too, the courts engage in such a balancing exercise in their application of the precautionary principle. As for instance, in the *M. C. Mehta (Delhi Vehicular Pollution)* case, the Supreme Court noted the need to balance the needs of transport with the needs of the public.¹²⁶

123. *Ibid.*

124. *Pandurang Sitaram Chalke and Anr v. State of Maharashtra*, OA No. 14/2012, judgment dated 01 October 2013, NGT (Western Zone Bench).

125. *Sujatha S. v. A. Prema and Ors* (2005) SCC OnLine Ker 295, para 14. See also *Madireddy Padma Rambabu v. District Forest Officer* (2001) SCC OnLine AP 638.

126. *Delhi Vehicular Pollution* case (n 121).

Similarly, in *Radheshyam and Ors v. State of Chhattisgarh and Ors*,¹²⁷ the Chhattisgarh High Court found that even where a public purpose existed, as for instance, in the establishment of thermal power plants, the precautionary principle had to be enforced, thus underscoring the need to balance competing interests with the words: ‘while considering the existence of public purpose the issues of environmental degradation and damage to ecosystem have to be kept in mind’.¹²⁸ It appears then that although on paper an application of the precautionary principle requires the polluter to discharge his or her burden of proof that the activity they are engaged in is ‘benign’, in actual fact the courts rely on a pragmatic balancing exercise, to which the polluter is expected to weigh in. This dichotomy between text and practice is intriguing and merits further examination, albeit not in this chapter.

Legal Status

In the *Vellore* case, the Supreme Court held that the precautionary and polluter pays principles are part of domestic environmental law, as well, arguably, as customary international law.¹²⁹ In the Court’s reasoning, Articles 21, 47,¹³⁰ 48A¹³¹ and 51A(g)¹³² of the Constitution of India, and India’s network of statutory environmental laws were sufficient to render the precautionary and

127. *Radheshyam and Ors v. State of Chhattisgarh and Ors* MANU/CG/0490/2012.

128. *Ibid.*, para 30.

129. *Vellore* (n 6), paras 13, 14 and 15.

130. Article 47 creates a duty for the state to raise the level of nutrition and the standard of living and to improve public health.

131. Article 48A reads, ‘[T]he State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country’.

132. Article 51A (g) imposes a duty on every citizen ‘to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures ...’.

polluter pays principles part of domestic environmental law.¹³³ It is worth noting that these constitutional provisions contain a mandate ‘to protect and improve’ the environment, and the network of environmental laws seek to further this mandate. At the time, there was no specific reference anywhere to the concept of precaution (as a step ahead of prevention), and the Court did not identify any either. Further, the Court declared that ‘sustainable development as a balancing concept between ecology and development has been accepted as a part of the Customary International Law although its salient features are yet to be finalized by international law jurists’.¹³⁴ It reached this conclusion by reference to a series of soft law international instruments, including the Rio Declaration, Agenda 21, and the Brundtland Report.¹³⁵ It listed several principles as ‘salient principles of “Sustainable Development”’¹³⁶ and identified the precautionary and polluter pays principles as ‘essential features of sustainable development’, and noted that ‘[e]ven otherwise once these principles are accepted as part of the Customary International Law there would be no difficulty in accepting them as part of the domestic law’.¹³⁷ The guarded phrasing of this last statement (‘even otherwise’ and ‘once’) appears to leave the question, of whether precaution and polluter pays are custom, open. However, subsequent judgments have understood this case to suggest that these principles are custom.¹³⁸ Presumably, although this is left unsaid, on the ground that if sustainable development is custom,

133. *Vellore* (n 6), paras 13 and 14.

134. *Ibid.*, para 10. See for an incisive contra-argument Vaughan Lowe, ‘Sustainable Development and Unsustainable Arguments’ in Alan Boyle and David Freestone (eds) *International Law and Sustainable Development* (OUP 1999) 19 (arguing that since sustainable development is a mediating principle, in the galaxy of other rights and principles it cannot have sufficient legal content to be norm-creating).

135. *Vellore* (n 6).

136. *Ibid.*, para 11.

137. *Ibid.*, paras 11 and 15.

138. See, for example, *Research Foundation for Science Technology National Resource Policy v. Union of India and Anr* (2005) 10 SCC 510, para 16,

then precaution and polluter pays, its essential features, are also custom. Indeed, the Canadian courts have also cited the Indian courts as recognising precaution as custom.¹³⁹

It is worth noting that both precautionary and polluter pays principles are contested in international law. As we have seen, although there are numerous references to the precautionary principle in international law,¹⁴⁰ there are divergent views on whether the precautionary principle is properly so called, how it might best be defined, what its precise content is, what obligations it creates and on whom, and whether, in its strong version, it lends itself to actualisation.¹⁴¹ As such to characterise this principle as custom (if indeed this is what the *Vellore* Court did), without the benefit either of serious forensic analysis of state practice and *opinio juris*, or at least of compelling argument, is problematic.

The Precautionary Principle beyond the Environment

Finally, a word on the use of the precautionary principle by the Indian Courts in non-environmental cases. There are several High Court cases that appear to further muddy the waters of the precautionary principle. In the case of *Naya Bans Sarv Vyapar Association v. Union of India*,¹⁴² the High Court of Delhi was faced with a constitutional challenge to the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade

and quoted with approval in *Research Foundation for Science Technology and Natural Resources Policy* (n 6), para 35.

139. See *Canada Ltee (Spraytech, Société d'arrosage) v. Hudson (Town)* (2001) SCC 40 (Supreme Court of Canada). See also *Josette Wier v. Environmental Appeal Board and Minister of Forests of the Province of British Columbia* (2003) BCSC 1441 (Supreme Court of British Columbia); *Yates v. Fedirchuk* [2011] OJ No. 4718 (Supreme Court of Ontario).

140. For an extensive list of references, see de Sadeleer (n 23).

141. See Sunstein (n 11).

142. (2012) SCC OnLine Del 5714.

and Commerce, Production, Supply and Distribution) Act 2003, and the Delhi Prohibition of Smoking and Non-smokers Health Protection Act 1996 (Prohibition Act), to the extent they prohibit wholesale of cigarettes or any other tobacco products within 100 yards of any educational institution. The argument was raised that the failure of the legislation to distinguish between wholesale and retail tobacco sellers was arbitrary, because students would be unaffected by the presence of the wholesale sellers. In rejecting this argument, the Court applied the precautionary principle to ‘err on the side of the society as a whole’. In doing so, the Court extended the precautionary principle beyond the environmental realm, side stepped the need to conduct factual enquiries into the effect of the law in question, and to justify broad categorisations on fuzzy grounds.

AN INDIGENOUS VERSION OF THE PRECAUTIONARY PRINCIPLE

Although the foregoing survey of Indian case law—Supreme Court, High Courts, and NGT—does not reveal a consistent and linear development of the principle, there are several recurring elements that can be culled from the application of this principle by the Indian courts:

- Precaution is frequently conflated with the commonsensical notion that prevention is better than a cure.
- The threat of serious or irreversible damage—an element of the original definition of precaution adopted by the *Vellore* Court—may be at issue, but is not generally considered an essential condition for the engagement of the principle; rather, in most cases, the principle is invoked when serious damage is ongoing.
- Scientific uncertainty—another element of the original definition of precaution adopted by the *Vellore* Court—may be at issue, but it is not generally considered an essential

condition for the engagement of this principle; rather, the invocation of this principle has been interpreted to generate a demand for robust scientific data and environmental clearance processes, to underpin environmental decision-making.

- Precaution is linked inextricably with sustainable development, polluter pays, and intergenerational equity; this then drains precaution of its distinctive characteristics and engages delicate balancing exercises between competing interests, in particular, social and environmental and development imperatives, and introduces factors such as compensation and restoration into the mix.
- Precaution triggers a reversal of the burden of the proof, although in cases where serious damage is overwhelming, ongoing, and obvious, the courts dispense with this requirement.

Together these elements demonstrate a much broader, and thus, less technical conception of the precautionary principle than the Rio principle, which inspired the *Vellore* Court's definition of precaution.

There is a context to such a development and use of the precautionary principle. There are systemic problems in environmental governance and administration in India, resulting in serious, poorly checked, and escalating environmental harm.¹⁴³ This, arguably, creates pressures and compulsions on other actors, including the judiciary, and the enviro-legal fraternity. Lawyers and advocacy groups believe that the ongoing crisis in environmental governance creates a need for strong and malleable weapons that litigators can draw upon from their arsenal to counteract environmental harm, which the State either sanctions or is unable

143. See, for example, Shibani Ghosh, 'Demystifying the Environmental Clearance Process in India' (2013) 6(3) *NUJS Law Review* 433; See Environmental Performance Index, Country Profile: India, South Asia (2018) <<https://epi.envirocenter.yale.edu/epi-country-report/IND>> accessed 31 October 2018.

to address.¹⁴⁴ The broader notion of precaution that courts have crafted in India is tailored to such a demand.

To strengthen their broader notion of precaution, courts also reverse the burden of proof. Public-spirited individuals, bolstered by the expansive public interest jurisdiction courts enjoy in India, bring cases of egregious environmental harm to the courts. These individuals do not usually have the means or access to the data to discharge the burden of proof that is customarily placed on the petitioner. The NGT in *Pandurang Sitaram Chalke and Anr v. State of Maharashtra*,¹⁴⁵ as discussed earlier, explained that in the absence of such a reversal of the burden of proof, the common citizen would be asked to provide the scientific and technological data that they could not have access to every time they sought to raise environmental concerns. The courts, therefore, when faced with serious environmental harm (imminent or ongoing) invoke the precautionary principle, reverse the burden of proof and offer relief to the petitioner and the environment.

While this explains why such a broad version of precaution has evolved in India, it does not justify it. This indigenous version of precaution bears little resemblance to the precautionary principle as defined in the instruments that the *Vellore* Court first cited to adopt the principle into domestic law. Indeed, many of the early cases explicitly sourced their invocation of the precautionary principle to international law. To source the precautionary principle to international law, replicate the Rio definition *in toto* in the decision, and then to proceed to ‘apply’ it on a case-by-case basis without reference to that definition, has led to considerable imprecision and subjectivity in the use of this principle. The lack of rigour, precision and nuance in the courts’ engagement with the precautionary principle renders it impotent to assist in the dialectic process of international and domestic norm creation and

144. I am grateful to the participants of the Work-in-Progress Workshop held on 13 December 2013 at the Centre for Policy Research, New Delhi for these insights.

145. *Pandurang Sitaram Chalke* (n 124).

crystallisation. While many of the cases discussed represent ‘state practice’ and count in quantitative assessments of the use of, or reference to, the precautionary principle, the conceptual vacuity of these judgments in relation to the interpretation and application of the precautionary principle renders them a poor reed to rely on in any qualitative content-based assessments of the evolution of norms in international law. This represents a significant missed opportunity for India in shaping the evolution of the precautionary principle in international law.

More importantly, such imprecision and subjectivity in the development and application of the principle has diluted its potential as a powerful and distinctive norm of domestic law. The case law, as we have seen, does not provide specificity and concreteness to the elements of this principle. It does not clarify what degree of risk triggers application of this principle, what specific action should be taken when the application of this principle is triggered, and the extent to which cost plays a role in the choice of measures to be taken in response to the risk. Rather, the courts appear to tailor the application of the principle to support the desired outcome, in the process further diluting the core elements of this principle, as laid out in the *Vellore* case. The courts do not typically limit the use of this principle, as the *Vellore* case had identified (albeit not followed), in distinctive situations of potential serious/irreversible damage and scientific uncertainty. Instead the courts have extended the boundaries of this principle so as to permit its instrumental application in a wide variety of fact situations, many of which are indistinguishable from situations in which the other principles—in particular sustainable development and prevention—apply. The principle of precaution, thus, although liberally used in environmental litigation in India, has not come of age as a distinctive principle of domestic environmental law.¹⁴⁶

146. It is worth noting that there are no definitions of the precautionary principle in national legislations. Although the NGT Act s 20, directs the NGT to apply, *inter alia*, the precautionary principle, it does not define it. The Draft National Water Framework Bill 2016, s 2(1)(r), contains a

CONCLUSION

This analysis of the case law on the precautionary principle reveals the following. First, that the courts often engage the precautionary principle when the background conditions for its engagement, as identified by the *Vellore* Court, are not met. Second, that the courts are in reality engaging the preventive principle in as far as they are crafting responses to known (not unknown or unknowable) risks. In other words, the courts while they cite the precautionary principle, are in fact engaging prevention as broadly conceived rather than narrowly conceived precaution. Third, they treat the notions of sustainable development and precaution/prevention as a fungible mix of elements, justifying therefore a balancing exercise between development and environmental concerns and priorities. While such a balancing exercise may be essential and inevitable in environmental cases, invoking the precautionary principle permits the courts to shift the burden of proof to the industrialist, and fundamentally change the dynamics of the decision-making process.

The courts have taken, in their wisdom, a principle of international environmental law, necessarily broad and imprecise, given that it is a guiding principle and applied at the international level, further broadened it, and introduced additional layers of

thoughtful definition of the precautionary principle that seeks to integrate the key elements of the definition as laid down by the *Vellore* Court and the subsequent practice. It remains to be seen if this draft will be adopted, and if yes, how this principle will be applied in practice. The relevant provision of the Draft National Water Framework Bill reads: “Precautionary principle” means the principle that advocates the adoption of a cautious approach, including anticipatory preventive or mitigatory action, towards an activity that holds the possibility of causing harm to human beings or the environment, even if that possibility is not fully established scientifically, with the onus of proving that there will be no such harm resting on the proposer of the activity.’ See Draft National Water Framework Bill 2016: Draft of 16 May 2016 <http://wrmin.nic.in/writereaddata/Water_Framework_May_2016.pdf> accessed 10 March 2017.

imprecision and ambiguity to it. This in turn privileges subjectivity and promotes uncertainty in outcomes. It also renders application (given lack of concrete content) and implementation difficult, and obfuscates hard questions and choices.

Rather than adding concrete content to its definition and discipline to its application—which could have resulted in targeted use of the principle to appropriate ends in hard cases—the Indian courts have used the precautionary principle in a commonsensical fashion to expand their own discretion. Indian courts have created, through the vehicle of the precautionary principle, room for judges and their predilections to play a significant role in the shape litigations take. It allows the courts to convert one strain of opinion into policy while annihilating others. It also allows the courts to develop into a ‘policy evolution fora’, a role it is ill-equipped to play.¹⁴⁷

It has long been recognised in India that a judge’s social and value preferences play a role in the decision-making process. Justice Chandrachud in *State of Rajasthan v. Union of India* noted that ‘it is an accepted fact of constitutional interpretation that the content of justiciability changes according to how the Judge’s value preferences respond to the multi-dimensional problems of the day’.¹⁴⁸ The Supreme Court in India is arguably perceived to consist of middle-class arm-chair intellectuals. It is, therefore, perceived to be more receptive to others of their ilk, certain social and value preferences

147. There are many concerns with the judiciary annexing policy-making in this way. I have identified some of them elsewhere. See Lavanya Rajamani, ‘Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability’ (2007) 19(3) *Journal of Environmental Law* 293, 320. An additional concern highlighted by Ran Hirchl is that the trend towards what he terms ‘juristocracy’ is ‘part of a broader process whereby political and economic elites, while they profess support for democracy and sustained development, attempt to insulate policymaking from the vicissitudes of democratic politics’. See Ran Hirschl, *Towards Juristocracy* (HUP 2004).

148. *State of Rajasthan and Ors v. Union of India* (1977) 3 SCC 592, para 134.

(for instance, the right to a clean environment rather than the right to livelihood), and certain modes of argumentation over others (technical rather than social). While the outcomes in particular cases discussed in this chapter may be generally considered to be favourable, the discretion courts have arrogated to themselves, through the use of expansive definitions of the precautionary principle, is deeply problematic for environmental governance, and for the development of a clear consistent line of environmental jurisprudence that promotes certainty, predictability, and clarity in the outcomes of environmental cases.

Public Trust Doctrine in Indian Environmental Law

SHIBANI GHOSH*

A landmark decision of the Supreme Court in 1996 marked the introduction of the public trust doctrine in Indian environmental law. Ever since, this doctrine has often been referred to and relied upon by the Supreme Court and High Courts in several cases relating to the use of natural resources and public spaces. It has been instrumental in orders to protect, *inter alia*, ecologically fragile lands, flowing waters, water bodies, public parks, beaches, natural gas, coal and spectrum. An American law review Article documenting the use of the doctrine in various jurisdictions outside the United States observes that India ‘has given the public trust doctrine the most detailed judicial consideration of any jurisdiction outside the United States’.¹

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1. Michael C. Blumm and Rachel D. Guthrie, ‘Internationalizing the Public Trust Doctrine: Natural Law and Constitutional and Statutory

Despite its widespread use by Indian courts, the contours of the doctrine remain unclear. Courts have defined the doctrine and its components in so many ways, often extracting from American case law, that its legal content in the Indian context appears at once expansive and limited. For this reason, whether the doctrine places any additional restraints on the actions of the executive, beyond what every State action is subject to under Indian law, is uncertain. Interestingly, although it has been ‘part of the law of the land’ since 1996,² it is yet to find an explicit mention in any central environmental legislation till date.³

This chapter traces the growth and application of the public trust doctrine in Indian jurisprudence, starting from the Supreme Court’s 1996 judgment in *M. C. Mehta v. Kamal Nath*.⁴ It also discusses some of the significant judgments of the Supreme Court, the High Courts, and the National Green Tribunal (NGT), which have expounded this doctrine or relied on it. The objective is to comprehensively describe and analyse the current judicial understanding of this doctrine and its various aspects in India, and propose a more systematic application of the doctrine in environmental regulatory processes, and judicial decision-making.

Approaches to Fulfilling the Saxion Vision’ (2012) 45(3) *UC Davis Law Review* 741, 748.

2. *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388, para 39.

3. Most notably, the National Green Tribunal Act 2010 (NGT Act) requires the Tribunal to apply the principles of sustainable development, precaution and polluter pays while passing an order, but does not mention the public trust doctrine. See NGT Act s 20. The Draft River Basin Management Bill 2012 and the Draft National Water Framework Bill 2016 proposed by the Ministry of Water Resources, Government of India, refer to the doctrine. But these bills have not been passed by Parliament till date. The Kerala Forest (Vesting and Management of Ecologically Fragile Lands) Act 2003 states in its preamble that ecologically fragile lands are held in public trust. The Act transfers the ownership and possession of ecologically fragile lands to the State.

4. *Kamal Nath* (n 2).

The next section discusses the origin of the public trust doctrine in Indian environmental jurisprudence. This is followed by a section that looks closely at the various components of the doctrine and how each of them has been understood by Indian courts. The section that follows problematises the doctrine by contextualising it in the Indian scenario. The final section attempts to ‘rescue’ the doctrine. The doctrine can continue to play a role, albeit a more circumscribed one than the one currently ascribed to it, in environmental regulatory processes and cases.

FROM WHERE IT ALL BEGAN

The *Kamal Nath* judgment of the Supreme Court is the lodestar for the public trust doctrine in Indian environmental jurisprudence. In 1996, the Supreme Court had the occasion to decide on the legality of leasing protected forest land along a river to a private hotel for commercial purposes. Sufficient evidence had been produced before the Court that proved that the hotel had, for several years, encroached on the forest land, before it was granted a lease by the government.

The Court could have decided the matter exclusively on the point of encroachment, and that the government should have taken action against the hotel management instead of regularising the encroachment by granting the lease. Instead, the Court relied on the public trust doctrine and held that the ‘area being ecologically fragile and full of scenic beauty should not have been permitted to be converted into private ownership and for commercial gains’⁵ and that the government had committed a ‘patent breach of the trust’⁶ held by it. The Court quoted extensively from the influential 1970 law review Article by Joseph L. Sax on the public trust doctrine,⁷

5. *Ibid.*, para 22.

6. *Ibid.*, para 36.

7. Joseph L. Sax, ‘The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention’ (1970) 68(3) *Michigan Law Review*

and discussed American case law which relied on this doctrine. It observed that as the doctrine was part of the English common law and as the Indian legal system was based on the common law system, the public trust doctrine was part of Indian jurisprudence.⁸ The Court declared the doctrine to be a part of the law of the land, although it was the first time that a court in India was relying on it in the context of environmental conservation, and it had not been statutorily incorporated. In the Court's words:

the State is the trustee of all natural resources which are by nature meant for public use and enjoyment. Public at large is the beneficiary of the sea-shore, running waters, airs, forests and ecologically fragile lands. The State as a trustee is under a legal duty to protect the natural resources. These resources meant for public use cannot be converted into private ownership.⁹

Since 1996, the public trust doctrine and the Court's dicta in this case have been used numerous times by the Supreme Court, High Courts, and NGT to protect (or refuse protection) to a variety of natural resources. Unlike the US, where the public trust doctrine has often been invoked by the State to defend its action relating to certain natural resources that are held in trust,¹⁰ in India, the doctrine has almost always been used to challenge the State's decision or a private party's actions which affect a natural resource or restrict its traditional use.¹¹

471. According to one legal scholar, Sax's Article is 'perhaps the most heavily cited law review article—by courts and scholars alike—in over four decades of environmental law'. See Richard M. Frank, 'The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future' (2012) 45(3) *UC Davis Law Review* 665, 667.

8. *Kamal Nath* (n 2), para 34.

9. *Ibid.*

10. Richard J. Lazarus, 'Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine' (1985–86) 71 *Iowa Law Review* 631, 646.

11. However, on one occasion the doctrine was used by the state of Kerala to justify a legislative action—an amendment to law relating to the

THE DECONSTRUCTION

What is the Source of Public Trust Doctrine in Indian Law?

The public trust doctrine was not part of Indian environmental jurisprudence until the *Kamal Nath* judgment.¹² While deciding *Kamal Nath*, the judges had to attribute the doctrine's origin to a source of law accepted in Indian jurisprudence. As a common law country, the Indian legal system is based primarily on common law principles and, therefore, once the Court found that the public trust doctrine had been part of the English common law, the attribution was only logical—public trust doctrine justified its place in Indian jurisprudence because of its origin in English common law.

But as the Court pointed out, the scope of the doctrine in the English common law was limited—it applied to a small set of natural resources to protect traditional uses such as navigation, commerce, and fishing.¹³ It was through American cases, as the Court acknowledged, that the doctrine had been expanded to protect trust property for ecological and environmental values.¹⁴

water level in the Mullaperiyar dam, which in essence negated a previous judgment of the Supreme Court. The Supreme Court struck down the impugned law and held that the legislature could not invoke the public trust doctrine to indirectly control the action of the courts. See *State of Tamil Nadu v. State of Kerala* (2014) 12 SCC 696, para 147.

12. The public trust doctrine discussed in this chapter is the doctrine as discussed in the context of environmental cases and cases involving decision-making affecting natural resources. It is different from the law relating to public trusts (such as charitable or religious trusts) or the public trust doctrine in the context of administrative law.

13. *Kamal Nath* (n 2), para 33. For a discussion on the Roman and English origin of the doctrine, see Jan S. Stevens, 'The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right' (1980) 14(2) *UC Davis Law Review* 195, 195–98.

14. *Ibid.* The Court refers to various American case law including the landmark decision of the Supreme Court of California in *National*

After extensive references to American case law, the Court came to the conclusion that the public trust doctrine in India should be expanded to all ecosystems operating in natural resources. In the *Intellectuals Forum* case,¹⁵ the Supreme Court observed that the doctrine, as it existed in the Roman and English law, related to specific types of resources; US courts have given the doctrine its contemporary shape—‘encompass[ing] the entire spectrum of the environment’.¹⁶

In such a scenario, one has to attribute the origin of the Indian version of the public trust doctrine mostly to American jurisprudence on the doctrine. Sax’s classic 1970 article¹⁷ has been extensively quoted by the Supreme Court in its judgments starting from *Kamal Nath*, and by various High Courts. Thus, the understanding of the public trust doctrine in Indian jurisprudence is certainly owed, in no small measure, to Sax’s work.

Interestingly, by the time *Kamal Nath* was decided, there was a growing body of scholarly work which critiqued Sax’s proposition that the public trust doctrine was a powerful tool to ‘promote rational management of our natural resources’.¹⁸ Steven M. Jawetz criticised the application of the doctrine to administrative decision-making relating to public lands as ‘a mask for the unauthorized substitution of judicial for administrative discretion’.¹⁹ In 1986, Richard J. Lazarus argued that the public trust doctrine was a step in the wrong direction given the ‘complex and pressuring resource

Audubon Society v. Superior Court 33 Cal 3d 419 (1983) (*Mono Lake* case) and the United States Supreme Court’s decision in *Phillips Petroleum Co. v. Mississippi* 108 SCt 791 (1988).

15. *Intellectuals Forum, Tirupathi v. State of Andhra Pradesh and Ors* (2006) 3 SCC 549.

16. *Ibid.*, para 74.

17. Sax (n 7).

18. *Ibid.*, 656.

19. Steven M. Jawetz, ‘The Public Trust Totem in Public Land Law: Ineffective-and Undesirable-Judicial Intervention’ (1982) 10 *Ecology Law Quarterly* 455, 457.

allocation and environmental protection issues we currently face'.²⁰ According to him, different disciplines of law had evolved in response to increased concern and awareness about environment and natural resources problems, and 'much of what the public trust doctrine offered in the past is now, at best, superfluous and, at worst, distracting and theoretically inconsistent with new notions of property and sovereignty developing in the current reworking of natural resources law'.²¹ James L. Huffman, in his critique of the doctrine, found that 'Sax's argument fails to justify the public trust doctrine in the context of American constitutional democracy', as it allowed 'non-democratic courts to overrule the decision of theoretically democratic legislatures'.²²

Sax wrote a second Article in 1980²³ elaborating what according to him was the root of the public trust doctrine. According to him, the focus of environmental problems was not the fact of change but the rate of change, and '[t]he essence of the problem raised by public trust litigation is the imposition of destabilizing forces that prevent effective adaptation'.²⁴ He wrote that the doctrine would 'help us reach the real issues—expectations and destabilization—whether the expectations are those of private property ownership, of a diffuse public benefit from ecosystem protection or of a community's water supply'.²⁵

20. Lazarus (n 10) 716.

21. Lazarus (n 10) 631. See also, Richard Delgado, 'Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform' (1991) 44 *Vanderbilt Law Review* 1209, 1214. Delgado argued that Sax's public trust doctrine was a seriously flawed solution to the environmental crisis, as it was 'inherently antagonistic to the promotion of innovative environmental thought' and 'poorly suited to advance natural values'.

22. James L. Huffman, 'A Fish out of Water: The Public Trust Doctrine in a Constitutional Democracy' (1989) 19 *Environmental Law* 527, 565.

23. Joseph L. Sax, 'Liberating the Public Trust Doctrine from Its Historical Shackles' (1980) 14(2) *UC Davis Law Review* 185.

24. *Ibid.*, 188.

25. *Ibid.*, 192–93.

The Supreme Court in *Kamal Nath* did not take into account the growing critique of the approach. It also did not engage with the evolving treatment of the doctrine in the US, which varied depending on the state.²⁶ It was only in September 2012, when the Supreme Court was faced with the question of whether the doctrine should be applied to non-environmental issues, that it referred to Lazarus and his scepticism about liberating the public trust doctrine from its traditional moorings.²⁷ However, the Court decided not to rule on the issue.

Although there is near consensus in Indian case law on the origin of the public trust doctrine as being English common law, in the *M. I. Builders* case,²⁸ the Supreme Court finds the doctrine to have grown out of Article 21 of the Constitution of India, which guarantees fundamental right to life and liberty. This transition from a common law doctrine to a fundamental right was not explained in the judgment, and this line of thinking has never really been pursued subsequently by the Supreme Court.²⁹ In fact, the doctrine is generally worded as an affirmative duty of the government, that is, the trustee, to do or refrain from doing something. No doubt, the doctrine has been relied on to protect certain rights, such as the right of the people to be able to access light, air and water,³⁰ right

26. See, for example, Robin Kundis Craig, 'A Comparative Guide to the Eastern Public Trust Doctrines: Classification of States, Property Rights, and State Summaries' (2007) 16(1) *Penn State Environmental Law Review* 1; Robin Kundis Craig, 'Comparative Guide to the Western States Public Trust Doctrines: Public Values, Private Rights, and the Evolution toward an Ecological Public Trust' (2010) 37(1) *Ecology Law Quarterly* 53.

27. *Natural Resources Allocation, In Re, Special Reference No. 1 of 2012* (2012) 10 SCC 1 (*Presidential Reference*), para 93.

28. *M. I. Builders (P) Ltd v. Radhey Shyam Sahu* (1999) 6 SCC 464, para 51.

29. The Allahabad High Court in one case observed that '[t]his doctrine has been accepted in our country as flowing from Article 21 of the Constitution'. See *Mohd. Kausar Jah v. Union of India (UOI) and Ors* (2011) SCC OnLine All 735, para 38.

30. *Fomento Resorts and Hotels Limited and Anr v. Minguel Martins and Ors* (2009) 3 SCC 571.

to healthy and decent living³¹ and right of future generations to natural resources.³² But it is unclear whether the doctrine can itself be articulated in a rights framework.

What is Held in Public Trust?

The public trust doctrine, in essence, protects certain components of the natural environment from exploitation. These components, often referred to in this context as natural resources or properties, are held in trust by the State for the people, who are, in a sense, the real owners and beneficiaries of the same. Over the years, Indian courts have applied the doctrine to various natural resources. However, only in some cases have the courts provided a justification for considering a particular natural resource as being held in trust by the State.

In *Kamal Nath*, the Court makes three important observations in this context: ‘all natural resources which are by nature meant for public use and enjoyment’ are held in trust by the State and such properties are of ‘great importance to the people as a whole’;³³ ‘[p]ublic at large is the beneficiary of the sea-shore, running waters, airs, forests and ecologically fragile lands’; and the Court ‘see[s] no reason why the public trust doctrine should not be expanded to include all ecosystems operating in our natural resources’.³⁴ The Court justified its approach—of subjecting all ecosystems to the public trust doctrine—by observing that US courts were expanding the application of the doctrine to new types of lands and waters by accepting ecological concepts to identify trust properties.³⁵

31. *Joginder Kumar Singla and Ors v. Government of NCT of Delhi and Ors* (2005) SCC OnLine Del 84.

32. *T. N. Godavarman Thirumalpad v. Union of India* (2006) 1 SCC 1.

33. *Kamal Nath* (n 2), para 25.

34. *Ibid.*, para 33.

35. *Ibid.* The Court refers to the *Mono Lake* case and *Phillips Petroleum Co.* (n 14) in this context.

Following *Kamal Nath* and without further doctrinal analysis, several Indian cases discussing the public trust doctrine consider the doctrine to be applicable to all natural resources, whether wildlife,³⁶ lakes,³⁷ forests,³⁸ deep underground water³⁹ or seashores.⁴⁰ In *Intellectuals Forum*, the Supreme Court held that resources that are freely available for use by the public,⁴¹ such as lakes and water tanks, are held by the State in trust.⁴² In another decision, a public park was considered to be public trust property because of its 'historical importance and environmental necessity'.⁴³

In the *2G spectrum* case,⁴⁴ a case dealing with the legality of the spectrum allocation policy of the government, the Supreme Court relied on the public trust doctrine. The first question that the Court set for itself was '[w]hether the Government has the right to alienate, transfer or distribute natural resources/national assets otherwise than by following a fair and transparent method consistent with the fundamentals of the equality clause enshrined in the Constitution?'.⁴⁵ The Court answered this question in the negative and held that the State, as a trustee of the people, is the

36. *Common Cause, A Registered Society v. Union of India* (1999) 6 SCC 667.

37. *Intellectuals Forum* (n 15).

38. *T. N. Godavarman* (n 32).

39. *State of West Bengal v. Keshoram Industries Pvt. Ltd* (2004) 10 SCC 201; *Perumatty Grama Panchayat v. State of Kerala* (2003) SCC OnLine Ker 500.

40. *Fomento Resorts* (n 30).

41. *Intellectuals Forum* (n 15), para 76.

42. This was narrowed down in a subsequent decision wherein the Court held that the doctrine applied to 'natural water storage resources' and not to artificial lakes. *Susetha v. State of Tamil Nadu and Ors* (2006) 6 SCC 543.

43. *M. I. Builders* (n 28); *Vivek Srivastava v. Union of India* (2005) SCC OnLine All 1555; *Arunangshu Chakraborty v. Bidhannagar Municipality and Ors* (2013) SCC OnLine Cal 7708.

44. *Centre for Public Interest Litigation and Ors v. Union of India* (2012) 3 SCC 1 (*2G Spectrum* case).

45. *Ibid.*, para 1.

legal owner of natural resources.⁴⁶ The judgment provides rare guidance as to what constitutes ‘natural resource’:

... we consider it proper to observe that even though there is no universally accepted definition of natural resources, they are generally understood as elements having intrinsic utility to mankind. They may be renewable or non-renewable. They are thought of as the individual elements of the natural environment that provide economic and social services to human society and are considered valuable in their relatively unmodified, natural form. A natural resource’s value rests in the amount of the material available and the demand for it. The latter is determined by its usefulness to production. Natural resources belong to the people but the State legally owns them on behalf of its people and from that point of view natural resources are considered as national assets, more so because the State benefits immensely from their value.⁴⁷

Natural resource thus defined identified a distinctly anthropocentric approach to the application of the public trust doctrine—a point of debate in environmental conservation that the Supreme Court of India would enter into just a few weeks after this judgment, in a different context.⁴⁸

The High Courts and NGT have applied the public trust doctrine in a variety of cases—to uphold deallocation of a coal block;⁴⁹ direct removal of encroachment from river banks;⁵⁰ stop construction of a commercial complex,⁵¹ basketball court⁵² and

46. *Ibid.*, para 89.

47. *Ibid.*, para 74.

48. *T. N. Godavarman Thirumulpad v. Union of India and Ors* (2012) 3 SCC 277 (Wild Buffalo case).

49. *Kalinga Power Corporation v. Union of India* (2012) SCC OnLine Del 2090.

50. *Environment Protection Committee v. Union of India* 2011 (1) EFLT 326 (NULL) (High Court of Guwahati, Imphal Bench); *Association for Environment Protection v. State of Kerala and Ors* (2013) 7 SCC 226.

51. *P. Venkateswarlu v. Government of Andhra Pradesh* (2001) SCC OnLine AP 942.

52. *Paryavaran Avam Janathan Mission v. Lt. Governor* (2009) SCC OnLine Del 3720.

CNG station⁵³ in public parks; uphold restrictions on transport of sand;⁵⁴ limit exploitation of groundwater;⁵⁵ allow public access to a park;⁵⁶ regulate constructions around public lakes;⁵⁷ deny vested or preferential rights to supply of river water;⁵⁸ and quash land acquisition proceedings for land where two rivers are flowing.⁵⁹ In all these cases, the courts found that the State held the natural resource in question in trust, without further justification.

Justice B. S. Reddy's Separate Opinion, in a commercial dispute before the Supreme Court over natural gas pricing, must also be referred to in this context.⁶⁰ The justification provided for holding natural gas to be public trust property is significant. The opinion finds that 'public trust elements [are] so intrinsic to resources under the seabed'.⁶¹ Reliance is placed on Article 297 of the Constitution to identify these resources: '[a]ll lands, minerals

53. *EC Pocket Maya Enclave Residents' Welfare Association v. Delhi Development Authority* (2006) SCC OnLine Del 1244.

54. *D. Sivakumar v. Government of Tamil Nadu* (2009) SCC OnLine Mad 821.

55. *Digvijay Singh and Baldev Singh v. Bhagwan Singh* 2007 (1) ShimLC 40 (High Court of Himachal Pradesh at Shimla); *Perumatty Grama Panchayat* (n 39); *Asim Sarode and Ors v. The District Collector, Nanded and Ors*, OA No. 47/2013, judgment dated 11 January 2016, NGT (Western Zone Bench); *Mukesh Yadav v. State of Uttar Pradesh and Ors*, OA No. 133/2014, judgment dated 29 February 2016, NGT (Principal Bench).

56. *Society for Protection of Culture, Heritage, Environment, Tradition and Protection of National Awareness v. Union of India and Ors*, OA No. 60/2014, order dated 10 July 2015, NGT (Principal Bench).

57. *Thenkeeranur Vivasayigal Nala Sangam v. The Secretary to Government Ministry of Environment and Forests Union of India and Ors*, OA No. 193/2013, order dated 7 August 2015, NGT (Southern Zone Bench).

58. *Marathwada Janta Vikas Parishad v. State of Maharashtra* (2016) SCC OnLine Bom 8475, para 101–02.

59. *Rajiv Pujari v. State of Orissa* (2010) SCC OnLine Ori 222.

60. *Reliance Natural Resources Limited v. Reliance Industries Limited* (2010) 7 SCC 1.

61. *Ibid.*, para 249.

and other things of value underlying the ocean within the territorial waters, or the continental shelf, or the exclusive economic zone, of India'. According to Article 297,⁶² these resources are to vest in the Union and are to be held for the purposes of the Union. Article 297 then, perhaps, creates a class of natural resources which have to be granted a constitutionally mandated public trust character based on their geographical location.

From the analysis of the case law, it may be concluded that the Indian courts have accepted a very wide application of the doctrine, which considers *all natural resources* to be held in public trust. The purpose for which the particular natural resource has been traditionally used, or the value derived from it by the public, are not factors that Indian courts have considered to be relevant. It must, however, be mentioned that the doctrine is not used consistently across all cases. Cases involving the protection of village ponds and common lands, shared natural resources typically held in public trust, have been decided without any reference to the doctrine.⁶³

What are the Principles of the Public Trust Doctrine?

Over the years, courts have applied various principles while invoking the public trust doctrine. These principles can be grouped under

62. Article 297: 'Things of value within territorial waters or continental shelf and resources of the exclusive economic zone to vest in the Union:

(1) All lands, minerals and other things of value underlying the ocean within the territorial waters, or the continental shelf, or the exclusive economic zone, of India shall vest in the Union and be held for the purposes of the Union.

(2) All other resources of the exclusive economic zone of India shall also vest in the Union and be held for the purposes of the Union.

(3) The limits of the territorial waters, the continental shelf, the exclusive economic zone, and other maritime zones, of India shall be such as may be specified, from time to time, by or under any law made by Parliament.'

63. See *Hinch Lal Tiwari v. Kamala Devi* (2001) 6 SCC 496; *Jagpal Singh v. State of Punjab* (2011) 11 SCC 396.

four heads: restriction on governmental authority; affirmative duties of the government; access to natural resources; and quality of decision-making relating to natural resources.

Restriction on Governmental Authority

According to the Supreme Court in *Fomento Resorts*, the basic premise of the public trust doctrine lies in the limits and obligations it places on the government agencies on behalf of people.⁶⁴ In *Intellectuals Forum*, the Court has relied on Sax's formulation of the types of restriction on governmental authority which are imposed by the public trust doctrine.⁶⁵ In Sax's words:

Three types of restrictions on governmental authority are often thought to be imposed by the public trust: first, the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public; second, the property may not be sold, even for a fair cash equivalent; and third the property must be maintained for particular types of uses. The last claim is expressed in two ways. Either it is urged that the resource must be held available for certain traditional uses, such as navigation, recreation, or fishery, or it is said that the uses which are made of the property must be in some sense related to the natural uses peculiar to that resource.⁶⁶

The issue before the Court in *Intellectuals Forum* was that two historical 'tanks', which were still in use as sources for drinking water and irrigation water, and for augmenting ground water, had been alienated for construction of houses. The Court, while applying Sax's formulation, held that the first and the third restrictions

64. *Fomento Resorts* (n 30), para 54.

65. *Intellectuals Forum* (n 15), para 76. The High Court of Madras in *K. Balamurugan v. State of Tamil Nadu* (2008) SCC OnLine Mad 649 also includes this formulation as one of the principles to be considered while taking a decision on environmental protection.

66. Sax (n 7) 477.

had been violated,⁶⁷ although it did not provide any explanation for the same. It decided to overlook the violation of the second restriction because the development of the housing complex was being undertaken by the government and not by a private party.⁶⁸

In *Kamal Nath*, the Supreme Court addressed the second and third restrictions. It held that resources meant for public use cannot be converted for private ownership or for commercial use.⁶⁹ The public trust property had to be maintained for certain type of uses. This would include the ecological use of the resource—preserving the lands in natural state so that they could be used for scientific study, and provide food and habitat for birds and marine life, aesthetic use of the resource, and recreational use.⁷⁰ In this case, the government had leased out ecologically fragile land along a river, to a motel management, and the Court found this transaction to be in patent breach of the trust in which the government held the land.⁷¹

The Supreme Court in *M. I. Builders* briefly touched on the third restriction when it held, while relying on *Kamal Nath*, that when the true nature of a trust property (a park, in this case) is destroyed, it would be in violation of the public trust doctrine.⁷² The park had been converted into a parking lot and it was no longer possible to plant trees there, and although it had green grass and paths, the park had lost the ingredients of a park.⁷³ In other words, the park could not be used for certain specific uses which were traditionally associated with it.⁷⁴

67. *Intellectuals Forum* (n 15), para 77.

68. *Ibid.*

69. *Kamal Nath* (n 2), para 35.

70. The Supreme Court judgment in *Kamal Nath* excerpts from several American cases to make this point including *Robbins v. Department of Public Works* 244 NE 2d 577 and the *Mono Lake* case (n 14).

71. *Kamal Nath* (n 2), para 36.

72. *M. I. Builders* (n 28), para 50.

73. *Ibid.*, para 50.

74. Similarly, in *P. Venkateswarlu* (n 51), the High Court of Andhra Pradesh observed that '[a] park provides for some lung space. It is well

Although the public trust doctrine is often couched in terms of absolute inalienability of public resources, right from the beginning, Indian courts have acknowledged that such resources would have to be reallocated for purposes which may restrict their public use. Following American case law, the Supreme Court observed that when a resource is otherwise available for the general public to use freely, any government act which reallocates the resource for more restricted uses or subjects it to private interests, a court will review this act with considerable scepticism.⁷⁵ Similarly, the *Intellectuals Forum* case highlights the ‘negatory angle’ of the doctrine—it does not prohibit alienation of the trust property, but ‘it provides for a high degree of judicial scrutiny on any action of the Government, no matter how consistent with the existing legislations, that attempts to restrict such free use’.⁷⁶ In the absence of any legislation, the executive’s actions have to be governed by the public trust doctrine—it cannot ‘abdicate the natural resources and convert them into private ownership, or for commercial use’.⁷⁷ Thus, courts have allowed alienation of public trust property to the extent that high standards of judicial review are met.⁷⁸

settled that the community requires certain lung space and may also use open space for sports and other recreational activities. Parks or wetlands are also necessary for the purpose of maintaining ecological balance. The doctrine of public trust applies in relation to park, wherefore the open space is earmarked for the purpose of park, and it becomes the statutory duty of the local authorities and other statutory bodies to maintain the same’ (para 39).

75. *Kamal Nath* (n 2), para 26.

76. *Intellectuals Forum* (n 15), para 76.

77. *Kamal Nath* (n 2), para 35.

78. *Susetha* (n 42), para 20. Looking at the aspect of (limited) alienability from a different angle, Justice Reddy wrote in his concurring judgment in the *Reliance Natural Resources* case that ‘the Union of India cannot enter into a contract that permits extraction of resources in a manner that would abrogate its permanent sovereignty over such resources’. According to him, it is a matter of constitutional necessity that the government retains permanent sovereignty over natural resources listed in Article 297 of the Constitution of India. See *Reliance Natural Resources* (n 60), para 249.

The NGT, while deciding an appeal against the setting up of a multi-purpose seaport in Kerala, at a coastal site considered to be of outstanding natural importance, held that the public trust doctrine would not apply to the given fact situation for two reasons. First, in ‘any situation covered by legislation or a regulatory framework’, the doctrine did not apply,⁷⁹ and second ‘in this case public resources are not being diverted for commercial/private interest but for a project which will be for larger public good and serve national interest. So on this count also the doctrine of public trust is not attracted in the instant case’.⁸⁰ The Tribunal’s understanding of the doctrine appears to be incorrect. In *Kamal Nath*, the Supreme Court clearly envisaged the judiciary’s role in determining the intent behind a particular legislative enactment,⁸¹ and did not fully exclude its role—in the context of the public trust doctrine—if there is an applicable law in place. Second, as discussed later,⁸² public trust properties may have different public uses and interests. Balancing competing public uses/interests is an important feature of the public trust doctrine, and the Tribunal could have engaged in such an exercise, but it did not.⁸³

There is extensive discussion in American case law and legal writing on the relationship between the Takings Clause and the public trust doctrine, and whether disallowing an owner from using trust property in a particular manner is, in effect, a ‘taking’ requiring the State to compensate.⁸⁴ Indian courts have not

79. *Wilfred J. and Anr v. Ministry of Environment and Forests and Ors*, OA No. 74/2014, judgment dated 2 September 2016, NGT (Principal Bench), para 99.

80. *Ibid.*

81. *Kamal Nath* (n 2), para 35.

82. See text and discussion accompanying n 95 to n 102.

83. The competing public interests in this case were the need to protect an area of critical ecological importance and the potential benefits of the particular site to construct a port.

84. Michael C. Blumm and Lucas Ritchie, ‘*Lucas’s Unlikely Legacy: The Rise of Background Principles as Categorical Takings Defenses*’ (2005) 29(2) *Harvard Environmental Law Review* 321; Alexandra B. Klass,

considered the public trust doctrine in the context of the State's eminent domain power and land acquisition law. This is probably because most natural resources considered to be held in public trust by Indian courts were not privately owned and, therefore, the question of the State acquiring them, in law or in fact, did not arise. In one case, however, the High Court of Odisha found the state government's exercise of its eminent domain power to acquire the petitioners' land to be illegal, as the purpose for which the land was acquired did not meet the criteria for 'public purpose' under the Land Acquisition Act 1894.⁸⁵ The Court also considered the land in question to be protected by the public trust doctrine. But in this case, the land owners petitioned for their lands to be protected as trust property.

Affirmative Duties of the Government

The public trust doctrine not only places certain restrictions on the manner in which the government functions with regard to natural resources held in public trust, but also enjoins the government to take affirmative steps to protect such resources for the enjoyment of the general public. As was held by the Californian Supreme Court in the *Mono Lake* case,⁸⁶ and quoted with approval by the Indian Supreme Court in *Kamal Nath*, the doctrine is an affirmation of the legal duty of the State to protect the people's common heritage of streams, lakes, marshlands, and tidelands, and this right of protection can only be surrendered in rare cases where it is in consonance with the purposes of the trust.⁸⁷

In the *Intellectuals Forum* case, the Supreme Court emphasised the affirmative duty of the government—the government has to

'Modern Public Trust Principles: Recognizing Rights and Integrating Standards' (2006) 82(2) *Nortre Dame Law Review* 699.

85. *Rajiv Pujari* (n 59).

86. *Mono Lake* case (n 14).

87. *Kamal Nath* (n 2), para 32.

actively prevent the infringement of the community's right. The Court held:

the tank is a communal property and the State authorities are trustees to hold and manage such properties for the benefits of the community and they cannot be allowed to commit any act or omission which will infringe the right of the Community and alienate the property to any other person or body.⁸⁸

In *Environment Protection Committee v. Union of India*, the High Court of Guwahati held that it is the 'the bounden duty [of the government] to protect the Nambul River by evicting the encroachers'.⁸⁹

Access to Natural Resources

Another aspect of the public trust doctrine that courts have highlighted is that of access to natural resources, although the nature of access that has been considered is different. One type of access was discussed by the Supreme Court in *Fomento Resorts*, the public's right to enjoy uninterrupted access to a natural resource, in this case a beach. While finding that the hotel was under a statutory obligation to maintain access to the beach without any obstruction,⁹⁰ the Court also discussed the public trust doctrine in detail. It held that people are entitled to uninterrupted use of common properties.⁹¹ If the transfer of a public trust property interferes with the right of the public, the State cannot transfer such property. If it does, courts can step in and invoke the public trust doctrine, to protect the 'right of the people to have access to light, air and water and also for protecting rivers, sea, tanks, trees, forests and associated natural ecosystems'.⁹²

88. *Intellectuals Forum* (n 15), para 91.

89. *Environment Protection Committee* (n 50). See also *Sandhya Barik and Ors v. State of West Bengal and Ors* (2013) SCC OnLine Cal 1060.

90. *Fomento Resorts* (n 30), para 51.

91. *Ibid.*, para 65.

92. *Ibid.*

The Division Bench of the Bombay High Court, in light of its previous orders and the public trust doctrine, refused to allow a public event to be held on the Girgaum Chowpatty beach, as it was concerned that public access to the beach would be blocked and that it would be damaged due to the construction work that would take place.⁹³

The Supreme Court in the *Reliance Natural Resources* case also referred to the access element with regard to resources mentioned in Article 297 of the Constitution of India. The Court held that the Union of India cannot ‘allow a situation to develop wherein the various users in different sectors could potentially be deprived of access to such resources’ and that any user of such resources shall not be given guaranteed continued access beyond a period specified by the government.⁹⁴ Access in this case was access for commercial use of a resource, not for direct public benefit.

Quality of Decision-making Relating to Natural Resources

Certain judgments relying on the public trust doctrine suggest that the application of the doctrine requires the decision-making process relating to natural resources to have certain qualities. *First*, as typically there are competing public interests involved, there has to be an adequate assessment of all relevant considerations, before a decision is taken on how the natural resource is to be used. In the *M. I. Builders* case, under the relevant law, the municipal authority had an obligation to maintain parks, but at the same time

93. *Adarsh Chowpatty Pragati Mandal v. State of Maharashtra* (2016) SCC OnLine Bom 1010. This decision was challenged in the Supreme Court, and as interim relief the Court allowed the event to take place. However, the interim order did not comment on the application of the public trust doctrine to the fact situation. See *State of Maharashtra v. Adarsh Chowpatty Pragati Mandal*, SLP No. 3207/2016, order dated 3 February 2016.

94. *Reliance Natural Resources* (n 60), para 250.

to construct and maintain parking lots as well.⁹⁵ In that context, the Supreme Court held that it was possible for the authority to convert a part of the park into a parking lot, but that would require a proper assessment of all relevant considerations, including surrounding locality and population.⁹⁶ However, such a study was not carried out and for that reason the authority had breached the trust in which it held the park.

The NGT, in one case, suspended the environmental clearance granted for the construction of a national highway that cut across certain water bodies because the appraisal process had not taken into account the need to protect water bodies that are held in public trust.⁹⁷

Second, there has to be transparency and non-arbitrariness in the decision-making process. This aspect was highlighted in the *2G Spectrum* case where the Court held that the State, as a trustee of the people, is the legal owner of natural resources, and it has the power to distribute the resources, but it has to be guided by constitutional principles including the doctrine of equality and larger public good.⁹⁸ According to the Court, there is a need for ‘compliance with the constitutional principles in the process of distribution, transfer and alienation to private persons’.⁹⁹ Decisions of the State have to be governed by concepts of equality, justice and fairness, and must not adversely affect public interest. The Court observed that the doctrine of equality has two aspects: (a) It applies to the relationship between the State and the people—the public should enjoy an equitable access to natural resources, and if there is a transfer of natural resources, they should be compensated adequately; (b) It applies to the State in relation to private parties

95. *M. I. Builders* (n 28), para 50.

96. *Ibid.*

97. *Conservation of Nature Trust and Ors v. The District Collector, Kanyakumari District and Ors*, OA No. 104/2013, order dated 14 September 2016, NGT (Southern Zone Bench).

98. *2G Spectrum* case (n 44), para 75.

99. *Ibid.*, para 78.

who want to acquire/use natural resources. The procedure for distribution of natural resources should be ‘just, non-arbitrary and transparent’, and should not discriminate between similarly placed private parties.¹⁰⁰

Third, any decision with regard to natural resources must look beyond the present generation and protect the rights of the future generations. This was highlighted by the Supreme Court in *Godavarman* case.¹⁰¹ Subsequently, the concurring opinion of the Supreme Court in the *Reliance Natural Resources* case also lays down that the State cannot allow ‘the extraction of such resources without a clear policy statement of conservation, which takes into account total domestic availability, the requisite balancing of current needs with those of future generations, and also India’s security requirements’.¹⁰²

Having identified the main principles of the public trust doctrine through a case law analysis, the next section problematises the doctrine in the Indian context.

PROBLEMATISING THE PUBLIC TRUST DOCTRINE

The public trust doctrine has been accepted as part of Indian environmental jurisprudence,¹⁰³ yet there is lack of clarity in the application of the doctrine.¹⁰⁴ From the case law it appears that

100. *Ibid.*, para 85. Although certain issues decided in this case were subject of discussion in the *Presidential Reference* (n 27), the legal position on the need for transparency and non-arbitrariness in decision-making has not changed after the opinion on the Reference was delivered.

101. *Godavarman* (n 32), para 89.

102. *Reliance Natural Resources* (n 60), para 250.

103. *Kamal Nath* (n 2), para 34; *Reliance Natural Resources* (n 60), para 116; *N. D. Jayal v. Union of India* (2004) 9 SCC 362.

104. The arguments placed before the Supreme Court in the *Presidential Reference* also reflect a lack of clarity in the application of the doctrine—for instance, on the aspect of whether it is applicable only for environmental protection. See *Presidential Reference* (n 27). See also Dhananjay Mahapatra,

this doctrine has been generally applied by the Indian courts in environmental cases to protect natural resources—and to that extent there is certainly consistency—but beyond that it is difficult to identify a core content of the doctrine that can lend a degree of predictability in decision-making relating to natural resources, or provide a direction to policymaking. Even if some definitional components are identified, the relevance of the doctrine in today’s context is uncertain. There are at least four arguments that can be made to support this observation.

Lack of a Reasonably Comprehensive Definition

Courts in India are yet to provide a reasonably comprehensive definition of the doctrine. A review of the case law does not help to delineate a set of situations in which the public trust doctrine would be relevant, and those in which it can be excluded. It appears to be a tool used by the judiciary to review actions of the executive, but is yet to find explicit place in any national environmental law.¹⁰⁵ The lack of a proper definition has meant that one cannot describe the nature of protection that would be available to properties held in public trust—what does it mean, in law, to be a trust property? What kind of restrictions does it place on existing rights, private or public? How will executive or legislative decision-making relating to public trust property be different from properties not held in trust? Is there a different standard of assessment or a different (heavier) burden of procedural requirements to be met?

‘Centre seeks SC clarity on RIL-KG basin verdict’ *The Times of India* (20 July 2012) <http://articles.timesofindia.indiatimes.com/2012-07-20/india/32763794_1_natural-resources-natural-gas-kg-basin-gas> accessed 27 April 2017.

105. The Draft National Water Framework Bill 2016 defines ‘public trust’ to mean the doctrine that the State, at all levels, holds natural resources in trust for the community [Clause 2(r)]. Available at <http://wrmin.nic.in/writereaddata/Water_Framework_May_2016.pdf> accessed 27 April 2017.

Indian courts have referred to the three restrictions mentioned in American case law and summarised by Sax to determine violation of the public trust doctrine¹⁰⁶—first, the trust property must not only be used for a public purpose, but it must be held available for use by the general public; second, the property must not be sold, even for a fair cash equivalent; and third, the property must be maintained for particular types of uses. Significantly, Sax acknowledged the limitations of defining the doctrine in terms of these three restrictions. In his 1970 article, he noted, ‘the case law has not developed in any way that permits confident assertions about the outer limits of state power’.¹⁰⁷ Notwithstanding the cautious approach taken by Sax, Indian courts have used his tentative formulation as a basis for the doctrine in the country. Contextualising this formulation in the Indian legal system and decision-making processes for natural resources is important.

There are two main issues which arise with regard to the first restriction—what constitutes ‘public purpose’, and whether it is even possible for natural resources to be used for a public purpose *and* be available for use by the general public. Case law suggests that it is important to show that a ‘public purpose’ is being served by alienating a natural resource. But it does not identify the criteria for what constitutes public purpose. Is public purpose assessed based on the value derived from the operations itself—for example, employment generated, boost to local businesses, and increased domestic demand for input goods? Or would the outcome or product of the operations be the determining factor? For instance, the Supreme Court in the *Intellectuals Forum* case observed that the right to shelter was not ‘so pressing’ if the housing projects that were coming up in public trust lands, water tanks in this case, were meant for high and middle income group.¹⁰⁸ In another case, it held that de-reservation of common grazing lands was permissible in exceptional circumstances and for public purpose (in this case for

106. See text and discussion accompanying n 64 to n 85.

107. Sax (n 7) 486.

108. *Intellectuals Forum* (n 15), para 92.

a hospital).¹⁰⁹ Similarly, the Madras High Court in *S. Venkatesan* upheld the construction of a bus stand on part of a water body (*eri*), as there was a dire need for a bus stand in the area.¹¹⁰ A definitional ambit for ‘public purpose’ is, therefore, crucial to the application of the public trust doctrine.¹¹¹

The dual criteria of alienation being for a public purpose *and* continued public access to trust property even after alienation is equally hard to meet. If one were to take the example of coal or any other mineral,¹¹² the government routinely allocates mines to private and public-sector enterprises. Suppose an enterprise mines coal, which feeds the domestic iron ore industry. While it could certainly be argued that the coal is being used for a public purpose (crucial for building infrastructure), once the coal is allocated to the enterprise, it will not be accessible to the general public, as the enterprise would necessarily enjoy some exclusivity in access to carry out its activities. A similar argument can be made for water. If access to flowing water is given for construction of a hydro-power project, it serves a public purpose, but it significantly reduces water availability downstream for public use.

The second restriction—that sale of trust property, even in return of a fair cash equivalent, is not permissible—is of little relevance in the Indian context. The government regularly alienates natural resources such as minerals and forests in return for money,

109. *State of Jharkhand and Ors v. Pakur Jagran Manch and Ors* (2011) 2 SCC 591, para 23. Although the Supreme Court did not refer to the public trust doctrine in this case, it overruled the judgment of the High Court of Jharkhand, which had relied on the doctrine to disallow de-reservation of grazing lands.

110. *S. Venkatesan v. Government of Tamil Nadu* MANU/TN/1580/2011.

111. ‘Public purpose’ has been defined in the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013. But the definition is so wide that the use of natural resources for such purposes would hardly ever be limited by the public trust doctrine.

112. In *Kalinga Power Corporation* (n 49), the High Court of Delhi considered coal to be a public trust property.

and there are laws which regulate such activities.¹¹³ This alienation is often, but not always, done through a process which aims to maximise government revenue. Furthermore, in *Intellectuals Forum*, the Supreme Court had emphasised the fact that the doctrine does not prohibit alienation of trust property,¹¹⁴ a position subsequently reinforced by the Supreme Court's opinion in the *Presidential Reference*.¹¹⁵

The possibility of alienation of natural resources in return for compensation finds support in Supreme Court judgments. In the *Reliance Natural Resources* case, the Supreme Court had held that the central government could not transfer title of resources listed in Article 297 of the Constitution after their extraction, unless it received just and proper compensation for the same.¹¹⁶ Furthermore, in the *Presidential Reference* opinion, the judges of the Supreme Court accepted that there are various ways in which the price of natural resources can be discovered and one of them is through an auction.¹¹⁷ In such cases, an economic valuation of

113. The process of alienation and limits thereof would depend on the relevant laws. For instance, in the context of minerals, the government would only be able to alienate minerals or rights in minerals to the extent such rights vest in it. See *Thressiamma Jacob and Ors v. Geologist, Department of Mining and Geology and Ors* (2013) 9 SCC 725, wherein the Supreme Court held that all mineral wealth/subsoil rights do not vest in the State.

114. *Intellectuals Forum* (n 15), para 76.

115. *Presidential Reference* (n 27), para 90.

116. *Reliance Natural Resources* (n 60), para 250.

117. *Presidential Reference* (n 27), para 146. In the context of auctioning of minor minerals, the Supreme Court held in *Ram and Shyam Co. v. State of Haryana* (1985) 3 SCC 267:

12. ... disposal of public property partakes the character of a trust in that in its disposal there should be nothing hanky panky and that it must be done at the best price so that larger revenue coming into the coffers of the State administration would serve public purpose ... This is subject to one important limitation that socialist property may be disposed at a price lower than the market price or even for a token price to achieve some defined constitutionally recognised public purpose ...

the resource would have to be undertaken by the bidders, and the government would transfer trust property in exchange of the price quoted, generally, by the highest bidder. In fact, the judges, in their opinion, also envisage a scenario where the trust property would have to be distributed through a competitive and revenue maximizing process, or else it would 'face the wrath of Article 14 of the Constitution'.¹¹⁸ Therefore, an embargo on sale of trust property in the Indian context is not tenable.

The third and final restriction on the government is that trust property has to be maintained for particular types of uses. However, if one looks at the manner in which certain natural resources are utilised by government and private enterprises, it would seem that restrictions on how to maintain or use such property are not consistently applied.

For instance, forests are permitted to be used for non-forest activities, such as mining or road construction, after statutory approvals are granted.¹¹⁹ Commercial enterprises such as hotels and resorts built along the coast not only restrict public access to 'their' part of the beach,¹²⁰ but also allow the beaches to be used for activities which are not related to the natural use peculiar to beaches (for example, music concerts and parties). And finally, the construction of a dam for the production of power affects the natural flow of the river. The kind of ecological diversity that the river could naturally support diminishes. Even other uses derived from the river, such as fishing, nutrient source (post-flooding) and spiritual significance, are irreversibly affected. But construction of hydro-electric power projects is a stated objective of the government of India.¹²¹

118. *Presidential Reference* (n 27), para 149.

119. Forest (Conservation) Act 1980 s 2.

120. See, for example, *Fomento Resorts* (n 30).

121. See, for example, the official website of NHPC Limited, a Government of India enterprise involved in development of hydropower <<http://www.nhpcindia.com>> accessed 27 April 2017.

Therefore, the three general restrictions on government action relating to public trust property as discussed by Indian courts cannot be applied to many decisions relating to natural resources, leaving the definition and applicability of the public trust doctrine murky. The opinion of the Supreme Court in the *Presidential Reference* suggests that perhaps the only defining aspect of the public trust doctrine that the Court considered important was that it mandates high judicial scrutiny. The Court emphasised this higher degree of judicial review as it was required by Article 14 of the Constitution of India in the context of allocation/alienation of natural resource.¹²² It is unclear whether after this opinion, the public trust doctrine would be applied only in this ‘narrow’ sense, or would courts still apply the three-pronged test.

Application of the Doctrine to all Natural Resources is Problematic

The aforementioned definitional ‘crisis’ is further problematised by the fact that Indian courts consider all natural resources to be held in public trust. This has been the position of the courts since *Kamal Nath* (which said ‘all ecosystems’), and in its opinion in the *Presidential Reference*, the Supreme Court observed that ‘[a]s far as “trusteeship” is concerned, there is no cavil that the State holds all natural resources as a trustee of the public and must deal with them in a manner that is consistent with the nature of such a trust’.¹²³

122. *Presidential Reference* (n 27), paras 93, 96–107.

123. *Ibid.*, para 88. This was perhaps in response to the argument raised by the Attorney General of India during the hearing that the application of the doctrine to all natural resources, as was done by the Supreme Court in the *2G Spectrum* case, was creating confusion and needed to be clarified. According to him, the public trust doctrine applies to ‘certain common properties pertaining to the environment, like rivers, seashores, forest and air, meant for free and unimpeded use of the general public’.

Case law analysis does not reveal a rationale for why all natural resources deserve special protection of the public trust doctrine. Courts have made general observations, which are applicable to all natural resources—‘great importance to the people as a whole’,¹²⁴ ‘freely available for the use of the public’,¹²⁵ ‘not the ownership of any one State or individual, the public at large is its beneficiary’,¹²⁶ ‘belongs to the public’¹²⁷ or ‘are a national asset to be used for the good/betterment of public at large’.¹²⁸ These observations touch on various characteristics of a natural resource—the value that humans attach to it, whether historically it has been available for public use, who owns it, what should it be used for—but do not identify any intrinsic value or characteristic of a natural resource.

Although the definitional ambit of the public trust doctrine is not entirely clear, it is safe to assume that the doctrine offers a special kind of protection to trust property, and restricts the government’s ability to alienate the property or modify its nature. This obligation, therefore, requires the government to be far more circumspect and rigorous in its decision-making with regard to these trust properties.¹²⁹ Furthermore, the doctrine mandates that decisions involving a natural resource have to be subjected to a ‘high degree of judicial scrutiny’.¹³⁰ While from an environmental point of view, closer scrutiny of any decision which diminishes the ecological value of a natural resource is desirable, a ‘broader

124. *Kamal Nath* (n 2), para 25.

125. *Intellectuals Forum* (n 15), para 76.

126. *Godavarman* (n 32), para 68.

127. *Perumatty Grama Panchayat* (n 39), para 13.

128. *Kalinga Power Corporation* (n 49), para 11.

129. The Supreme Court in *Intellectuals Forum* noted that there was a distinction between the government’s general obligation to act for the public benefit, and the special more demanding obligation which it may have as a trustee. See *Intellectuals Forum* (n 15), para 76.

130. *Intellectuals Forum* (n 15), para 76; *Presidential Reference* (n 27), para 93.

application' of the doctrine beyond environmental cases¹³¹ could be problematic for two reasons.

First, an all-encompassing definition of 'natural resource' that includes resources like natural gas, air waves, and telephony spectrum would mean that the doctrine would subject several important economic decisions of the government to greater scrutiny and procedural rigour. Unless such a position is given a statutory basis, it is unlikely to pass judicial muster. Indian courts have repeatedly held that in issues of economic policy they would be reluctant to intervene.¹³² The possibility that the doctrine may be used as a vehicle to disregard the separation of powers set in the Constitution may undermine the importance of the doctrine in Indian law.

Second, as the doctrine is applicable to all natural resources, its application and meaning as an independent legal doctrine has become indiscernible from the equality jurisprudence under Article 14 of the Constitution, and the directive principle of state policy (DPSP) under Article 39(b),¹³³ as developed by the Indian courts. In two cases discussing the public trust doctrine, the Supreme Court has eluded to the need to read the equality jurisprudence under Article 14 and the public trust doctrine together.¹³⁴

While the Supreme Court has expounded on various facets of Article 14 expansively, the one most relevant to the present discussion is that any action of State has to be 'fair, reasonable,

131. *Reliance Natural Resources* (n 60), para 114.

132. *BALCO Employees' Union (Regd) v. Union of India and Ors* (2002) 2 SCC 333; *Peerless General Finance and Investment Co. Ltd and Anr v. Reserve Bank of India* (1992) 2 SCC 343; *M/s Prag Ice and Oil Mills and Anr v. Union of India* (1978) 3 SCC 459.

133. Article 39: 'Certain principles of policy to be followed by the State—The State shall in particular, direct its policy towards securing:

(a) ...

(b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good ...'

134. See *2G Spectrum* case (n 44); *Presidential Reference* (n 27).

non-discriminatory, transparent, non-capricious, unbiased, without favouritism or nepotism, in pursuit of promotion of healthy competition and equitable treatment'.¹³⁵ This constitutional principle guides all State actions, including those alienating or affecting interests in natural resources. Whether a decision conforms to this principle would be tested notwithstanding a claim based on the public trust character of the property. The public trust doctrine then, in effect, takes on a secondary character.

It is important to point out here that in its opinion in the *Presidential Reference*, the Supreme Court has been reluctant to draw a distinction between natural resources based on the purpose for which they are being alienated. The Court was responding to the proposition that auction can be the only constitutionally permissible route for a finite set of natural resources which are scarce and are being alienated for private business.¹³⁶ Although this was the limited ground on which the Court was deciding, it is indicative of what the Court's position could be if it were asked to categorise natural resources based on entrenched interests.

No Clear Guidance about the Final Objective

The third reason for being skeptical about the doctrine's content in the Indian context is that it does not provide clear guidance as to what is the ultimate objective. As discussed earlier, it has generally been relied on in environmental cases to protect a natural resource from being used for a non-natural, commercial or non-traditional purpose, or to ensure unrestricted access to a certain resource. It is listed along with the precautionary principle and polluter pays principle as one of the principles that need to be adhered to, imperatively, to preserve ecology.¹³⁷ But given its wide

135. *Presidential Reference* (n 27), para 107.

136. *Ibid.*, para 112.

137. *Karnataka Industrial Areas Development Board v. C. Kenchappa* (2006) 6 SCC 371.

amplitude, its value as a legal principle does not seem to be limited to conservation. A review of the case law provides us with a variety of reasons for applying the doctrine—conservation of a natural resource,¹³⁸ continued public access to a resource,¹³⁹ retaining public spaces,¹⁴⁰ preventing over-exploitation of a resource for private use,¹⁴¹ regulating alienation of resources considered to be scarce,¹⁴² and respecting traditional uses of the resource.¹⁴³

Given the range of interests that the doctrine aims to protect, in some situations two or more protected interests may be in conflict, and the doctrine then can only support one but not the other. Continued public access to a natural resource could hamper efforts to conserve the resource.¹⁴⁴ Another example would be allowing traditional uses of a resource (such as fishing in a village pond) at the risk of over-exploitation of the resource. In such situations, the doctrine's role is limited to triggering an assessment, such as a cost-benefit analysis, of the competing interests. The doctrine itself has little control over the final decision. Sax had envisaged the public trust doctrine to be a principle of rational management of natural resources.¹⁴⁵ Implicit within his perspective are two assumptions: first, that natural resources would be utilised in some form by humans, even if for recreation or pleasure (for example,

138. *Kamal Nath* (n 2); *Environment Protection Committee* (n 50).

139. *Fomento Resorts* (n 30).

140. *M. I. Builders* (n 28); *Paryavaran Avam Janathan Mission* (n 52).

141. *Keshoram Industries* (n 39); *Perumatty Grama Panchayat* (n 39).

142. *Reliance Natural Resources* (n 60); *2G Spectrum case* (n 44).

143. *Intellectuals Forum* (n 15).

144. For example, some wildlife conservationists argue that restricting public access to forests could assist in restoration of forest ecology. See A. J. T. Johnsingh, 'Lessons from Uttaranchal', (2005) 22(4) *Frontline* (2–15 July). Interestingly, Lazarus found the public trust doctrine to be at odds with modern environmental concerns because, according to him, modern environmental laws had to necessarily restrict access to protect the resources, whereas public access was an important public trust guarantee. See Lazarus (n 10) 711.

145. Sax (n 7) 565.

visiting a national park)¹⁴⁶ and second, that the management of resources has to be tested by criteria such as rational decision-making and procedural propriety, not by goals such as conservation or continued access.

The possibility of a variety of interests, some conflicting, leads to another set of concerns relating to the identification of affected constituencies which, in a way, have to be determined *a priori*. As discussed earlier,¹⁴⁷ a decision that alienates a public trust property, or affects interests in it has to possess certain qualities, must be made after an adequate assessment of all relevant considerations and interests,¹⁴⁸ be made through a transparent and non-arbitrary process,¹⁴⁹ and must protect the rights not only of the present generation but future generations too.¹⁵⁰ A prerequisite for a decision to have all these qualities is that the decision-maker should be able to identify as many affected constituencies as possible to elicit their opinion and gauge their interests in the public trust property.

Who are the affected constituencies and how much weightage should be assigned to each constituency's opinion can be a deeply contested determination, particularly since different constituencies may have conflicting interests. It is not only the opinion of current beneficiaries of a public trust property that is relevant. It is also those who are likely to or could have interests in it, in the future, such as people who have not visited a public park but are likely to some time in future; those who will be affected by the new use of the natural resource such as the lower riparians in case of a hydro-power dam; those who have an indirect interest in the property,

146. The Supreme Court's definition of natural resource in the *2G Spectrum* case is in line with this approach. However, the Supreme Court's view in *Godavarman* (Sandalwood case) that there is a need to rid environmental decision-making and jurisprudence in the country of anthropocentric thinking runs contrary to Sax's perspective. *T. N. Godavarman v. Union of India* (2012) 3 SCC 362.

147. See text and discussion accompanying n 95 to n 102.

148. *M. I. Builders* (n 29), para 50.

149. *2G Spectrum* case (n 44), para 85.

150. *Godavarman* (n 32), para 89.

such as that a botanist may have in preserving a particular patch of a grassland because it supports certain rare plant species. In the Indian milieu, the social, economic and political conditions are immensely relevant to how loudly (or softly, or not) constituencies voice their opinions. Furthermore, certain affected constituencies (including the environment itself) may not be represented at all.

Case law on public trust doctrine does not provide much guidance on how constituencies are to be identified, and even less on which of the constituencies should be given preference in case of a conflict. Is it a question of number of people who will be affected? Or is it a monetary valuation? And often, it would not just be a question of which constituency has to be given preference, but how much importance should be attached to the interests of a particular constituency. If there are multiple uses of the natural resource, some 'more public' than others (example, drawing water for irrigation or drinking purposes, commercial and sustenance fishing, praying, or bathing in a lake), then how should values be attached?

Identification of stakeholders and undertaking a proper assessment of relevant considerations presupposes the suitability of a cost–benefit analysis or some other similar test. The Supreme Court indicated the need for such an analysis in *M. I. Builders*. But an inherent contradiction in accepting a cost–benefit analysis for a public trust property lies in the fact that undertaking it would require valuing intrinsic characteristics of a resource, which are typically unquantifiable.¹⁵¹

Lack of Strong, Independent Legal Basis

The fourth argument is the weak legal basis of the doctrine. All major public trust cases in India have relied on the doctrine only in

151. This concern has been discussed by scholars in the American context as well. See, for example, Lazarus (n 10) 684–85; William D. Araiza, 'The Public Trust Doctrine as an Interpretive Canon' (2012) 45 *UC Davis Law Review* 693, 733; Brian E. Gray, 'Ensuring the Public Trust' (2012) 45 *UC Davis Law Review* 973, 984.

conjunction with other statutory provisions. It is difficult to predict the outcome of a case in which the public trust doctrine is the only legal principle with no other substantive law relevant to the cause of action. In most public trust doctrine cases in India, the doctrine was not the only relevant law. *Kamal Nath* had a clear case of encroachment of reserved forest land by a private hotel; in *M. I. Builders*, there was a statutory duty on the municipal corporation to protect public parks; and in *Fomento Resorts*, there was a statutory provision under the land acquisition law which prohibited the hotel from blocking access to the beach. Even in the *Intellectuals Forum* case, the Supreme Court relied on several other principles such as sustainable development and intergenerational equity to finally deliver the order that it did.

By 1996 when *Kamal Nath* was decided, the main central environmental laws were already in place. Although the scope and effectiveness of these laws and notifications issued under them had been, and continue to be, a subject matter of debate, these laws provided potential tools in the hands of the government, and the people, to regulate environmental degradation. In *Kamal Nath*, the Supreme Court decided to import the public trust doctrine into Indian law to reinforce existing environmental law—in this case, the Forest (Conservation) Act 1980. It was the poor implementation of a law that created an opening for the doctrine, not the absence of laws. Therefore, from the very beginning, the Supreme Court's treatment of the doctrine is one that complements other legal provisions.¹⁵²

The case regarding the right to exploit groundwater in Plachimada, Kerala, is an important example in this context. The

152. Interestingly, to counter some of the criticisms of the public trust doctrine, particularly regarding its weak legal foundation, it has been proposed that the doctrine be used as 'a canon of construction rather than a freestanding, legally binding, legal principle' and as 'a background principle against which positive legislation and administrative actions are construed and reviewed' when it is being extended to 'drylands'. See Araiza, *ibid.*

Single Judge Bench of the Kerala High Court relied on the public trust doctrine to hold that 'the underground water belongs to the general public' and that a soft drink manufacturing company had 'no right to claim a huge share of it and the Government have no power to allow a private party to extract such a huge quantity of ground water, which is a property, held by it in trust'.¹⁵³ The Court held that even though there was no law protecting groundwater, it was an obligation on the government and the Panchayat to protect it from excessive exploitation.¹⁵⁴

In appeal, the Division Bench of the Kerala High Court overruled the Single Bench, deciding in favour of the company.¹⁵⁵ The High Court observed that '[a]bstract principles cannot be the basis for the Court to deny basic rights, unless they are curbed by valid legislation'. It did not consider the Single Judge's reasoning, based on the public trust doctrine, to be adequately persuasive. The case is now before the Supreme Court awaiting a final decision, but the differing views of the two benches of the High Court well illuminate the problems in implementing the doctrine, and its limitations in defining and protecting rights.

RESCUING THE PUBLIC TRUST DOCTRINE

The seemingly haphazard manner in which the public trust doctrine has developed is not unique to it, as other principles in Indian environmental law have developed similarly. Environmental cases rarely raise clear-cut issues of legal interpretation of a statutory provision. Instead, they address a spectrum of issues with social, political, economic and cultural implications. Courts are often left with no option but to respond creatively, not necessarily

153. *Perumatty Grama Panchayat* (n 39), para 13.

154. *Ibid.*

155. *Hindustan Coca-Cola Beverages (P) Ltd V. Perumatty Grama Panchayat* (2005) SCC OnLine Ker 206.

legalistically, aiming to minimise environmental damage, but occasionally at the cost of developing strong legal precedent.

Pressures on natural resources are rapidly increasing in India leading to frequent contestations. In this scenario, despite inherent difficulties, the public trust doctrine performs an important function in the legal tool box of the conservation community. To save it from legal redundancy, it is perhaps prudent to develop an understanding of the doctrine that is conceptually better suited to Indian environmental regulation.

Presently, the law permits the invocation of the doctrine in a large variety of cases dealing with natural resources. If the doctrine is relied on only to protect natural resources that exist in a pre-defined set of circumstances, and the nature of protection that may be expected from the doctrine is outlined, the doctrine could be protected from dilution, and a charge of irrelevance. It is proposed that for a natural resource to be protected by the public trust doctrine, it must possess at least one of the following four characteristics.

First, the general public is currently benefitting or accessing, or in the near past has benefitted or accessed, the resource. The nature of benefit could be environmental, aesthetic, religious, social, scientific, or something which contributes towards sustenance livelihood—but not commercial. The ‘general public’ could be an identified group of people such as those sharing a historical association or a religious belief connected with the resource (for example, a tribe worshipping a sacred grove); sharing a common source of livelihood (for example, fisher folk or forest dwellers); or sharing a scientific interest in an aspect of the resource (for example, botanists researching on an endemic species).

Second, the benefit from the natural resource accrues to the general public almost directly and not through a commercial process. This means that the use of the natural resource does not depend on mechanised processes that are difficult to implement on an individual or small scale. For instance, coal cannot be used directly from the ground. It has to be first mined with the help of massive infrastructure and then processed. The same reasoning can

be used to exclude natural gas and oil from the purview of public trust doctrine.

Third, the value of the resource is predominantly intangible, something which is difficult to replace, replicate, or monetarily value. Even though a national park may not be frequently visited and its economic value is difficult to monetise, it has immense ecological value.¹⁵⁶ Protected areas in the country and unique geological formations (such as the Rann of Kutch) should be considered as held in trust.

Fourth, the nature of the resource is such that it is publicly shared and/or enjoyed. Restricting its use to a few people by limiting the access and/or use of the resource would adversely affect the enjoyment by many, including future generations. Examples of such natural resources would be groundwater¹⁵⁷ and beaches.¹⁵⁸

An important factor of this proposed identification process is that natural resource must be identified as public trust properties contextually, that is, the protection of the doctrine may extend to a natural resource in a particular context, but not in every context. For example, mineral deposits would not be held in public trust generally, but if they exist beneath forests which are held in trust, then the minerals are also public trust property.

The public trust doctrine has figured in Indian law as a judicial doctrine. But it is important that it permeates executive decision-making as well. The first line of defence for properties held in trust are the relevant administrative agencies or regulators. These agencies need to effectively implement the principles of public

156. A similar argument to consider natural capital and ecosystem services as part of the 'utilitarian core' of the public trust doctrine in the American context was made in J. B. Ruhl and James Salzman, 'Ecosystem Services and the Public Trust Doctrine: Working Change from Within' (2006) 15(1) *Southeastern Environmental Law Journal* 223.

157. *Keshoram Industries* (n 39); *Perumatty Grama Panchayat* (n 39); See also Philippe Cullet, 'Groundwater Law in India towards a Framework Ensuring Equitable Access and Aquifer Protection' (2014) 26(1) *Journal of Environmental Law* 55.

158. *Fomento Resorts* (n 30).

trust doctrine in their decision-making process.¹⁵⁹ This could begin by identifying resources held in trust (along the lines suggested earlier).

Once the trust property has been identified, the public trust doctrine should be used as a medium of democratising public access to, and use of, natural resources held in trust. Here public access needs to be understood in contradistinction to commercial or private access for narrow gains (primarily monetary in nature). The doctrine, as interpreted by Indian courts, does not prohibit alienation of public trust resources, but it can provide an additional level of protection to such resources. It would place a more demanding obligation on the government to ensure that decision-making processes for alienation or change in the use of such resources are subject to rigorous procedural scrutiny. Processes relating to data collection, information sharing, and public consultation would have to be carefully designed and meticulously followed. At a later stage, particularly when the issue is before the judiciary, the trust property may have diminished in value (irreversibly damaged), or interested persons may not have the capacity to voice their opinion. Orders alienating resources held in public trust would have to be written, well-reasoned, and justified, taking into account all relevant considerations. Issuance of summary executive orders amending the rules of the game for such resources—often undertaken presently—would become impermissible. Various competing interests (public and private) must be assessed and considered meaningfully.

The doctrine would also place an obligation on the executive to actively engage in the protection and conservation of resources held in trust. Emphasising the Supreme Court's dictum in *Intellectuals Forum*, it is proposed that there be placed an express obligation on the executive to protect from degradation natural resources held

159. See for similar argument Ronald B. Robie, 'Effective Implementation of the Public Trust Doctrine in California Water Resources Decision-making: A View from the Bench' (2012) 45 *UC Davis Law Review* 1155.

in trust, and thereby prevent the infringement of people's rights in these resources.

The central government has exercised its powers under the Environment (Protection) Act,¹⁶⁰ to declare ecosensitive zones where environmentally harmful activities (such as mining, construction, felling of trees, etc.) are either prohibited or regulated.¹⁶¹ Similar notifications could be used as administrative instruments to implement the doctrine, by identifying specific natural resources that are held in public trust, according them additional protection, and ensuring that the use of these resources, if permissible, would be subject to higher regulatory scrutiny.

It could be argued that the nature of and rationale for legal protection envisaged by some of the current Indian environmental regulations is the same as that provided by the doctrine, even though not expressly acknowledged. The Wetlands (Conservation and Management) Rules 2017 is a case in point. The Rules recognise the ecological significance of wetlands and the need to protect them, and the regulatory process ensures greater scrutiny of the use of the wetlands, which may be considered to be public trust properties. A similar argument could be made for the Coastal Regulation Zone Notification 2011 and the Island Protection Zone Notification 2011. Such regulations should either expressly mention that the public trust doctrine must guide the regulatory processes or, at least, concerned agencies should allow the doctrine to inform their processes.

This process could potentially increase the number of cases in which the doctrine is raised as a legal argument before the courts as well. As trigger factors, such as identification of a resource as a trust property, and notifications protecting trust properties become clear, lawyers and judges may be more inclined to use the doctrine in cases. A public trust doctrine argument could be raised

160. EP Act s 3.

161. For central government notifications declaring ecosensitive zones, see <<http://envfor.nic.in/content/esz-notifications>> and <http://www.moef.nic.in/eco-sensitive_zone> accessed 27 April 2017.

in cases where the executive did not treat a natural resource as a trust property, although it met certain criteria, or where the level of protection that trust properties deserve was not accorded. The (correct) application of the public trust doctrine by the executive as a ground for judicial review, rather than just a judicial doctrine, would also counter the possible charge of judicial overreach or that the judiciary cannot merely substitute its view with that of the executive.¹⁶²

The public trust doctrine has been a part of Indian environmental law since 1996, and has over the years been relied upon by Indian courts in a wide variety of cases. This chapter, while exploring the various facets of the doctrine, highlighted some of the conceptual flaws in the manner of its application. However, given the state of the environment in the country, an interpretive strategy, as proposed by this chapter, is needed to 'rescue' the doctrine, to make it an integral part of present-day environmental regulation and a sharper tool in the tool box of the conservation community.

162. This concern has been raised specifically in the context of the doctrine by early critics of Sax. See the text accompanying n 19 and n 22. In the context of Indian environmental jurisprudence, see Harish Salve, 'Justice between Generations: Environment and Social Justice' in B. N. Kirpal *et al.* (eds) *Supreme but not Infallible: Essays in Honour of the Supreme Court of India* (OUP 2000) 360, 376–77; Armin Rosencranz, Edward Boenig and Brinda Dutta, 'The Godavarman Case: The Indian Supreme Court's Breach of Constitutional Boundaries in Managing India's Forests' (2007) 37 *ELR News and Analysis* 10032.

SEVEN

The Judicial Implementation of Environmental Law in India

DHVANI MEHTA *

The previous chapters in this volume have critically analysed the manner in which the Indian judiciary has articulated and applied environmental rights and key environmental principles. These analyses have demonstrated that environmental rights and principles have often been vaguely defined, and their scope and application are unclear. On occasion, they have been used to mask the court's own sociopolitical leanings; in other instances, they have merely supplemented existing enforcement mechanisms. This inconsistency and a lack of rigour in reasoning have meant that Indian environmental jurisprudence, for all the Supreme Court's widening of *locus standi* and expansive interpretation of Article 21 of the Constitution, has remained substantively thin.

For a fuller understanding of the import of judicial activity (and activism) in environmental law, and in order to truly grasp the work that environmental principles have performed, it is

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critical to examine the manner in which courts have tried to implement them. This chapter attempts to do this by analysing the various implementation mechanisms employed by the courts, in particular the Supreme Court and National Green Tribunal (NGT). The methods that courts consider necessary to give effect to environmental principles are likely to provide an additional clue about the meaning and weight that they attach to these principles, thereby complementing the analyses of environmental judgments in the previous chapters.

This focus on judicially-developed implementation mechanisms also highlights another theme that runs through various chapters—the use of the courts to compel the executive to discharge its duties towards the environment. For instance, in *Vellore Citizens' Welfare Forum v. Union of India and Ors*,¹ Bandopadhyay in Chapter 3 points out that the principle of sustainable development was used to require executive and administrative authorities to give due regard to existing policies in their decision-making processes. *Indian Council for Enviro-legal Action v. Union of India and Ors*,² one of the leading cases on the polluter pays principle, is important not only for the imposition of remedial costs by the Supreme Court, but also for its orders directing the closure of polluting factories, a power ordinarily exercised by State Pollution Control Boards (SPCB).

The analysis in this volume, therefore, demonstrates that an important way in which courts use environmental rights and principles is to define the role of executive authorities, and to demand that they take steps to remedy their improperly exercised discretion or inaction. Given this function, studying their implementation is also important from the point of view of the legitimacy of judicial institutions. If courts are routinely stepping in to address executive failure, then the successful implementation of their own orders becomes almost indispensable to the operation of environmental law. When even judicial directions go unimplemented, this has a

1. (1996) 5 SCC 647.

2. (1996) 3 SCC 212 (*Bichhri*).

negative impact on the credibility of the courts and raises important concerns of institutional competence.

These concerns have already been raised in an extensive body of literature that addresses judicial activism, particularly in the context of public interest litigation (PIL).³ The Supreme Court, in particular, has been criticised for playing policymaker while resolving complex, polycentric issues that it does not have the technical expertise to tackle.⁴ The potentially paralysing effect that this role of the courts might have on other institutions has also been discussed.⁵ This chapter makes a contribution to the existing literature by critically examining the various tools of implementation, used by courts in environmental cases, as indicators of the functions that courts are performing. Therefore, one of the questions that this chapter addresses is the extent to

3. See generally Surya Deva, 'Public Interest Litigation: A Critical Review' (2009) 28 *Civil Justice Quarterly* 19; Shubhankar Dam, 'Lawmaking Beyond Lawmakers: Understanding the Little Right and the Great Wrong (Analysing the Legitimacy of the Nature of Judicial Lawmaking in India's Constitutional Dynamic)' (2005) 13 *Tulane Journal of International and Comparative Law* 109; Pratap Bhanu Mehta, 'India's Judiciary: The Promise of Uncertainty' in Devesh Kapur and Pratap Bhanu Mehta (eds) *Public Institutions in India: Performance and Design* (OUP 2007).

4. Armin Rosencranz and Michael Jackson, 'The Delhi Pollution Case and the Limits of Judicial Power' (2003) 28 *Columbia Journal of Environmental Law* 223; Lavanya Rajamani, 'Public Interest Environmental Litigation in India: Exploring Issues of Access, Participation, Equity, Effectiveness and Sustainability' (2007) 19 *Journal of Environmental Law* 293.

5. T. R. Andhyarujina, 'Disturbing Trends in Judicial Activism' *The Hindu* (6 August 2012) <<http://www.thehindu.com/opinion/lead/disturbing-trends-in-judicial-activism/article3731471.ece>> accessed 27 November 2016. For a discussion of judicial activism and institutional paralysis in the context of the right to food, see Dan Banik, 'Governing a Giant: The Limits of Judicial Activism on Hunger in India' (2010) 3 *Journal of Asian Public Policy* 263.

which judicial orders and directions stand in for executive actions, and the extent to which they reflect the exercise of judicial powers.⁶

In order to provide context to this distinction between executive and judicial functions, the next section of this chapter discusses compliance and enforcement mechanisms under existing environmental laws and rules. Conceptual differences between compliance and enforcement on the one hand, and the implementation of judgments on the other, are also discussed in this part, with brief references to the manner in which these concepts are treated in regulatory theory and international law. The section that follows provides an overview of the different implementation mechanisms used by the Supreme Court and High Courts, focusing for the most part on cases that have been discussed in previous chapters. Where particularly innovative mechanisms have been used by the courts, these are discussed in greater detail. The analytical questions that accompany the description of mechanisms in this section are: What do these mechanisms tell us about the ways in which courts interpret environmental principles? To what extent are the courts straying into the executive realm by employing these mechanisms?

Since one of the concerns of this chapter is the legitimacy of the courts, the succeeding section attempts to determine the extent to which some of the judicial orders and directions described in the third section have actually been implemented. In essence, this assesses the effectiveness of implementation mechanisms developed by the courts. The enquiry in this section is a limited one—it does not assess the effectiveness of implementation mechanisms by asking whether they have had a tangible impact on the environment. Establishing the link between judicial pronouncements and improved environmental quality is beyond the scope of this chapter; proving even a correlation of this sort would require extensive and rigorous evidence-gathering. Instead, it is restricted to following

6. For a general discussion on executive and judicial functions in the context of positive duties, see Sandra Fredman, *Human Rights Transformed* (OUP 2008), Chapter 4, 92.

the progress of some of the key judgments discussed in this volume. Even this exercise is court-centric, in as much as I focus on the manner in which the courts themselves monitor the implementation of their own orders and directions, and the consequences that are attached to non-implementation.

In the penultimate section, the analysis undertaken in the preceding two sections is replicated for the NGT. The objective of this section is to determine the impact of the creation of a specialised environmental tribunal like the NGT. One of the reasons for the creation of the NGT was to address some of the concerns about the lack of competence of the High Courts and Supreme Court in environmental matters. It is therefore important to compare the success or the failure of the NGT in securing the implementation of its orders and directions with these other judicial institutions. The concluding section discusses the implications of the preceding analyses for the legislative and institutional reforms that are required to strengthen Indian environmental law.

COMPLIANCE AND ENFORCEMENT MECHANISMS IN INDIAN ENVIRONMENTAL LAW

A later part of this chapter demonstrates that courts have developed implementation mechanisms, at least in part, as a response to the failure of the executive to enforce environmental laws and rules effectively. In order to appreciate the courts' role fully, it is therefore important to have an idea of the means available to executive authorities to secure compliance with the law and to guarantee its effective enforcement. These means may then be compared with those employed by courts to secure the implementation of their judgments.

However, before describing these tools of compliance, enforcement and implementation, it is necessary to clarify the manner in which these three concepts are employed in this chapter, especially since compliance and enforcement mechanisms are used with reference to one institution—the executive—and

implementation mechanisms are used with reference to another—the judiciary.

Conceptual Understanding of Compliance, Enforcement and Implementation

Compliance and enforcement are concepts that are commonly used in regulatory literature in general,⁷ as well as in international environmental law,⁸ and they are used here in similar ways in the context of Indian environmental law.

Neil Gunningham describes two broad types of enforcement strategies used by regulators—deterrence strategy, which focusses on ‘the sanctioning of rule-breaking behaviour’, and compliance strategy, which attempts to ‘advise and persuade’.⁹ This suggests that enforcement is a broader concept than compliance—while compliance mechanisms refer to the measures used by regulators to ensure adherence to rules, enforcement mechanisms encompass

7. See generally Robert Baldwin, Martin Cave and Martin Lodge (eds) *The Oxford Handbook of Regulation* (OUP 2010); Karen Yeung, *Securing Compliance: A Principled Approach* (Hart Publishing 2004). For a discussion of these concepts in specific regulatory areas, see Christopher Hodges, *Law and Corporate Behaviour: Integrating Theories of Regulation, Enforcement, Compliance and Ethics* (Hart Publishing 2015); Horacio Vedia Jerez, *Competition Law Enforcement and Compliance Across the World: A Comparative Review* (Kluwer Law International 2015).

8. Michael Faure, Peter de Smedt and An Stas (International Network of Environmental Compliance and Enforcement), *Environmental Enforcement Networks: Concepts, Implementation and Effectiveness* (Edward Elgar 2015); Carl Bruch and Elizabeth Mrema, *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements* (United Nations Environment Programme 2006); Rüdiger Wolfram, *Means of Ensuring Compliance with and Enforcement of International Environmental Law* (Brill Academic Publishers 1999).

9. Neil Gunningham, ‘Enforcement and Compliance Strategies’ in Baldwin, Cave and Lodge (n 7) 120.

both preventive measures to secure compliance, as well as measures that punish wrongs.

There is much less clarity about the manner in which implementation is understood. One of the reasons for this is that it can be applied to a range of institutions and actors. It could refer to steps that are required to be taken by those on whom the law imposes obligations; it could refer to measures that public authorities must take in order to give effect to a law or measures that States must take to give effect to international agreements. It has also been used interchangeably with enforcement measures taken by the executive.

None of these uses of the term is discounted. However, since this volume focusses on environmental cases, I discuss implementation from the point of view of the courts, although it may be used in different senses even in this context. In empirical studies,¹⁰ on the role of Indian courts in realising socioeconomic rights, implementation is viewed as one end of a spectrum of judicial effectiveness, the other end of which assesses the impact of courts on broader legal and policy changes in these areas. As mentioned earlier, it is difficult to prove the direct or indirect impact of judgments on environmental quality. Therefore, implementation is not used synonymously with impact or effectiveness in this chapter.

Court-driven implementation has also been discussed at length in the literature on PIL; in particular, the innovative remedies developed by courts to overcome the limits of traditionally adversarial judicial processes, and to monitor the implementation of their own orders, have received significant attention.¹¹ The judicial implementation mechanisms described in

10. Shylashri Shankar and Pratap Bhanu Mehta, 'Courts and Socio-economic Rights in India' in Varun Gauri and Daniel Brinks (eds) *Courting Social Justice* (CUP 2010); Namita Wahi and Sharanjeet Parmar, 'India: Citizens, Courts and the Right to Health: Between Promise and Progress' in Alicia Ely Yamin and Siri Gloppen (eds) *Litigating Health Rights: Can Courts Bring More Justice to Health?* (HUP 2011).

11. Fredman (n 6), Chapter 5, 124. In the context of environmental law, see Geetanjoy Sahu, 'Implications of Indian Supreme Court's

this chapter are closest to this understanding of implementation. The chapter critically analyses the steps that courts consider necessary to secure compliance with their orders, the judicial equivalent of the enforcement mechanisms used by the executive. However, it attempts to distinguish this analysis from the existing literature on implementation by drawing connections between these implementation mechanisms and the courts' articulation of environmental principles. Where relevant, it demonstrates the manner in which a particular judicial understanding of an environmental principle influences the methods that courts employ to ensure the implementation of their orders.

The courts' use of implementation mechanisms is also inevitably influenced by the success or failure of the compliance and enforcement mechanisms used by the executive. A brief overview of the latter is therefore in order.

The Regulatory Tool Box of Compliance and Enforcement

Inspection remains the principal compliance tool at the disposal of the SPCBs and officials have the power to enter and take samples of emissions or effluents under Section 21 of the Water (Prevention and Control of Pollution) Act 1974 (Water Act) and Section 26 of the Air (Prevention and Control of Pollution) Act 1981 (Air Act). However, the deterrence power of this tool is questionable, with contributing factors being a lack of human and financial resources.¹² Given the human and financial resources available to these boards, the frequency of inspections recommended in their guidance manuals has also been termed 'either too unrealistic or too lenient'.¹³

Innovations for Environmental Jurisprudence' (2008) 4 *Law, Environment and Development Journal* 375.

12. Centre for Science and Environment (CSE), 'Turnaround: Reform Agenda for India's Regulators' (2009).

13. *Ibid.*, 19.

Courts have frequently been compelled to order site visits or commission expert reports from bodies like the National Environmental Engineering Research Institute (NEERI), thereby ordering the performance of inspection and monitoring functions that ordinarily ought to have been carried out by the SPCBs.¹⁴ For instance, in *Bichhri*, before apprising itself of the facts of the situation, the Supreme Court requested NEERI to study the pollution caused by H acid–manufacturing industries in and around the Bichhri village and to recommend remedial alternatives, in addition to a report already submitted by the Rajasthan Pollution Control Board.¹⁵ This suggests that the court felt it necessary to supplement the Rajasthan Board’s performance.

As the next section will demonstrate, courts therefore often step in to address the failure of regulatory authorities to carry out their compliance-related functions effectively. This judicial regulation, so to speak, has proved particularly necessary, given that reporting requirements under the Environment (Protection) Rules 1986 are not adequate tools for securing compliance. Under Rule 14, industries, operations, or processes that require consent under the Water Act or Air Act must submit an annual environmental statement to the relevant SPCB. This statement must include information on the percentage of variation of the pollutants discharged from the prescribed standards.¹⁶ Such self-monitoring requirements ought to assume even more importance, since the severe understaffing of SPCBs prevents them from conducting sampling and analysis on the necessary scale.¹⁷ However, such self-disclosed data cannot be used by the regulatory authorities to impose penalties or initiate prosecution; only samples taken by inspectors under the authority of the relevant statute are

14. Section 17, Water Act lays down the functions of SPCBs.

15. *Bichhri* (n 2), para 16, referring to Court’s order dated 11 December 1989.

16. Environment (Protection) Rules 1986, Form V, Appendix A.

17. CSE Reform Agenda (n 12) 18–21.

admissible in legal proceedings.¹⁸ This tedious process of admitting legal evidence of pollution might also explain why the higher courts prefer to appoint expert committees directly to gather evidence of pollution or other environmental harm, and to issue directions on the basis of their reports, rather than refer cases to the lower courts to initiate criminal proceedings.

The unavailability of accurate data from third-party audits may also contribute to the preference for court-appointed expert committees. In 1996, under the direction of the Gujarat High Court,¹⁹ the Gujarat Pollution Control Board instituted an alternate compliance mechanism that allowed for the third-party audit of plants with high pollution potential. Under this scheme, certified auditors submitted annual pollution readings to the Board, but a field trial conducted by economists threw doubt on the effectiveness of the scheme as a compliance tool.²⁰

SPCBs carry out compliance assistance functions by providing training and technical guidance in the form of workshops and manuals for polluting firms, although the poor rate of compliance by small and medium enterprises in particular suggests that these measures have not had the desired effect.²¹ In the face of this administrative ineffectiveness, courts have had to step in. It required the sweeping oversight of the Supreme Court over

18. Alternative interpretations of these statutes permitting the use of self-reported data for enforcement have been advanced. See *ibid.*, 25.

19. *Gujarat Chamber of Commerce and Industry v. Pravin Jashbhai Patel*, Miscellaneous Civil Application No. 1863/1995, order dated 20 December 1996, High Court of Gujarat.

20. Esther Dufló, Michael Greenstone, Rohini Pande and Nicholas Ryan, 'Truth-telling by Third Party Auditors and the Response of Polluting Firms: Experimental Evidence from India' (2013) 128 *Quarterly Journal of Economics* 1499.

21. United Nations Development Programme, 'Analysis of Existing Environmental Instruments in India' (2009) 11.

numerous small tanneries in the *Kanpur Tanneries*²² case to bring them in compliance with minimum effluent discharge standards.²³

There is limited use of market-based instruments to secure compliance and, therefore, no real opportunity to assess whether these are likely to be more effective. The metre-based charge on water consumption under the Water (Prevention and Control of Pollution) Cess Act 1977 represented the only really major statutory backing for such economic incentives.

This overview has demonstrated that environmental compliance mechanisms under the Indian regulatory framework are heavily dependent on a large number of technically competent officials carrying out their functions with a high degree of regularity and efficiency. However, SPCBs are thwarted in this because of a shortage of funds, lack of trained personnel, and inadequate guidance and coordination from the Central Pollution Control Board (CPCB). The implementation mechanisms used by courts, and described in the next part, are partly a response to these shortcomings of the regulatory framework.

SPCBs are powerfully equipped under Sections 31A and 33A of the Air Act and Water Act, respectively, to issue any directions in the exercise of their functions, including directions for the 'closure, prohibition or regulation of any industry, operation or process', or to stop or regulate the supply of electricity or water or other services. Before such supply is cut off or closure is ordered, boards issue show cause notices to defaulting units, requiring an explanation for non-compliance. Like their inspection record, the performance of SPCBs in converting show cause notices to closure orders is patchy.²⁴

One of the biggest weaknesses of the environmental enforcement framework in India is the lack of flexibility that is

22. *M. C. Mehta (Kanpur Tanneries) v. Union of India* (1992) Supp 2 SCC 637.

23. Shyam Divan, 'Cleaning the Ganga' (1995) 30 *Economic and Political Weekly* 1557.

24. CSE Reform Agenda (n 12) 23.

available to regulatory authorities. The SPCBs have no power to impose civil penalties under existing laws; imprisonment sentences may be awarded or fines may be imposed only by criminal courts.²⁵ These proceedings are notoriously lengthy and conviction rates are low.²⁶ Although the NGT has the power to award compensation for environmental damage, this fulfills the need for remediation rather than regulation. Most proposals for regulatory reform, therefore, recommend that the Boards be awarded more powers to calibrate their responses to the kind of violation committed,²⁷ and to institute a system of financial penalties and rewards.²⁸

As with compliance-related functions, the lack of sufficient trained manpower also impacts the ability of SPCBs to exercise their enforcement powers. When this is combined with protracted proceedings to impose fines and secure convictions, it is no surprise that proceedings before the higher judiciary or the NGT have proved to be the preferred route for securing the enforcement of environmental law. The nature of claims brought before the Supreme Court and the High Courts has inevitably shaped the implementation mechanisms relied on by them. The next section demonstrates that courts frequently order SPCBs to exercise their powers of closure or order closure of polluting units themselves, thereby driving the enforcement functions of the executive.

25. Water Act ss 41 and 49; Air Act ss 37 and 43.

26. Ibid.

27. Centre for Science and Environment, 'Filling the Blanks: A Discussion Paper on Strengthening Environmental Governance' (2014); Shibani Ghosh, 'Reforming the Liability Regime for Air Pollution in India' (2015) 4 *Environmental Law and Practice Review* 125. The most recent proposal to introduce civil penalties is the draft Environment Laws (Amendment) Bill 2015.

28. Report of the High-level Committee to review various Acts administered by MoEFCC (2014), para 9.2.1.

From a review of the case law, it appears that Indian courts are more likely to invoke the precautionary principle²⁹ and polluter pays principle³⁰ when dealing with instances of pollution, while in cases where the grant of the appropriate environmental or forest clearance or other authorisation/approval (usually related to certain uses of resources) is challenged, the principle of sustainable development³¹ and public trust doctrine³² are more likely to be invoked. (These are not, however, watertight categories—for instance, as Chapter 4 mentions, the polluter pays principle was invoked in a case dealing with unauthorised mining and quarrying around a wildlife park.³³ Similarly, Chapter 5 discusses the case of *A. P. Pollution Control Board II v. Prof. M. V. Nayudu and Ors*,³⁴ where the precautionary principle was applied to determine whether a permit ought to be granted to a hazardous industry.) As discussed in the next section, the compliance and enforcement mechanisms used by the courts to deal with these different types of violations also vary.

29. *M. C. Mehta v. Union of India and Ors* (1997) 2 SCC 353 (*Taj Trapezium* case); *Research Foundation for Science Technology and Natural Resource Policy v. Union of India and Ors* (2007) 15 SCC 193.

30. *Bichhri* (n 2); *Deepak Nitrite Ltd v. State of Gujarat and Ors* (2004) 6 SCC 402; *Hindustan Coca-Cola Beverages Pvt. Ltd v. West Bengal Pollution Control Board and Ors*, Appeal No. 10/2011, judgment dated 19 March 2012, NGT (Principal Bench).

31. *G. Sundarajan v. Union of India and Ors* (2013) 6 SCC 620; *Goa Foundation v. Union of India* (2014) 6 SCC 590.

32. *Thenkeeranur Vivasayigal Nala Sangam v. The Secretary to Government, Ministry of Environment and Forest Union of India and Ors*, OA No 193/2013, order dated 7 August 2015, NGT (Southern Zone Bench); *Kalinga Power Corporation v. Union of India* (2012) SCC OnLine Del 2090.

33. *Rohit Choudhary v. Union of India and Ors*, Application No. 38/2011, judgment dated 7 September 2012, NGT (Principal Bench), para 35.

34. (2001) 2 SCC 62. See also *Jeet Singh Kanwar v. MoEF and Ors*, Appeal No. 10/2011 (T), judgment dated 16 April 2013, NGT (Principal Bench), where one of the grounds for quashing the environmental clearance granted to a thermal power plant was that the MoEF had not properly considered the precautionary principle.

Like SPCBs, the record of the Ministry of Environment, Forest and Climate Change (MoEFCC) in monitoring compliance with conditions attached to environmental and forest clearances is poor.³⁵ A recent report of the Comptroller and Auditor General of India records that the MoEFCC does not have a database of violations of the conditions attached to environmental clearances; the report also notes that the MoEFCC, in its reply to a Parliamentary question in July 2016, stated that no penalty had been imposed for violating these conditions for the preceding two years.³⁶ The Supreme Court appeared to have recognised the limitations of the MoEFCC in this regard when it recommended the appointment of a national regulator to enforce environmental conditions and impose penalties on polluters.³⁷ Rather than directing the MoEFCC to carry out monitoring functions, in some cases,³⁸ the NGT has ordered the constitution of expert committees to monitor conditions attached to environmental clearances and to submit monitoring reports to the Tribunal. This suggests that the MoEFCC is unable to discharge its duties fully, perhaps prompting courts to develop their own compliance and enforcement mechanisms.

This section has described the regulatory tools available to the authorities to secure compliance with and enforce Indian environmental law, and described the limitations of the authorities in utilising these tools. This creates the context for the next section, which describes the different implementation mechanisms developed by courts.

35. Kalpavriksh, 'Calling the Bluff: Revealing the State of Monitoring and Compliance of Environmental Clearance Conditions' (2009).

36. Report of the Comptroller and Auditor General of India on Environmental Clearance and Post Clearance Monitoring (Report No. 39 of 2016).

37. *Lafarge Umiam Mining Pvt. Ltd v. Union of India and Ors* (2011) 7 SCC 338, Part II (i).

38. *Wilfred v. Ministry of Environment and Forests*, OA No. 74/2014, judgment dated 17 July 2014, NGT (Principal Bench); *Bhagat Singh Kinnar v. Union of India*, Appeal No. 14/2011 (T), judgment dated 28 January 2016, NGT (Principal Bench).

IMPLEMENTATION MECHANISMS DEVELOPED BY THE COURTS

In this section, we focus on the orders and directions of courts that follow the articulation of legal principles. The objective is two-fold: First, to analyse whether these orders and directions that aim to implement environmental rights and principles tell us anything about the courts' understanding of the rights and principles themselves; second, to examine the extent to which these implementation mechanisms represent an exercise of executive or judicial functions. I have identified three broad objectives that judicially-developed implementation mechanisms in environmental cases serve—evidence-gathering, monitoring, and prevention of environmental damage and remediation.

Different kinds of mechanisms can fulfil one or more objectives. Judicial inspections and the appointment of commissioners or committees primarily serve the objective of obtaining expert opinion, although they could also be used to monitor the implementation of court orders, and their findings might form the basis for directions for remediation. The continuing mandamus is the centrepiece of monitoring mechanisms employed by courts, often supplemented by the appointment of authorities under Section 3 of the Environment (Protection) Act 1986 (EP Act).³⁹ Mechanisms for prevention of environmental damage and remediation include injunctions that courts use to *stop* environmental damage, as well as directions issued to *restore* the environment. Awards of compensation also fall within this third category. The following paragraphs describe

39. Section 3(3) of the EP Act empowers the central government to constitute authorities for the purpose of exercising powers and functions under the Act, including the power to issue directions under Section 5. Examples include the Central Empowered Committee and the Loss of Ecology (Prevention and Payment of Compensation) Authority, set up in compliance with directions of the Supreme Court in *T. N. Godavarman Thirumalpad v Union of India* (2013) 8 SCC 198 and (2009) 17 SCC 755 and *Vellore* (n 1), respectively.

the various mechanisms across these groups, using examples from cases analysed in the previous chapters.

Evidence-gathering Mechanisms

These are among the most commonly employed implementation mechanisms, with courts using them to give effect to most environmental principles in different ways that are explained here. The term ‘evidence-gathering’ mechanism is being used to refer to: a) those used by courts to ascertain the state of the environment; and b) those used to provide technical expertise to courts. The first type of mechanism, which is more of a fact-finding exercise, is more commonly understood as part of the judicial function—for example, fact-finding powers are vested in civil courts while trying a suit under the Code of Civil Procedure 1908. These include the power to summon and enforce the attendance of persons, require the discovery and production of documents, and issue commissions for the examination of witnesses and documents.⁴⁰ In the exercise of their writ jurisdiction under Articles 32 and 226, the Supreme Court and High Courts have developed similar fact-finding mechanisms—spot visits by judges⁴¹ and inspections by Pollution Control Boards,⁴² independent expert committees⁴³ or institutions

40. See Code of Civil Procedure 1908 ss 30 (power to order discovery and the like) and 75 (power of court to issue commissions); NGT Act s 19(4).

41. For examples of cases in which Supreme Court judges have made spot visits to sites in order to understand the issues involved, see Sahu (n 11) 383–84.

42. *M. C. Mehta v. Kamal Nath* (1997) 1 SCC 388; *Vineet Kumar Mathur v. Union of India* (1996) 1 SCC 119, where the Supreme Court directed SPCBs to inspect polluting industries for the installation of effluent treatment plants.

43. *M. C. Mehta v. Union of India* (1986) 2 SCC 176 (*Oleum Gas Leak* case). The Supreme Court appointed a team of experts to inspect the

like NEERI,⁴⁴ court-appointed Commissioners,⁴⁵ and even *amicus curiae*.⁴⁶

As the cases in footnotes 41–46 demonstrate, these fact-finding mechanisms have been employed by courts at various stages. In some instances, they are used to determine the existence of violations or the extent of environmental damage.⁴⁷ When used in this manner, in cases relating to the public trust doctrine, such mechanisms are used to inform final orders and directions that require the restoration of the environment.⁴⁸

These mechanisms are also used to give effect to the polluter pays principle. Experts are appointed to assess the damage and estimate the costs of restoration. In *Kamal Nath*, the Supreme Court ordered NEERI to prepare a report on the costs that would be incurred in restoring the environment, after damage was caused to the river banks of the Beas due to construction activities by a motel.⁴⁹ This report was then used as the basis of a show cause notice issued to the motel, demanding why it ought not to bear

caustic chlorine plant where a leak had occurred, in order to report on the implementation of the recommendations by another expert committee.

44. *M. C. Mehta v. Union of India* (1997) 3 SCC 715, where the Supreme Court ordered NEERI to file an inspection report on the geological features of the Badkhal and Surajkund lakes.

45. *M. I. Builders v. Radhey Shyam Sahu* 1999 (6) SCC 464, where the former Head of the Department of Building Engineering and Management was appointed as a Commissioner by the Court to determine the nature of construction at a public park.

46. In *Paryavaran Avam Janathan Mission v. Lieutenant Governor* (2009) SCC OnLine Del 3720, which concerned the use of a public park for non-ecological purposes, the Delhi High Court appointed an *amicus curiae* to inspect the park and file a status report.

47. In *Hindustan Coca-Cola Beverages (P) Ltd v. Perumatty Grama Panchayat* (2005) SCC Online Ker 206, the Centre for Water Resources Department and Management was appointed to conduct an investigation to determine whether the factory had created a shortage of drinking water through its over-exploitation of groundwater.

48. For examples of these cases, see Chapter 6.

49. *Kamal Nath* (n 42).

the costs of reversing damage to the environment, and why an additional fine ought not to be imposed.⁵⁰ A NEERI report was used in a similar manner as a show cause notice to polluting industries in the *Bichhri* case, proposing an amount required for remedial measures.⁵¹ However, as Chapter 4 on the polluter pays principle demonstrates, there is no consistency as regards the body appointed to conduct such fact-finding. In *Deepak Nitrite v. State of Gujarat*,⁵² the Supreme Court directed the Gujarat High Court itself to determine whether there was any damage to the environment, and if so, to lay down the norms that it ought to apply in determining the appropriate amount of compensation.

Fact-finding mechanisms may also be used to determine whether a particular environmental principle can meaningfully be applied. In *Intellectuals' Forum v. State of Andhra Pradesh*, the Secretary, Ministry of Water Resources, was directed to constitute a Committee of Experts to determine whether two historical tanks in Tirupathi could still be utilised for water harvesting, which, it was argued the public trust doctrine would have required.⁵³ Another important use of such mechanisms is to assess the degree of compliance with the court's orders and directions, but these are more usefully discussed in the next section on monitoring mechanisms.

The second type of evidence-gathering mechanisms are those where expertise is used to inform judicial decisions substantively, in the sense that courts balance environmental interests against other concerns using expert evidence, or frame directions on the basis of expert recommendations.

One of the first cases in which the Supreme Court balanced developmental interests against ecological concerns, *Rural*

50. *M. C. Mehta v. Kamal Nath* (2002) 3 SCC 653, para 2, referring to Court's order dated 19 December 1996.

51. *Bicchri* (n 2), para 70.

52. (2004) 6 SCC 402.

53. (2006) 3 SCC 549, para 35 referring to Court's order dated 5 December 2003.

Litigation and Entitlement Kendra v. State of Uttar Pradesh and Ors,⁵⁴ is a good example of the manner in which the Court has used expert evidence—it often relies on multiple authorities,⁵⁵ but does not appear to have developed consistent criteria to evaluate and give weight to different kinds of evidence. While the Court may rely heavily on expert recommendations to frame its directions;⁵⁶ it may also overrule the recommendations of expert committees without providing supporting reasons.⁵⁷ The failure of courts to develop uniform standards governing the use of such evidence has meant that evidence-gathering mechanisms have lost some of their credibility. Instead, they appear to be substitutes for the exercise of legal reasoning by the courts.

In *Dahanu Taluka Environment Protection Group v. Bombay Suburban Electricity Supply Company Limited*,⁵⁸ rather than engage in evaluating the comparative merits of a set of expert reports on the one hand, and the recommendations of an Expert Appraisal Committee (EAC) appointed by the central government on the other, the Supreme Court used judicial deference to approve the environmental clearance granted by the central government to a thermal power plant.⁵⁹ Other authors have also remarked on this non-engagement with expert evidence, especially when it is contrary to the government's development agenda, as some of the litigation on large dams demonstrates.⁶⁰

54. (1985) 2 SCC 431.

55. In *Rural Litigation*, at least three different expert groups were appointed (two by the Supreme Court, one by the government) to inspect limestone quarries in the region and make recommendations on their closure.

56. *Oleum Gas Leak* case (n 43), para 20.

57. *Rural Litigation* (n 54), para 8.

58. (1991) 2 SCC 539.

59. *Ibid.*, para 2. The Court stated that its role was restricted to examining whether the government had taken all relevant aspects into account.

60. See the discussion on *Tehri Bandh Virodhi Sangharsh Samiti v. State of Uttar Pradesh* (1992) Supp 1 SCC 44 in Shyam Divan and Armin

Like fact-finding mechanisms that are used to inform the courts' orders and directions, expert evidence is also relied on extensively to frame remedies. This can take several forms—making illegal tree felling a cognisable offence on the recommendation of a court-appointed Commissioner,⁶¹ ordering the preparation of an eco-restoration plan as recommended by a committee appointed under Section 3 of the EP Act,⁶² enforcing a recommendation in a NEERI report to make the commencement of mining operations contingent on approval by a designated authority,⁶³ and demarcating the zone within which certain polluting activities can be carried out.⁶⁴

Just as courts have relied on a range of actors to perform fact-finding functions, the kind of expert evidence used by the courts also varies. The courts may rely on Government-appointed committees,⁶⁵ independently appoint individual experts or institutions,⁶⁶ or use a combination of both.⁶⁷ The strict rules regarding the admissibility of evidence in traditional adversarial processes are relaxed, leaving the courts open to the charge of cherry-picking expert evidence

Rosencranz, *Environmental Law and Policy in India* (OUP 2001) 431–41. See also Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court: Litigation, Interpretation, Implementation* (Orient BlackSwan 2014) 57–64.

61. *Ajay Singh Rawat v. Union of India and Ors* (1995) 3 SCC 266.

62. *K. M. Chinappa and T. N. Godavarman Thirumalpad v. Union of India and Ors* (2002) 10 SCC 606.

63. *M. C. Mehta v. Union of India* (1996) 8 SCC 462 (Stone Crushing case).

64. *M. C. Mehta v. Union of India* (1991) 2 SCC 353; *Mohammad Haroon Ansari v. District Collector, Ranga Reddy, Andhra Pradesh* (2004) 1 SCC 491. Both these cases dealt with stone-crushing.

65. *Mullaperiyar Environmental Protection Forum v. Union of India* (2006) 3 SCC 643; *Tehri Bandh Virodhi Sangharsh Samiti* (n 60).

66. *Aruna Rodrigues v. Union of India* (2012) 5 SCC 331; *Kennedy Valley Welfare Association v. Ceylon Repatriates Labourers Welfare Society* 2000 (2) SCALE 143.

67. *Rural Litigation* (n 54); *Oleum Gas Leak case* (n 43).

that best aligns with the sociopolitical views of the judges. An analysis of the 'expertisation' of environmental adjudication argues that the Supreme Court 'seems to have moved on a continuum from deference to defiance of executive fiat without any apparent reasons for differentiating between these cases'.⁶⁸

This overview of evidence-gathering mechanisms suggests that they serve either as triggers for the application of environmental principles, or as tools to give effect to these principles, once they have been applied. For instance, fact-finding mechanisms have been used quite effectively to help establish the fact of environmental damage as well as the kind of remediation required, both of which are essential for the operationalisation of the polluter pays principle and public trust doctrine. When the precautionary principle and principle of sustainable development are invoked, this is usually followed by a judicial review of decisions taken by the executive assessing environmental risk or balancing environmental interests against others. Such forms of judicial review are likely to be aided by expert evidence.

The use of such mechanisms *per se* by the courts does not necessarily involve the exercise of executive functions. Courts ought to have the flexibility to gather the facts relevant to the adjudication of environmental disputes, which are inherently polycentric. However, it is the use of these mechanisms by the courts as proxies to take policy decisions about the environment and development that encroach on executive functions. The use of such mechanisms, especially in their fact-finding form, highlights the failure of executive authorities to perform their crucial functions of inspection and monitoring, prompting the judiciary to take over. More evidence of this kind of executive failure is demonstrated in the next section on monitoring mechanisms.

68. Nupur Chowdhury, 'Environmental Risk Regulation and the Indian Supreme Court: An Exercise in Deformalization of the Law' (2014) 17 *Journal of Risk Research* 61, 80.

Monitoring Mechanisms

One of the defining procedural innovations in Indian PIL is the continuing mandamus, which allows courts to monitor the implementation of their orders and directions regularly. *Vineet Narain v. Union of India*⁶⁹ is one of the first cases in which this mechanism was employed by the Supreme Court to monitor the discharge by the Central Bureau of Investigation of its statutory duty. The rationale advanced by the Supreme Court for the use of this tool was the need for a permanent solution to the continuing inertia of the agencies in question.⁷⁰ A one-time mandamus directing the agencies to perform their duties was deemed insufficient; instead, it was considered more expedient to issue directions from time to time, requiring the agencies to report to the Supreme Court and thereby allowing the court to monitor the progress made.⁷¹ The continuing mandamus is therefore conceived of as an implementation mechanism designed to tackle *systemic* failure by executive authorities in carrying out their functions. Given the general failings of environmental regulatory authorities (briefly described in the previous section), it is no wonder then that the continuing mandamus has proved to be a popular tool in environmental cases.

The simplest and most direct way in which the continuing mandamus is employed by the courts is by issuing it to the agencies or authorities responsible for implementing judicial orders and directions. Usually, such bodies are required to submit progress reports on implementation at intervals that are specified by the courts. The continuing mandamus is a device that allows courts to impose accountability on the executive, while also allowing it the flexibility to modify its orders and directions, a much-needed requirement in typically polycentric environmental cases. For instance, in the *Delhi*

69. (1998) 1 SCC 226.

70. *Ibid.*, para 9.

71. *Ibid.*

Vehicular Pollution case,⁷² although the Supreme Court ordered all government vehicles to run on compressed natural gas (CNG), it was persuaded by groups opposing this order to issue a direction to an expert committee, to determine whether other fuel types might constitute more acceptable options, both environmentally and economically.⁷³

This example also shows that the use of the continuing mandamus allows courts to become sites for the exchange of opinions, or a sort of policymaking by relevant stakeholders in PIL cases. This exchange of views often takes place more formally, through a court-appointed expert committee or task force. In a Delhi High Court judgment on the allocation of cycle rickshaw licences (which also dealt with questions of road traffic and air pollution), a continuing mandamus was issued in order to constitute a special Task Force, which would examine all aspects of vehicular movement, invite views from interested parties, and make proposals.⁷⁴

However, the flexibility afforded by the continuing mandamus has also allowed courts to greatly overstep their role and engage in micromanagement. One commentator describes in detail the manner in which the Supreme Court used the continuing mandamus to transform public interest litigation into ‘a perennially unstable and fundamentally malleable jurisdiction’.⁷⁵ In addition to monitoring, the continuing mandamus permits courts to ‘take up fresh causes of action’.⁷⁶ One of the consequences of passing

72. *M. C. Mehta v. Union of India*, WP (C) No. 13029/1985 (*Delhi Vehicular Pollution* case).

73. See Rosencranz and Jackson (n 4) 235. The Supreme Court, however, pressed ahead with its direction on CNG when presented with two differing expert reports on the most suitable type of fuel.

74. *Manushi Sangathan v. Government of Delhi* (2010) SCC OnLine Del 580.

75. Anuj Bhuwania, *Courting the People: Public Interest Litigation in Post-Emergency India* (CUP 2016) 51.

76. *Ibid.*, 59. Bhuwania makes this observation with particular reference to *M. C. Mehta v. Union of India*, WP (C) No. 4677/1985, where

interim orders rather than a reasoned judgment is that ‘some of the most far-reaching impacts of PIL [public interest litigation] take place through—what is effectively—pure judicial fiat’.⁷⁷ This implementation mechanism, rather than shedding light on the courts’ reasoning, has had the effect of diluting it. This is evident from the minimal judicial engagement with the statutory and regulatory framework.⁷⁸

Courts often appoint other bodies to monitor the implementation of their judgments. These could take the form of committees⁷⁹ or statutory authorities.⁸⁰ In *Banwasi Sewa Ashram v. State of Uttar Pradesh*,⁸¹ a Board of Commissioners was appointed to monitor the directions of the Supreme Court regarding the resettlement and rehabilitation of Adivasis who were displaced by the construction of a thermal power plant. This Board also comprised a representative of the Adivasis. Another prominent example is the Environment Pollution (Prevention and Control) Authority, appointed in pursuance of the Supreme Court’s directions in the *Delhi Vehicular Pollution* case,⁸² which included independent experts

the central cause of action shifted several times over the life of the petition, from stone-crushing units to pollution in the Yamuna to the relocation of large industries from Delhi.

77. Gautam Bhatia, ‘ICLP Book Discussion: Anuj Bhuwania’s ‘Courting the People’—I: A Radical Revision’ *Indian Constitutional Law and Philosophy* (20 January 2017) <<https://indconlawphil.wordpress.com/2017/01/20/iclp-book-discussionanuj-bhuanias-courting-the-people-i-a-radical-revision/>> accessed 14 February 2017.

78. For a more detailed analysis of the manner in which courts engage with statutes, rules and regulations as part of their judicial reasoning, see Dhvani Mehta, ‘The Environmental Rule of Law in India’ (thesis submitted for the Doctor of Philosophy in Law, University of Oxford, 2017).

79. In *M. C. Mehta v. Union of India* (2004) 12 SCC 118, while considering a ban on mining in the Aravalli Hills, the Supreme Court appointed a monitoring committee to inspect the mines and determine whether the ban ought to be lifted on a case-to-case basis.

80. See n 39.

81. (1986) 4 SCC 753.

82. *Delhi Vehicular Pollution* case (n 72), order dated 7 January 1998.

and officials from Delhi's municipal corporations. The Authority has been vested with the power to take up matters *suo motu*, or on complaints made by individuals or organisations regarding the violation of air quality or emission discharge standards. It can also issue directions under Section 5 of the EP Act in respect of such violations. In the *Aravalli Mining* case,⁸³ apart from Government officials, the Supreme Court also appointed three 'representatives of the public' as members of the Monitoring Committee that would inspect mines, although these representatives were also experts, rather than laypersons or local residents.⁸⁴

Like the courts' use of evidence described in the previous section, there is no consistency in the manner in which they have appointed monitoring committees, although there appears to be a similar privileging of technical and official expertise over laypersons or civil society groups in the use of these implementation mechanisms.

In some instances, monitoring mechanisms are not limited to overseeing the implementation of the courts' orders and directions. The Central Empowered Committee (CEC) was appointed by the Central Government,⁸⁵ in pursuance of the orders of the Supreme Court in the *Godavarman* case, to monitor and ensure compliance with its orders. It was also empowered to issue guidelines for the location and functioning of saw mills and to regulate their capacity for sustainability, besides being vested with broader powers to protect and manage forests and wildlife under the applicable laws and rules.⁸⁶ In the exercise of these functions, the CEC has made a wide range of recommendations. It initiated a significant change in the policy of valuation of forests by recommending the adoption of the Net Present Value,⁸⁷ was involved in the framing of

83. *M. C. Mehta* (n 79).

84. *Mehta* (n 78) 296–97.

85. SO 1008 (E), dated 17 September 2002.

86. *Ibid.*

87. CEC report dated 9 August 2002; *T. N. Godavarman Thirumalpad v. Union of India* (2006) 1 SCC 1.

rules governing the disbursement of compensatory afforestation funds between the Centre and the states,⁸⁸ has issued directions for the demolition of all fish tanks within a wildlife sanctuary,⁸⁹ and has suggested that environmental clearances, granted to mining leases within 10 km of national parks and wildlife sanctuaries in Goa, be suspended until a proper assessment is made of the adverse impact of mining on flora and fauna.⁹⁰

Although the Forest Advisory Committee constituted under Section 3 of the Forest (Conservation) Act 1980 is the statutory body vested with the power to make recommendations to the Central Government regarding the diversion of forest land, the recommendations of the CEC are frequently sought. This requires the CEC to balance environmental interests against developmental concerns regularly.⁹¹ Evidently, the CEC functions as a sort of supra-regulator in the field of forest conservation. As one body, it performs all three functions of government—legislative, executive, and judicial. As the examples given earlier demonstrate, it is a fact-finding and monitoring body, as well as one that has the power to frame general guidelines and recommend sweeping policy changes. From the general, it can go back to the particular, as it makes complex balancing decisions regarding specific instances of diversion of forest land. In the exercise of all these functions, the CEC

88. *T. N. Godavarman Thirumalpad v. Union of India* (2014) 6 SCC 150.

89. *T. N. Godavarman Thirumalpad v. Union of India* (2006) 5 SCC 47.

90. *Goa Foundation v. Union of India* (2014) 6 SCC 590.

91. In *Godrej and Boyce Manufacturing Company Ltd v. State of Maharashtra* (2014) 3 SCC 430, the CEC was asked to determine whether the balance of convenience lay in granting permission for the de-reservation of forest land under the Forest (Conservation) Act 1980 or ordering the demolition of existing buildings, relocating the existing owners and physically converting the area in question into forest. See also *Orissa Mining Corporation v. Ministry of Environment and Forest* (2013) 6 SCC 476 (*Niyamgiri Mining case*), where the CEC wrote to the MoEFCC requesting that a proposal for the diversion of forest land for the mining of bauxite ore in Odisha be put on hold, until the proposal had been examined by the CEC.

is accountable only to the Supreme Court, which often reproduces the recommendations of the CEC verbatim in its orders. The breach of the principle of separation of powers that CEC's functioning entails, and the conflict created with other statutory authorities, has been criticised for creating 'faulty jurisprudence'.⁹² However, it should also be noted that the Supreme Court has dismissed a challenge that was made to the credibility of the CEC,⁹³ clarifying that orders are passed on the basis of the recommendations of the CEC only after the satisfaction of the Court. In any case, since the transfer of more than 300 cases to the NGT from the Supreme Court in 2015,⁹⁴ the role of the CEC has diminished.

This criticism that the CEC has attracted ought to be contrasted with the praise that has been conferred on a similar authority, the Dahanu Taluka Environment Protection Authority,⁹⁵ appointed by the Ministry of Environment and Forests (MoEF) (as it was previously known), under the orders of the Bombay High Court. It was charged with protecting the ecologically fragile area of the Dahanu Taluka, implementing the precautionary and polluter pays principles, and ensuring compliance with expert recommendations made by NEERI, the notifications issued by the MoEF, and the orders issued by the Bombay High Court and the Supreme Court.⁹⁶ As part of these duties, the Authority ordered the installation of a particular technology within the thermal power plant, obtained a Rs 300 crore bank guarantee from the company taking over the plant, successfully resisted the construction of an international port

92. Armin Rosencranz and Sharachandra Lele, 'Supreme Court and India's Forests' (2008) 43 *Economic and Political Weekly* 10, 13.

93. *Samaj Parivartan Samudaya v. State of Karnataka* (2013) 8 SCC 154.

94. *T. N. Godavarman Thirumulpad v. Union of India* (2016) 13 SCC 586.

95. Geetanjoy Sahu and Armin Rosencranz, 'Court-Appointed Monitoring Committees: The Case of the Dahanu Taluka Environment Protection Authority' (2009) 5/2 *Law, Environmental and Development Journal* 187.

96. *Ibid.*

in the Dahanu Taluka,⁹⁷ and required pre-afforestation schemes as conditions precedent to the grant of clearances for development projects.⁹⁸ The openness of the Authority to local viewpoints and effective leadership have been cited as factors for its success,⁹⁹ despite erratic financial assistance from the MoEF and hostility from the Maharashtra government.¹⁰⁰ However, it could be argued that another factor is the narrow circumscribing of its functions when contrasted with the enormous ambit of the CEC. Monitoring mechanisms like court-appointed authorities are likely to function more effectively when dealing with a particular case and operating within a limited jurisdiction, as in Dahanu, rather than when they are vested with sweeping powers to govern, like the CEC.

The use of the continuing mandamus favours the passing of interim orders, which in turn offer less scope for the courts to expound on the meaning of the environmental rights and principles that they apply. In several cases, the Supreme Court has either failed to cite Constitutional provisions or environmental principles¹⁰¹ while passing orders, or has failed to engage in a discussion of the relevant statutory framework.¹⁰² Just as the evidence-gathering mechanisms discussed in the previous section allowed courts to take technical decisions without actually appearing to do so, the use of monitoring mechanisms, especially the appointment of authorities, has allowed courts to exercise legislative and executive powers through a substitute. Like public interest litigation in other

97. *Ibid.*

98. For details of these schemes, see Meenakshi Kapoor, Kanchi Kohli and Manju Menon, 'India's Notified Ecologically Sensitive Areas: The Story so Far' (Kalpavriksh 2009) 30–31.

99. Sahu and Rosencranz (n 95).

100. Kapoor, Kohli and Menon (n 98) 34–35.

101. *Tarun Bharat Sangh, Akwar v. Union of India* (1992) 2 Supp SCC 548; *Mullaperiyar Environmental Protection Forum* (n 65).

102. *Mukti Sangharsh Movement v. State of Maharashtra* (1990) Supp SCC 37; *Mohammad Haroon Ansari* (n 64). For a fuller discussion of the Court's engagement with environmental principles and Constitutional and statutory provisions, see Mehta (n 78), Appendix.

spheres, the use of such mechanisms is partly an attempt by the judiciary to step up in the face of executive inaction or failure.¹⁰³ However, the more the courts deploy these mechanisms, the more this appears to rob other branches of government of the initiative to take action on their own to protect the environment.¹⁰⁴

Mechanisms for Prevention of Environmental Damage and Remediation

Environmental cases brought before Indian courts ask for broadly two kinds of relief—either to *prevent* activities or projects that have the potential to cause environmental damage, or to *halt* activities or projects that have already caused such damage, and seek remediation for damage caused (if any). Naturally, the kind of implementation mechanism used by the courts is influenced by the kind of case brought before them. Preventive mechanisms are usually used in cases that challenge an approval (such as, an environmental or forest clearance) granted to a project by the regulatory agency concerned. Quite frequently, the challenge might also be about

103. See generally n 3 and 4.

104. For a general overview of this effect of the judiciary on the other branches of government, see Andhyarujina (n 5). When air quality reached alarmingly dangerous levels in November 2016 in northern India, it was the Supreme Court that had to order the central and state governments to frame an anti-pollution plan urgently. See Priyanka Mittal and Mayank Aggarwal, ‘Delhi air pollution: Supreme Court calls for anti-smog plan in two days’ *LiveMint* (9 November 2016) <<http://www.livemint.com/Politics/q389EW5hdOJ4achLNDTajP/Delhi-air-pollution-Supreme-Court-demands-antismog-plan-in.html>> accessed 20 February 2017. See also Lavanya Rajamani, ‘Rights Based Climate Litigation in the Indian Courts: Potential, Prospects and Potential Problems’ Centre for Policy Research Climate Initiative, Working Paper 2013/1 (May), available at <https://papers.ssrn.com/sol3/papers2.cfm?abstract_id=2464927> accessed 20 February 2017, where the author points out that ‘endless judicial oversight will paralyze the Executive and distort existing processes and policy evolution channels on climate change’.

the fact that the project had commenced without obtaining the necessary clearance.¹⁰⁵ In such cases, courts may require project proponents to apply for the clearance, quash the clearance already granted¹⁰⁶ (although this function is now performed in the first instance by the NGT), or order a fresh assessment of the potential benefit and harm of the project.¹⁰⁷

It is not necessary that this fresh assessment be restricted to scientific, technical, or ecological considerations. Religious and cultural considerations may also play a role in the granting of approvals, as the *Niyamgiri Mining* case¹⁰⁸ demonstrates. In this case, since the mining was proposed to be carried out in the Niyamgiri Hills sacred to the Dongria Kondh tribe, the Supreme Court ordered the MoEF to take a final decision on approving a bauxite mining project only after the local Gram Sabhas affected by the project had made their own determination regarding its desirability.

Courts may also go beyond the mere upholding or setting aside of environmental clearances. In *G. Sundarrajan v. Union of India*,¹⁰⁹ while upholding the environmental clearance granted to the

105. *Thervoy Gramam Munnetra Nala Sangam v. Union of India* (2009) SCC OnLine Mad 1522, *Dinesh Bothra v. The State of Rajasthan* (2015) SCC OnLine Raj 515 and *Goa Foundation v. Union of India* (2014) 6 SCC 590 are examples of cases in which the obtaining of prior environmental clearance or its continuing validity were in issue.

106. However, the reluctance of the Supreme Court to set aside clearances granted to infrastructure development projects such as the Tehri Dam, the Narmada Dam, the Dahanu thermal power plant and the Commonwealth Games Village is well documented. See Geetanjoy Sahu, *Environmental Jurisprudence and the Supreme Court: Litigation, Interpretation, Implementation* (Orient BlackSwan 2014) 57–64. For a more recent example of a case in which the clearance was set aside, see *Him Privesh Environment Protection Society v. State of Himachal Pradesh* (2012) SCC OnLine HP 2690.

107. *Talaulicar and Sons Private Limited v. Union of India* (2016) 8 SCC 299.

108. *Niyamgiri Mining* case (n 91).

109. *Sundarrajan* (n 30).

Kudankulam nuclear power plant as part of the country's national policy, the Supreme Court passed several additional directions to ensure safety and security in the operation of the plant—periodic inspections by the MoEF and the Atomic Energy Regulatory Board (AERB), the development of a surveillance and monitoring programme for spent nuclear fuel, training courses for state government officials and other stakeholders, and the discharge of its corporate social responsibilities by the Nuclear Power Corporation of India Limited (NPCIL). In such instances, the courts, in an attempt to accommodate the interests of different stakeholders, appear to be venturing beyond their traditional judicial function of reviewing the clearance.

Unlike the grant of environmental and forest clearances, the grant of the consent-to-operate by SPCBs under the Water Act and Air Act, does not appear to have been frequently challenged before the Supreme Court and the High Courts. However, the NGT now examines the grant of such consent by SPCBs.¹¹⁰ Before such consents came to be challenged before the NGT, appeals were made to courts to stop pollution by units that may validly have been granted the consent-to-operate, but were now violating their permits or prescribed environmental standards, *Vellore* being a case in point. The implementation mechanisms employed by the Supreme Court in this case are set out in greater detail later. More recently, the Supreme Court directed that the consent-to-operate would only be granted to industries with functional effluent treatment plants, and also set up strict implementation mechanisms for its order, fixing accountability on the member secretaries of SPCBs and the secretaries of environment departments within state governments, besides requiring data analysis by the Central

110. *M/s Parul Fabricator Private Limited v. Uttarakhand Environment Protection and Pollution Control Board*, OA No. 407/2016, judgments dated 18 August 2016 and 25 April 2017, NGT (Principal Bench); *Shri Mahaveer Stone Industry v. Central Pollution Control Board and Anr*, OA No. 540/2016 and OA No. 541/2016, judgments dated 4 November 2016 and 17 April 2017, NGT (Principal Bench).

Groundwater Authority, followed by submission to the relevant bench of the NGT.¹¹¹

In *Vellore*, the Supreme Court ordered the central government to appoint an expert authority under Section 3(3) of the EP Act, headed by a retired judge of the Madras High Court.¹¹² The authority was directed to implement the precautionary and the polluter pays principles,¹¹³ although the Court only gave more detailed directions regarding the implementation of the latter principle. The authority was given the power to assess the environmental damage, identify the individuals/families affected by it, and determine the compensation after devising a just and fair procedure. This amount was to be forwarded to the Collector/District Magistrate of the area concerned, to collect it as arrears of land revenue from the polluters.¹¹⁴

The Supreme Court clearly intended the authority to take over some of the functions of the SPCB, given that the authority was conferred with the power to direct the closure of an industry in case of failure to pay compensation,¹¹⁵ as well as the power to frame schemes in conjunction with expert bodies to reverse the damage caused to the environment.¹¹⁶ Even the power to permit the reopening of the polluting tanneries was transferred to the authority rather than requiring the consent of the SPCB.¹¹⁷ The authority was also conferred the power to review the cases of all tanneries operating within a certain area and to order their permanent closure or relocation.¹¹⁸ The judicial mechanisms employed in the *Vellore* case are a good combination of mechanisms for prevention

111. *Paryavaran Suraksha Samiti v. Union of India* (2017) SCC OnLine SC 182.

112. *Vellore* (n 1), para 27.

113. *Ibid.*, para 27(2).

114. *Ibid.*, para 27(3).

115. *Ibid.*, para 27(4).

116. *Ibid.*, para 27(7).

117. *Ibid.*, para 27(9).

118. *Ibid.*, para 27(10).

and remediation, the effectiveness of which are discussed in the next section.

Injunctions are another example of mechanisms for prevention and remediation. While they may be used to prevent environmental damage, such as the irreversible pollution of drinking water reservoirs,¹¹⁹ they may also be mandatory injunctions that direct entities to take steps to reverse environmental damage, as the chapters on the polluter pays principle (Chapter 4) and the public trust doctrine (Chapter 6) demonstrate. Injunctions require the balancing of competing considerations, especially when determining whether to allow potentially environmentally damaging activities to continue. The Supreme Court, however, has been far from consistent as regards the metric that it applies for such balancing, both while reviewing environmental or forest clearances, and while determining whether to halt certain kinds of activities.

From restricting itself to assessing whether the government had taken into account relevant and material considerations,¹²⁰ to adopting the ‘reasonable person’s test’ to determine the risk of harm to the environment or human health,¹²¹ the Supreme Court has applied widely differing standards as triggers for the application of mechanisms for prevention.¹²² It has been particularly inconsistent about the acceptable level of harm, as Chapter 5 on the precautionary principle has already demonstrated. The confusion in the Court’s reasoning is especially apparent in *Lafarge Umiam Mining Pvt. Ltd v. Union of India*,¹²³ where the Court claims to apply the principle of proportionality and the doctrine of margin of appreciation while reviewing the clearance granted to a mining project, although it effectively ends up applying the same standards of unreasonableness

119. *Nayudu* (n 34).

120. *Dahanu* (n 58), where the Supreme Court was considering the clearance granted to a thermal power plant.

121. *Nayudu* (n 34).

122. For a more complete discussion of these mechanisms, see Mehta (n 78) 159–65.

123. *Lafarge* (n 37).

that a more traditional judicial review would have entailed.¹²⁴ This kind of inconsistency makes it difficult to learn more about the Courts' understanding of environmental principles, even from legal tests used to determine whether mechanisms for prevention ought to be applied.

While negative remedies like injunctions fall squarely within the ambit of judicial functions, mechanisms for remediation, which require positive steps, tend to be used by courts to bypass executive authorities. As the deployment of evidence-gathering and monitoring mechanisms in the previous sections has demonstrated, this in turn is a reflection of the failure of SPCBs to perform their statutory duties. However, it might also be a reflection of the limited powers at the disposal of SPCBs to take restorative steps, which is discussed again in the concluding section of this chapter. First however, the success or failure of the implementation mechanisms described here are analysed in the context of some of the cases discussed in previous chapters in this volume.

EFFECTIVENESS OF IMPLEMENTATION MECHANISMS

There is no doubt that the Supreme Court has made an important contribution to Indian environmental jurisprudence through the incorporation of international environmental legal principles and concepts, some of which have been modified for the Indian context, like the public trust doctrine and the standard of absolute liability.¹²⁵ However, as this volume demonstrates, much of the Court's reasoning is unsatisfactory, setting up a weak foundation for its orders. For the Court to retain its legitimacy, it becomes all the more important to evaluate the success with which these orders are implemented. This section tracks some of the prominent cases that have been discussed in other chapters, not just to gain an accurate sense of the degree of implementation, but also to

124. Mehta (n 78).

125. *M. C. Mehta v. Union of India* (1987) 1 SCC 395.

uncover the different factors that might contribute to successful implementation.

Vellore is a good case to assess for implementation because all the environmental principles discussed in this volume, except for the public trust doctrine, feature prominently in the Court's judgment. Additionally, as the previous part demonstrated, the Supreme Court gave fairly detailed directions regarding the manner in which the Loss of Ecology Authority was to function. However, the Authority has not performed well in one of its primary tasks, that is, awarding compensation. A study found that compensation had been distributed only in a few talukas, and only 347 out of 547 industries had paid the compensation amount.¹²⁶

The method used by the Authority to assess damage and calculate compensation has also been criticised. The Authority is alleged to have used only data furnished by the Revenue Department and the Tamil Nadu Pollution Control Board (TNPCB), without interacting with a single farmer affected by the discharge of untreated effluents by the tanneries, and apparently without taking into account a scientific study assessing the loss of ecology that the authority commissioned the Tamil Nadu Agricultural University to prepare.¹²⁷ The Authority appears not to have lived up to its name—rather than assess the loss of ecology, its award, according to the Vellore Citizens' Welfare Forum, assesses loss only in terms of loss of agricultural production, and even then, takes into account 'only the loss of crop and not the deterioration of the value of land'.¹²⁸

This unsatisfactory implementation of the Court's orders is aggravated by the extraordinary delay in their implementation. It

126. Geetanjoy Sahu, 'Implementation of Environmental Judgments in Context: A Comparative Analysis of Dahanu Thermal Power Plant Pollution Case in Maharashtra and Vellore Leather Industrial Pollution Case in Tamil Nadu' (2010) 6 *Law Environment and Development Journal* 337, 344–345.

127. Asha Krishnakumar, 'An Award and Despair' (2002) 19 *Frontline* <<http://www.frontline.in/static/html/fl1916/19160930.htm>> accessed 26 March 2017.

128. *Ibid.*

took two years to constitute the Loss of Ecology Authority, despite its prompt notification in the wake of the Court's order, and more than three years to examine representations from the various parties before the final award of the Authority was made in 2001.¹²⁹ Finally, in 2016, 20 years after the Supreme Court's order, the Madras High Court ordered¹³⁰ the winding up of the Authority and the transfer of the 28,000 claims that were pending before it,¹³¹ to the NGT. It remains to be seen whether the NGT will be more effective in disposing of this huge volume of claims.

Some of the reasons that Geetanjoy Sahu identifies for the failure of the Loss of Ecology Authority are: inability to decentralise its decision-making process, the lack of capacity of the Vellore Citizens' Welfare Forum to keep up its activism in the years following the Supreme Court's judgment, and political and market factors that encourage small-scale leather industries that have a 'relatively high pollution-to-production ratio'.¹³²

Factors like these that affect the implementation of orders in environmental cases will inevitably vary from case to case, and it is difficult to point to a common set of social, political, or economic circumstances that determine the implementation of a judgment. In *Bichhri*, a pollution case similar to *Vellore*, there has been comparable delay in awarding compensation despite the smaller number of industries involved,¹³³ although the reason for this appears to be stubborn non-compliance and delaying tactics by

129. Ibid.

130. *Vellore Citizens' Welfare Forum v. Union of India* (2016) SCC OnLine Mad 1881.

131. Both farmers and industries challenged the award of the Authority. An order of the Madras High Court in *K. K. Subramanian v. Loss of Ecology (Prevention and Payment of Compensation) Authority* (2014) SCC OnLine Mad 11620 required each of these claims petitions to be adjudicated independently.

132. Sahu (n 126) 345–52.

133. The action was brought by the Indian Council of Enviro-legal Action against five industries that owned units/factories in and around Bichhri village manufacturing H acid.

the respondent industries.¹³⁴ Some of the industries also claimed to have closed down.¹³⁵ The monitoring mechanisms employed by the Supreme Court in this case, that is, quarterly progress reports to be filed by the Government, do not appear to have had the desired effect. Factors that are not within the court's control obviously play a crucial role in determining the successful implementation of its orders, there are equally a host of ways in which courts themselves can influence the manner in which their orders are implemented.

Of these internal factors, so to speak, the language used by the courts, as well as the type of action required, may have some influence on implementation, although this may often be subverted by external factors that have nothing to do with the courts. The language used by the court refers to the degree of authority in its orders: are they in the nature of binding directions or does the court couch them in the form of softer recommendations?¹³⁶ This affects the manner in which orders are interpreted by the entity to whom they are directed. In *Lafarge*, the Solicitor General argued that the delay in compliance with the Court's direction, to set up a national regulator for the environment, was because the Government had understood it as a recommendation rather than a mandatory requirement.¹³⁷

Sometimes, however, the gravity of the issue under consideration might mean that even a recommendation is acted upon. In the *Oleum Gas Leak* case,¹³⁸ the Supreme Court 'requested' the government to take necessary steps to regulate hazardous industries, and also 'impressed' upon it the need for a national policy to locate such industries in places with scarce populations.

134. The Supreme Court notes this in its final order in *Bichhri* in 2011: *Indian Council for Enviro-legal Action v. Union of India* (2011) 8 SCC 161.

135. *Ibid.*, paras 6–7.

136. Binding directives are usually signalled by the use of 'shall ensure' or 'shall implement', while recommendations are suggested through terms like 'should consider', 'impress upon' or 'urge'.

137. *T. N. Godavarman Thirumulpad v. Union of India* (2014) 4 SCC 61, para 3.

138. *Oleum Gas Leak* case (n 43), para 21.

In response, the Manufacture, Storage and Import of Hazardous Chemicals Rules were notified in 1989. In 1990, the government approved the Second Master Plan for Delhi, identifying category 'H' industries that were large and associated with hazardous emissions, and required to shift out of Delhi within three years.¹³⁹ The government's response to these recommendations must also be understood in the context of the Bhopal gas tragedy and the legal questions surrounding the liability of Union Carbide, of which the Supreme Court was also seized.¹⁴⁰

Like the government, the offending industry in the *Oleum Gas Leak* case complied with the orders of the Supreme Court without 'complaint or demur'.¹⁴¹ This ought to be contrasted with the aggressively litigious strategy adopted by the industries in *Bichhri* to evade compliance. It is difficult to point to the reasons for effective implementation of the Court's orders in the *Oleum Gas Leak* case, as opposed to *Bichhri*. In both cases, the industries were denied permission to restart operations until they complied with the court's orders. In both cases, the Court also appointed expert committees to monitor the implementation of its orders. However, as mentioned earlier, the *Oleum Gas Leak* case was coloured by the events in Bhopal, and the consequent weight of political pressure determined not to let another polluter off lightly. Perhaps the financial pressures that compelled compliance by the industry in this case, appear not to have been as much of a threat in *Bichhri*,

139. Urvashi Narain and Ruth Greenspan Bell, 'Who Changed Delhi's Air? The Role of the Courts and the Executive in Policymaking' *Resources for the Future* (December 2005), <<http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-05-48.pdf>> accessed 12 March 2017.

140. See Usha Ramanathan, 'Business and Human Rights: The India Paper' *International Environmental Law Research Centre* (2001) 1 <<http://www.ielrc.org/content/w0102.pdf>> accessed 4 May 2017, observing that the Bhopal and *Oleum Gas Leak* cases 'altered the contours of the law of safety, compensation and liability' and that the legislation that followed assimilated 'some of the institutional and processual arrangements suggested in the judgments of the court'.

141. Divan and Rosencranz (n 60) 530.

evident from the ease with which one of the Bichhri units pleaded bankruptcy to avoid paying costs, while simultaneously investing Rs 3 crores in a new plant in Vapi.¹⁴²

Delay in implementation, however, appears to be a perennial feature of environmental cases. In the previous example, the attitude of the respondents and the prevailing political atmosphere both played a role in determining whether the Supreme Court's directions would be implemented speedily or not. As mentioned earlier, another factor that influences the speed with which directions are implemented might be the kind of action that the courts require government or other entities to take. For instance, a direction to constitute specialised environmental courts,¹⁴³ which will require legislation to be drafted and resources to be invested in creating new judicial machinery, is likely to take far more time than, say, framing a policy to regulate the use of ecologically fragile areas. In environmental cases, courts have required a wide range of actions, including the enforcement of existing legislation,¹⁴⁴ the implementation of existing guidelines,¹⁴⁵ drafting and implementing new rules,¹⁴⁶ framing a new policy,¹⁴⁷ constituting a new executive or judicial authority,¹⁴⁸ introducing new technical standards in industries,¹⁴⁹ or conducting public hearings.¹⁵⁰ The investment of time, money, and administrative resources that each of these

142. Anju Sharma and Rajat Banerji, 'The Blind Court' *Down to Earth* (30 April 1996) <http://www.downtoearth.org.in/content/blind-court?quicktabs_1=0> accessed 12 March 2017.

143. *Nayudu* (n 34), para 74.

144. *Indian Council for Enviro-legal Action v. Union of India* (1996) 5 SCC 281 (*CRZ Notification case*).

145. *Lafarge* (n 37).

146. *Almitra H. Patel v. Union of India* (1998) 2 SCC 416.

147. *Oleum Gas Leak case* (n 43).

148. *Godavarman* (n 39), setting up the Central Empowered Committee; *Vellore* (n 1), setting up the Loss of Ecology Authority.

149. *Delhi Vehicular Pollution case* (n 72); *Noise Pollution (V), In re* (2005) 5 SCC 733.

150. *Niyamgiri Mining case* (n 91).

directions requires is likely to play a role in determining the manner in which they are implemented.

However, the kind of action required is obviously non-determinative, and even when the subject at hand is something as uncontroversial as the introduction of environmental education in schools and colleges,¹⁵¹ there can be serious delays in implementation. In the *Environmental Education* case, the first order was passed in 1991, but the writ petition was disposed finally only in 2010, with a gap of nearly 12 years between the first and second orders. A possible reason for delay in this case might have been the many different authorities involved in its implementation—apart from the MoEFCC, there was also the Ministry of Human Resources Development (MHRD), University Grants Commission (UGC), the different state boards of education, National Council of Educational Research and Training (NCERT), All-India Council for Technical Education (AICTE), and National Council for Teacher Education (NCTE). In one obvious instance of overlap, the NCERT duplicated work when it framed a syllabus in compliance with the Court's order,¹⁵² and then soon after, made an application to revise it, in light of the MHRD's creation of the National Curriculum Framework (NCF).¹⁵³ In contrast, the direction to constitute National and Coastal Zone Management Authorities in the *CRZ Notification* case,¹⁵⁴ which might be presumed to have taken more time, was implemented relatively quickly (two-and-a-half years from the Court's order), perhaps because the Court was merely ordering the implementation of an obligation that already existed in the CRZ Notification and also because the court was dealing only with the constitution rather than the functioning of the authorities.

The conclusion to be drawn then, from tracking prominent environmental cases over the past three decades, is that there is

151. *M. C. Mehta v. Union of India*, WP (C) No. 860/1991 (*Environmental Education* case).

152. *M. C. Mehta v. Union of India* (2004) 1 SCC 571.

153. Interim Application Nos 1 and 6 in WP (C) No. 860/1991.

154. *CRZ Notification* case (n 144).

perhaps no conclusion that can be drawn about the factors that make the courts' implementation mechanisms successful in some instances but not in others. However, general trends suggest that the courts' monitoring mechanisms are likely the most effective in ensuring that its orders are implemented. Although the deadlines set by the courts might not always be met by the executive, the spectre of a court-appointed body overseeing the time-bound implementation of the court's orders is an important factor in guiding the executive's response. The *Delhi Vehicular Pollution* case stands out as an example of a case in which the Supreme Court closely prodded the executive to frame and implement policies to regulate public transport and curb air pollution, and continues to do so. (The wisdom of the policies themselves is open to question, but is an issue distinct from the implementation of the court's orders.) In this case, the Supreme Court repeatedly issued notices to the relevant authorities, regularly required status reports from them, and recruited experts as well as Delhi citizens to monitor the implementation of its directives. This stringent monitoring might not have been sufficient to ensure timely implementation; without it, however, there might not have been implementation at all. More recently, the Supreme Court directed compliance with the 1 April 2017 deadline, to bar the sale and registration of vehicles non-compliant with Bharat Stage-IV standards.¹⁵⁵

As for the external factors that have influenced judicial implementation mechanisms, organised interest groups appeared to play a particularly important role in the *Niyamgiri Mining* case, through local tribes, as well as non-governmental organisations (NGOs), both local and international, that grew into powerful civil society movements exerting pressure on the government to implement the orders of the Supreme Court.¹⁵⁶ Similarly, public

155. *Delhi Vehicular Pollution* case (n 72), order dated 13 April 2017.

156. Phone interview conducted on 2 March 2014 with Mr Sankar Pani, advocate for one of the civil society groups challenging the mining project. Conversations with unnamed sources also confirm the impact that civil society had in this case. The Niyamgiri Surakhaya Samiti (NSS) with the

and political opinion seems to have been a driving force behind the government's implementation of the Supreme Court's directions in the *Oleum Gas Leak* case.¹⁵⁷

However, organised interest groups can work in the opposite way as well, to delay implementation. Examples include corporate pressure in the *Niyamgiri Mining* case,¹⁵⁸ and the auto industry, truck lobbies and bus operators in the *Delhi Vehicular Pollution* case.¹⁵⁹ When influential and organised interest groups are pitted against each other, the political stand of the party in power is likely to prove crucial in determining implementation, as was evident in the *Niyamgiri Mining* case.¹⁶⁰ When there are organised pressure groups on either side, other factors that are likely to tilt the balance one way or the other are the financial and technical

support of organisations like the Samajwadi Jan Parishad, the Communist Party of India (Marxist–Leninist) (CPI-ML) and the Lok Sangram Manch was at the forefront of protests against Vedanta. Dynamic leaders of these local movements like Bhalachandra Sarangi, state spokesperson for the CPI-ML were prominent in galvanising and organising public opinion against Vedanta, as was Amnesty International, which published an exhaustive report detailing Vedanta's environmental and human rights violations. See 'Don't Mine Us Out of Existence: Bauxite Mine and Refinery Devastate Lives in India' <<http://www.amnesty.org/en/library/asset/ASA20/001/2010/en/0a81a1bc-f50c-4426-95057fde6b3382ed/asa200012010en.pdf>> accessed 6 March 2014.

157. On the day after the leak, members of the Rajya Sabha had demanded the immediate arrest of the industry's proprietors. See 'Gas Leak in Delhi, 200 Hospitalised' *The Times of India* (5 December 1985). Members of the Opposition had staged a walk-out when they failed to persuade the Speaker to allow an immediate discussion on the gas leak. See 'Gas Leaks in Delhi Again, 3 Officials Held' *The Times of India* (7 December 1985).

158. Sudeep Chakravarti, 'Niyamgiri is a Done Deal' *LiveMint* (18 July 2013) <<http://www.livemint.com/Opinion/ujWfo2P1w5vqrrhTGiEVO/Niyamgiri-is-a-done-deal.html>> accessed 4 May 2017.

159. Rajamani (n 4) 300.

160. 'Rahul Opposes Mining of Niyamgiri Hills' *The Hindu* (11 March 2008), <<http://www.hindu.com/2008/03/11/stories/2008031158670300.htm>> accessed 9 March 2014.

resources at the disposal of the State. For example, in the *Oleum Gas Leak* case, although the government enacted rules to regulate hazardous processes in the face of public and political opinion, it was unable to implement them effectively because of a lack of funds, infrastructure, and personnel.¹⁶¹

The response of the bureaucracy is also vital in determining whether the Supreme Court's orders will be implemented well or poorly. It is this body which is responsible for framing policies, implementing rules, coordinating the actions of relevant government ministries and departments, and conducting public hearings. The more inclusive and transparent the bureaucracy is, the better is the implementation.

Clearly, courts cannot control many of the factors that influence implementation and that have been described in this part. However, the factors that do appear to be within its power are the use of non-ambiguous language in framing its orders and directions; the deployment of strong supervisory mechanisms to oversee implementation, especially when there are multiple and complex directions requiring compliance over a particular time period; and the consistent use of expert advice to frame directions that are of a technical nature. The next section considers whether the NGT has eliminated some of the weaknesses in the implementation of judicial orders in environmental cases.

IMPLEMENTATION UNDER THE NGT

The Supreme Court highlighted the need for specialised environmental courts in *Nayudu*¹⁶² and the matter was subsequently

161. Supreme Court Advocate Sanjay Parekh in 'New Laws were Written' *Down to Earth* (15 July 2010), <<http://www.downtoearth.org.in/node/1457>> (last visited 1 March 2014); R. Shrivastava, 'The Poison Piles Up' *Down to Earth* (31 December 1994), <<http://www.downtoearth.org.in/node/32823>> (last visited 1 March 2014).

162. *Nayudu* (n 34).

taken up the Law Commission of India in 2003 in its 186th report.¹⁶³ The National Green Tribunal Act (NGT Act) was passed in 2010, but it was not until the Supreme Court issued directions¹⁶⁴ and the Government was directed to find premises for, and appoint members to, the Tribunal, that it could commence functioning. In addition to judicial members, the NGT is to consist of no less than 10 and a maximum of 20 expert members.¹⁶⁵ If necessary, the Chairperson may also invite persons of 'specialised knowledge and experience' to assist the NGT in particular cases.¹⁶⁶ It was felt that a specialised environmental tribunal would use its expertise to take into account the polycentric and interdisciplinary nature of environmental cases, to pass realistic orders and directions. This would ease the burden on the higher judiciary, which in any case, was experiencing an erosion of legitimacy as it continued to pass orders and directions that were not being implemented. The NGT is also explicitly required to apply the principles of sustainable development, the precautionary principle, and polluter pays principle while passing its orders, decisions, and awards.¹⁶⁷ The previous chapters have demonstrated that the Supreme Court and the High Courts have not clearly articulated the meaning of these principles; given the expertise of the NGT, it might be expected that the content of these principles, particularly complex balancing exercises or the assessment of irreversible damage, will be undertaken with greater rigour.

The NGT initially attracted praise for its ability to stand up to the government as well as corporate groups for their failure to observe environmental laws and rules.¹⁶⁸ In particular, it has

163. Law Commission of India, 'One Hundred Eighty Sixth Report on Proposal to Constitute Environment Courts' (2003).

164. See various orders in *Union of India v. Vimal Bhai and Ors*, SLP (C) No. 12065/2009.

165. NGT Act s 4(1)(b).

166. *Ibid.*, s 3(2).

167. *Ibid.*, s 20.

168. Armin Rosencranz and Geetanjoy Sahu, 'Assessing the National Green Tribunal after Four Years' (2014) 6 *Journal of Indian Law and Society*

quashed environmental clearances granted to large development projects for non-compliance with environmental impact assessment and public participation requirements.¹⁶⁹ However, some of its later orders have attracted the same criticism as the sweeping directives of the Supreme Court in some environmental cases, although part of this criticism comes from the MoEFCC, against which the NGT often finds itself in opposition.¹⁷⁰ For example, its decision to ban all diesel vehicles that are more than 10 years old from entering or getting registered in Delhi has been criticised for arrogating powers of governance to itself, despite being a judicial institution, and for failing to ground its orders in legal reasoning.¹⁷¹

The danger with this is that the NGT risks its own orders remaining unimplemented, in the same way as some of the directions of the Supreme Court have been. An example of this is its imposition of green tax on trucks destined for other states that pass through Delhi.¹⁷² The concern with this is that the successful implementation of this kind of order relies primarily on 'the same administrative set-ups and political machinery they [courts] castigate for lack of inaction to implement these levies and their

191. See also Kanchi Kohli, 'NGT: The First Seven Months' *India Together* (2 February 2012) <<http://www.indiatogether.org/ngt-environment--2>> accessed 12 March 2017.

169. *Debadityo Sinha v. Union of India*, Appeal No. 79/2014, judgment dated 21 December 2016, NGT (Principal Bench); *Jeet Singh Kanwar* (n 34).

170. Yukti Choudhary, 'Tribunal on Trial' *Down to Earth* (30 November 2014) <<http://www.downtoearth.org.in/coverage/tribunal-on-trial-47400>> accessed 8 February 2016. Ministry officials have called the NGT a 'power-hungry' institution and have also criticised its orders for being unrealistic.

171. Arghya Sengupta, 'Captain Planet Gone Wild: Sweeping Diktats of Green Tribunal show Good Intentions but Bad Grasp of Governance and Law' *The Times of India* (11 April 2015) <<http://blogs.timesofindia.indiatimes.com/toi-edit-page/captain-planet-gone-wild-sweeping-diktats-of-green-tribunal-show-good-intentions-but-bad-grasp-of-governance-and-law/>> accessed 12 March 2017.

172. *Vardhman Kaushik v. Union of India*, OA No. 21/2014, judgment dated 7 October 2015, NGT (Principal Bench).

utilisation for fixing or avoiding environmental damage'.¹⁷³ Already, there are several NGT orders that have not been implemented effectively. For instance, the ban on the use of heavy machinery for sand mining,¹⁷⁴ the enforcement of the Draft National Policy for Management of Crop Residues,¹⁷⁵ as well as, interestingly, an order to a State EAC to decide, on merit, the proposals submitted for environmental clearances by mineholders in Sindhudurg, Maharashtra.¹⁷⁶

More often than not, information about the non-implementation of the NGT's orders can be sourced from the follow-up action taken by the Tribunal itself. For example, in *Narhari Lingraj v. State Environment Impact Assessment Authority*,¹⁷⁷ the Pune Bench of the NGT issued a show cause notice to the State EAC for withholding environmental clearance to the mine owners. In other instances, the NGT has ordered civil imprisonment and payment of a fine, by Commissioners of a Municipal Corporation as well as the Corporation itself,¹⁷⁸ has required personal explanations for

173. Nitin Sethi, 'The Irony of Green Levies by Courts' *Business Standard* (16 November 2015) <http://www.business-standard.com/article/economy-policy/the-irony-of-green-levies-by-courts-115111601175_1.html> accessed 12 March 2017.

174. 'National Green Tribunal Angry as Orders Ignored' *Deccan Chronicle* (26 January 2017) <<http://www.deccanchronicle.com/nation/current-affairs/260117/national-green-tribunal-angry-as-orders-ignored.html>> accessed 27 March 2017.

175. *Vikrant Kumar Tongad v. Environment Pollution (Prevention and Control) Authority and Ors*, Application No. 118/2013, judgment dated 10 December 2015, NGT (Principal Bench).

176. Vishwas Kothari, 'NGT Notice to State Environment Panel for Non-Compliance of Order' *The Times of India* (6 January 2017) <<http://timesofindia.indiatimes.com/city/pune/ngt-notice-to-state-environment-panel-for-non-compliance-of-order/articleshow/56362886.cms>> accessed 12 March 2017.

177. OA No. 116/2016, judgment dated 27 December 2016, NGT (Western Zone Bench)

178. *Invertis University v. Union of India*, OA No. 186/2013, judgment dated 18 July 2013, NGT (Principal Bench). See also *Rayons Enlightening*

non-compliance from government officials,¹⁷⁹ and has imposed exemplary costs for failure to file an adequate response.¹⁸⁰ The NGT also has the power, under Section 26 of the NGT Act, to impose imprisonment for a period up to three years, or a fine up to Rs 10 crores, for failure to comply with an order of the Tribunal.

Apart from this explicitly conferred power to take action for non-compliance, the other implementation mechanisms employed by the NGT are largely the same as those already described in this chapter. The NGT regularly appoints expert committees for a variety of functions—to study the impact of construction work in ecologically sensitive areas;¹⁸¹ to perform fact-finding functions such as assessing the extent of diversion of traditional grazing lands to infrastructure, commercial and defence purposes, as well as to attend public hearings in affected villages;¹⁸² to assess the damage caused to the environment by certain activities,¹⁸³ and to monitor pollution.¹⁸⁴

Humanity v. Ministry of Environment and Forests, Application No. 86/2013, judgment dated 18 July 2013, NGT (Principal Bench).

179. *Nawab Khan and Ors v. Department of Housing and Environment, State of Madhya Pradesh and Ors*, OA No. 52/2014, judgment dated 29 April 2014, NGT (Central Zonal Bench).

180. *Vajubhai Arsibhai Dodiya v. Gujarat Pollution Control Board*, Application No. 64/2012, judgment dated 31 October 2013, NGT (Western Zone Bench).

181. *Society for Preservation of Kasauli and its Environs v. Himachal Pradesh Tourism Development Corporation Ltd*, OA No. 506/2015, judgment dated 27 April 2017, NGT (Principal Bench); Anand Bodhi, 'NGT to study construction work impact in Kasauli' *The Times of India* (22 March 2017) <<http://timesofindia.indiatimes.com/city/chandigarh/ngt-panel-to-study-construction-work-impact-in-kasauli/articleshow/57761376.cms>> accessed 12 March 2017.

182. *Leo Saldanha v. Union of India*, Application Nos. 6 and 12/2013, judgment dated 27 August 2014, NGT (Southern Zone Bench).

183. *Manoj Mishra v. Union of India*, OA No. 6/2012, judgment dated 13 January 2015, NGT (Principal Bench).

184. 'Air Pollution: NGT Directs Setting up of Monitoring Panels' *The Hindu* (10 November 2016) <<http://www.thehindu.com/sci-tech/energy->

Evidently, expert panels appointed by the NGT serve as an all-purpose implementation mechanism for it. The power to employ mechanisms for prevention and remediation has specifically been conferred on the NGT by Section 15 of the NGT Act, which empowers it to award relief, compensation, and restitution. Implementation mechanisms that were employed in *ad hoc* fashion by the Supreme Court and the High Courts now have a legislative source of authority. However, despite the institutionalisation of these mechanisms, there are sometimes enduring problems with their functioning, as the following examples demonstrate.

In one of the most prominent matters heard by the NGT in recent times—damage to the Yamuna floodplains because of a cultural festival organised by the Art of Living Foundation—an expert committee was constituted to assess the environmental damage caused. In its preliminary report, the committee estimated that Rs 120 crores would be required to restore the environment. The final report, however, avoids mentioning a specific figure, although reports suggest that a couple of members desired the inclusion of a cost estimate, including a penalty.¹⁸⁵ The committee submitted that a professional organisation might conduct such an estimate more suitably, and confined itself to listing the works that were required to be done at the site.¹⁸⁶ In response, the NGT asked the committee to get this estimate done by an appropriate organisation, although the timeline set by it was too short.¹⁸⁷ This was followed by an estimate of Rs 100–120 crores, as compensation for restoration

and-environment/Air-pollution-NGT-directs-setting-up-of-monitoring-panels/article16286092.ece> accessed 12 March 2017. In the context of air pollution in Delhi, the NGT directed the constitution of central and state-level monitoring committees to develop action plans for air pollution.

185. Amitabh Sinha, 'Why NGT's Expert Committee on Art of Living Event in Delhi Hasn't Spelt Out Costs' *The Indian Express* (18 August 2016) <<http://indianexpress.com/article/opinion/web-edits/why-ngts-expert-committee-on-art-of-living-event-in-delhi-hasnt-spelt-out-costs-2983016/>> accessed 12 March 2017.

186. *Ibid.*

187. *Ibid.*

work by a four-member committee, ultimately reduced to Rs 42.02 crores estimated by a seven-member committee.¹⁸⁸ The experience of the NGT in this case suggests that it might benefit from developing more consistent procedures regarding the assessment of environmental damage and the quantification of compensation.

In another instance, the NGT even issued bailable warrants against three members of an expert panel constituted by it to study the carrying capacity of the hills in the Shimla region.¹⁸⁹ There were several reasons for this, all related to the manner in which the expert panel had conducted itself—all the questions raised by the Tribunal had not been covered in the panel's report, some pages of the report had not been signed by any of the panel members, and the minutes of one of its meetings had not been recorded.

Jurisdictional clashes with the High Courts might also prove to be an obstacle in the implementation of the orders of the NGT. The Nagpur Bench of the Bombay High Court ordered the National Highway Authority of India to undertake road repairs, after taking *suo motu* cognisance of a newspaper Article describing the state of a section of a highway between Maharashtra and Madhya Pradesh.¹⁹⁰ It permitted tree felling, which was incidental to the repairs. When an environmental organisation filed a petition against the widening of the road before the NGT,¹⁹¹ the NGT ordered a stay on the tree felling, until the authorities were able to demonstrate the authority in law under which the felling was to be undertaken.¹⁹² As

188. Priyanka Mittal, 'Art of Living's Yamuna Event: NGT Panel says rehabilitation to cost Rs 42 crore' *LiveMint* (12 April 2017) <<http://www.livemint.com/Politics/L5eYxgf44lto21x3hTaLnM/Art-of-Livings-Yamuna-event-NGT-panel-says-rehabilitation.html>> accessed 4 May 2017.

189. *Yogendra Mohan Sengupta v. Union of India*, OA No. 121/2014, order dated 22 February 2017, NGT (Principal Bench).

190. *The Court on its Own Motion v. National Highway Authority of India*, (2014) SCC OnLine Bom 2936.

191. *Srushti Paryavaran Mandal v. Union of India and Ors*, Appeal No. 25/2015, NGT (Principal Bench).

192. *Ibid.*, order dated 3 July 2015.

a result, 'directly contradictory orders were issued by two judicial authorities, such that obeying the orders of one would have put the concerned authorities in contempt of the other'.¹⁹³

Like the Supreme Court, the NGT may invite criticism for overstepping its judicial function and for passing unrealistic orders and directions. It should focus instead on the stronger and more effective use of its implementation mechanisms. It has been suggested that both courts and the NGT 'should lay down strict conditions for the implementation of environmental judgments, identify the executive agency responsible for carrying them out, and ensure the accountability of the agency if it fails to follow directions'.¹⁹⁴

CONCLUSION

It is difficult to draw definitive conclusions about the meaning of environmental principles from analyses of judicial implementation mechanisms. Irrespective of the environmental principle used by the courts, the implementation mechanisms are usually a combination of measures for prevention and remediation, developed with expert inputs, and monitored with external assistance. More often than not, these mechanisms serve as a substitute for functions that ought to be routinely performed by SPCBs, forest officers, regional offices of the MoEFCC, and a range of other executive authorities that are responsible for ensuring compliance with and the enforcement of Indian environmental law.

These implementation mechanisms have had a mixed record, with a variety of social, political, and economic factors usually influencing the manner in which orders and directions are implemented. However, there are also some weaknesses in the manner in which courts themselves have deployed these mechanisms—inconsistency in the manner in which technical

193. Mehta (n 78) 179.

194. Rosencranz and Sahu (n 168) 197.

expertise is used, vesting court-appointed authorities with sweeping powers, a lack of uniformity in the application of standards of judicial review, and insufficiently deterrent consequences for non-compliance. Courts must be more rigorous about their legal reasoning, more willing to frame their orders and directions with reference to the existing statutory and legal framework, and clearer about the language that they employ.

Even with these changes, however, there are natural limits to the effectiveness of judicial implementation mechanisms. Unless the current environmental regulatory architecture is significantly streamlined and strengthened, the strongest judicial directives are likely to be of limited value. Criminal offences across environmental statutes ought to be rationalised, the possibility of civil penalties ought to be considered,¹⁹⁵ uniform methods to assess environmental damage and calculate compensation ought to be evolved, and principled guidance for executive authorities ought to be developed.¹⁹⁶ Institutional reform proposals,¹⁹⁷ however, appear to focus primarily on the creation of new authorities, prompted in part by the Supreme Court's direction to appoint a national environmental regulator.¹⁹⁸ Such proposals are only superficial attempts to streamline and consolidate existing laws and authorities that do not substantively change the structure of environmental governance in the country, and are positively harmful in as much

195. Centre for Science and Environment, 'Strengthen Institutions, Reform Laws and Streamline Processes: Agenda for Improving Environmental Governance in India' (2014).

196. Manju Menon, Shibani Ghosh, Navroz K. Dubash and Kanchi Kohli in consultation with Pratap Bhanu Mehta and Namita Wahi, 'A Framework of Principles for Environmental Regulatory Reform: Submission to the High Level Committee's Review of Environmental Law' (2014) <<http://www.cprindia.org/research/reports/framework-principles-environmental-regulatory-reform>> accessed 19 May 2017.

197. Report of the High Level Committee (n 28); MoEF, 'Towards Effective Environmental Governance: Proposal for a National Environment Protection Authority' (2009).

198. *Lafarge* (n 37).

as they seek to whittle down the powers of the courts. Judicial bodies must be vigilant of such attempts to dilute their authority. It becomes all the more important for them to exercise restraint in their use of implementation mechanisms that stray into legislative and executive functions. This must simultaneously be accompanied by statutory and regulatory reform, to ensure that all three institutions of government play their appropriate roles in securing compliance with and the enforcement of Indian environmental law.

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