

Legal and Precautionary Principles on Conservation on Biodiversity with Reference to Climate Change in India – An Analysis

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Abstract-

The precautionary principle requires that, if there is a strong suspicion that a certain activity may have environmentally harmful consequences, it is better to control that activity now rather than to wait for incontrovertible scientific evidence. This principle is expressed in the Rio Declaration, which stipulates that, 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.” While an important and intuitively sensible principle, the acceptance of the precautionary principle into law and policy and its implementation in practice have been marked by controversy and confusion. The World Conservation Union has a mandate from its members to assess the meaning and impacts of the precautionary principle in the field of natural resource management and biodiversity conservation, and to develop best-practice guidance for its implementation into policy and practice.

‘Precautionary Principle’ underlines sustainable development which requires that developmental activities must be stopped and prevented if it causes serious and irreversible environmental damage. India, based on this principle has drafted its environmental and biodiversity laws. Under the environmental regulations Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environmental Protection Act, 1986 are aimed at cleaning up the pollution and amount of it released into the environment. Though precautionary principle has not been explicitly stated in the environmental laws, judiciary has supported this by drawing attention to various articles under the Indian Constitution and delivering judgments based on it. Apart from this precautionary principle is part of customary International Law and hence part of domestic law. Previously precautionary

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principle was used only with the matter of environmental pollution but now it is used in the matters relating to wild life protection, biodiversity conservation, matters related to climate change, protection of species, etc.

The application of the precautionary principle to the problem of climate change and application of biodiversity law is discussed in this paper by the author.

Key words- Precautionary Principle, Climate Change, Biodiversity, Environment, Rule of Law.

I Introduction

The headlines in Deccan Herald News Paper¹ on May 8th carried shooting news which read “Bengaluru-based realtors fined Rs. 140 crores for eco violations”. The news read that the National Green Tribunal imposed Rs. 139.85 crore fine on two Bengaluru based realtors for executing projects in violation of environmental norms near Bellandur and Agara lakes in the state capital. This kind of verdicts is seen by the tribunal very often and the reason is that we are racing towards finding a solution to environmental problem which results in climate change.

In 1972, 113 nations of the world gathered in Stockholm, Sweden. They were concerned. The much-vaunted goal of economic growth had brought prosperity and high standards of living. But it had also brought unwanted spillover effects.² The land, air and waters of the world were being polluted to a dangerous level. The natural resources were being exploited unsustainably. The world’s biological diversity was being diminished. Species were being culled at an exponential rate.³ Ecologically sustainable development has to be achieved through the implementation of four principles: the precautionary principle, intergenerational equity, conservation of biological diversity and ecological integrity and improved valuation, pricing and incentive mechanisms.

This is long term will affect climate change. Climate change is one of the most pressing challenges faced by the human kind today. Rising temperatures, changing weather and

¹ Deccan Herald, Hubli-Dharwad Ed. vol. 27, No. 127, May 8th, 2015 at p. 1.

² E Mishan, *The Costs of Economic Growth*, Staples Press, London, 1967, pp. 149-209.

³ N Meyers, *The Sinking Ark: A New Look at the Problems of Disappearing Species*, Pergamum Press, Oxford, 1979, pp. 30-31

precipitation pattern, increasing extreme events, melting glaciers and rising sea levels are some of the consequences of climate change having an impact around the globe.

The precautionary principle, or precautionary approach, has emerged over recent decades as a widely and increasingly accepted general principle of environmental policy, law, and management. It is an approach to uncertainty, and provides for action to avoid serious or irreversible environmental harm in advance of scientific certainty of such harm. While an important and intuitively sensible principle, the acceptance of the precautionary principle into law and policy and its implementation in practice have been marked by controversy and confusion. Acceptance of precaution as a governance/management tool is highly inconsistent across biodiversity-related policy sectors, and in general remains contentious. Many countries have incorporated the principle into general environmental, biodiversity or natural resource law and policy.

The human population expansion has added several pressures on the resources towards their own survival and development. The per capita area of the natural ecosystems is gradually sinking and thereby there is overexploitation of the resources and biodiversity. The Cartagena Protocol on Biosafety of the Convention, also known as the Biosafety Protocol, was adopted in January 2000. The Biosafety Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. The Biosafety Protocol makes clear that products from new technologies must be based on the precautionary principle and allow developing nations to balance public health against economic benefits.

II Precautionary Principle and Biodiversity

The term ‘precautionary principle’ had its origin in the German word *Vorsorgeprinzip*.⁴ In simple terms, the ‘precautionary principle’ conveys the common-sense based advice, to err on the side of caution. The principle was first formally acknowledged internationally in the Preamble to the 1985 Vienna Convention for the Protection of the Ozone Layer, in which the Parties acknowledged the “precautionary measures” which had already been undertaken at both the national and international levels in relation to the protection of the ozone layer.⁵ The

⁴ Interestingly, an alternative translation of this word would mean ‘foresight principle’, which could have given an active and positive impression, as against the reactive and perhaps negative connotation attached with precaution.

⁵ Vienna Convention for the Protection of the Ozone Layer: Preamble. Reprinted in 26 ILM 1516 (1987).

principle intends to prevent harm to humans, environment, and eco-system at large. The precautionary principle is variously described as the fundamental principle underlying all environmental policy, or as a pointless distraction from the real issues. It is seen as a fundamental tool for sustainable development, a safeguard for future generations, and countering a tendency to overlook scientific uncertainties in an unscientific manner.

The precautionary principle, or precautionary approach, is used in a variety of ways, and a wide range of formulations exists. The core concept of precaution can be viewed as a mechanism to counter a widespread regulatory presumption in favour of allowing development/economic activity to proceed when there is a lack of clear evidence about its impacts. The precautionary principle can be viewed as related to an evolving from the principle of 'prevention' and also the well-established principle of 'polluter-pays principle' for environmental management.⁶

Precaution is commonly equated with restrictive, "protectionist" conservation approaches, and assumed to be inconsistent with sustainable use. However, determining the precautionary strategy is likely to require assessment of the relative conservation threats and benefits posed by alternative strategies. Implementation of precaution involves a political and values-based balancing between the interests of biodiversity/resource conservation, and other countervailing pressures such as economic or livelihood interests.

Convention on Biological Diversity though does not directly speak of precautionary principle, it states, 'where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing measures to avoid or minimize such a threat.' The elements of sustainable development of the precautionary principle and intergenerational equity, properly applied, will operate to conserve biological diversity and ecological integrity. The principle of biodiversity recognises the inherent value of all wild flora and fauna species as "biogenetic reserves" and constituents of ecosystems and seeks to protect the variety of these species and their habitats. In accordance with other principles developed under international law, this principle demands the conservation of biodiversity in order to preserve and restore the stability of natural ecosystems.⁷

III Climate Change and Protection of Environment

⁶ K.S. Kavi Kumar, '*Precautionary Principle*', Centre of Excellence in Environmental Economics, Chennai, p.6.

⁷ M Decleris, '*The Law of Sustainable Development: General Principles*', Office for Official Publications of the European Communities, 2000 at pp. 94–98.

Climate change is defined as ‘any changes in climate over time, whether due to natural variability or as a result of human activity’.⁸ Climate change is expected to impact every aspect of our day-to-day life. For example, buying or selling property, choice of fuel for transport or homes, purchasing electricity. The costs of unchecked climate change in economic loss, human misery, and loss of ecosystem services are likely to be enormous. The world is facing increasing natural disasters which are likely to be due to climate change. The number of great natural catastrophes worldwide increased nearly threefold from the 1960s to the 1990s, while economic losses from these same catastrophes increased nine-fold during the same period.⁹

The adverse of climate change can be seen where the resultant faster retreat of most glaciers is expected to affect the snow fed perennial water regimes. Changing environmental attributes are sure to affect the species spectrum and the profile and composition of forests is also likely to change. Estimated crop yield responses to climate change vary widely, depending upon species, cultivation practices and soil properties; pests, and pathogens; the direct effects of carbon dioxide on plants; and interactions between CO², air temperature, water stress, mineral nutrition, air quality, and adaptive responses. Changes in the severity and frequency of extreme heat and cold, and of floods and droughts, coupled with local air pollution and aero allergens may result in changes in infectious disease occurrence, in local food production and also cause under nutrition, leading to impaired child development. Unfortunately, the object could not be achieved as expected.

The primary international legal response to climate change is the United Nations Framework Convention on Climate Change (UNFCCC) which was adopted in 1992 and was entered into force in 1994. The ultimate objective of the convention, as stated in Article 2 is “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference in the climate system”. In accordance with the legal principle of ‘common but differentiated responsibility’ the Convention stresses the developed countries to take the lead in combating climate change and its adverse effects.

The realization that more substantive measures were needed to address climate change led to the adoption of the Kyoto Protocol under the UNFCCC in 1997, which came into effect in

⁸ S. Solomon, *et al.*, ‘*Impact of Climate Change*’, Cambridge University Press, Cambridge, 2007, p.3.

⁹ Aitken Hem, ‘The Role of the Supreme Court in Facilitating Adaptation to Climate Change Impacts in India’, *Journal of Environmental Research And Development*, vol. 7, No. 1, July-September 2012, p. 156.

2005. The protocol proposes various mechanisms to reach an emission reduction target and to enable countries to meet their commitments and to engage participation from all countries in addressing climate change under which more flexible measures were adopted.

Road transport contributes 85% of the greenhouse gas emissions of India's transport sector. India has come a long way in little over 60 years of independence. But this largely fossil fuel based economic growth contributed to rising greenhouse gas emissions which rose from 682 Mt (million tons) CO₂ in 1990 to 1,342 Mt CO₂ in 2004 and has risen up to 1,904.73 Mt in 2007.¹⁰ India is a party to both the UNFCCC and the Kyoto Protocol. Though India has plainly stated that the contribution towards greenhouse gas emission is very less compared to developed countries, it has planned and played a leading role to curb the pollution so that in the long run it does not affect the world climate.

IV Judicial Delineation on Sustainable Development, Biodiversity and Climate Change in India

The achievement of ecologically sustainable development depends on the commitment and involvement of all arms of government, the legislature, executive and judiciary as well as other relevant stakeholders. The judiciary is also a crucial partner in promoting environmental governance, upholding the rule of law and in ensuring a fair balance between environmental, social and developmental consideration through its judgments and declarations. The environmental decisions of the national / state courts and international environmental law have influenced each other.¹¹ The state courts have often developed national environmental jurisprudence by taking inspirations and helps from the international environmental laws.

The resultant is the National Green Tribunal Act, 2010¹² is an Act of the Parliament of India which enables creation of a special tribunal to handle the expeditious disposal of the cases pertaining to environmental issues. It was enacted under India's constitutional provision of Article 21, which assures the citizens of India the right to a healthy environment. The object

¹⁰ Available at <http://envfor.nic.in/sites/default/files/EXECUTIVE%20SUMMARY-PS%20BHRP.pdf>, *Indian Network for Climate Change Assessment, Greenhouse Gas Emissions 2007: Executive Summary* Government of India, May, (2007). Accessed on 3rd May, 2015.

¹¹ Bodansky, Daniel and Brunnee, Jutta, 'The Role of National Courts in the Field of International Environmental Law', *Review of European Community & International Environmental Law*, vol. 7(1), 1998, pp.11-20.

¹² Act no. 19 of 2010.

of the Act was that the Tribunal's is to have a dedicated jurisdiction in environmental matters which shall provide speedy environmental justice and help reduce the burden of litigation in the higher courts. The Tribunal was not bound by the procedure laid down under the Code of Civil Procedure, 1908, but should be guided by principles of natural justice. Time limit of six months was inserted to ensure speedy justice.

Under the Act, the Tribunal consists of 10 expert members and 10 judicial members (although the Act allows for up to 20 of each). The Chairman of the tribunal is the administrative head of the tribunal who shall also serve as a judicial member. Every bench of the tribunal shall consist of at least one expert member and one judicial member. The Chairman of the tribunal is required to be a serving or retired Chief Justice of a High Court or a judge of the Supreme Court of India. This Tribunal thus constituted has made remarkable judgments in protection of environment.

The courts have invoked Article 48-A (duty of the state to protect environment) to develop a fundamental right to environment as part of the right to life under Article 21.¹³ The role of the Indian Supreme Court in protection of environment may be explained quoting the views of Professor S.P. Sathe and Professor Upendra Baxi two leading academics who have extensively written on the role of judiciary in India. Professor Sathe has analyzed the transformation of the Indian Supreme Court "from a positivist court into an activist court". Professor Upendra Baxi, who has often supported the judicial activism in India, has also said that the "Supreme Court of India" has often become "Supreme Court *for* Indians".¹⁴ Many observers of the Indian Supreme Court including Professor Sathe and Baxi have rightly opined that the Indian Supreme Court is one of the strongest courts of the world.¹⁵ The Green Tribunal is an apt example for the above statement.

Under the constitutional scheme the legal status of Article 51(A)-(g) and 48-A is enabling in nature and not legally binding *per se*, however, such provisions have often been interpreted by

¹³ In several leading cases the Indian courts have been guided and inspired by Article 48-A and developed a general fundamental right to environment under Article 21. See, *M.C. Mehta v. Union of India* (Kanpur Tanneries Matter) AIR 1988 SC 1037 at 1038; *Rural Litigation and Entitlement Kendra v. State of U.P.* AIR 1988 SC 2187 at 2199; *Kinkari Devi v. State of H.P.* AIR 1988 4 at 8; *Bichhri Village Case* AIR 1996 SC 1446 at 1459, *Sachindanda Pandey, v. State of W.B.* AIR 1987 SC 1109 at 1114-1115; *T. Damodar Rao v. Municipal Corp., Hyderabad*, AIR 1987 A.P. 171 at 181 etc.

¹⁴Upendra Baxi, *The Avatars of Indian Judicial Activism : Explorations in the Geography of (In) justice*, in S.K. Verma and Kusum (eds.), *Fifty Years of the Supreme Court of India : It's Grasp and Reach*, (Delhi, Oxford University Press, 2000), pp. 156-209 at 157.

¹⁵ S.P. Sathe, *Judicial Activism in India*, (New Delhi, Oxford University Press, 2000), p. 19.

the Indian courts as legally binding. Moreover, these provisions have been used by the courts to justify and develop a legally binding fundamental right to environment as part of right to life under Article 21.¹⁶ In landmark *Doon Valley case*¹⁷, the Supreme Court dealt with the impact of mining in the Doon Valley region and through its orders impliedly generated a new fundamental "right of the people to live in healthy environment with minimal disturbance of ecological balance." Again in *Kanpur Tanneries Case*¹⁸ the Supreme Court extensively quoted the Stockholm Declarations and strengthened the then nascent fundamental right to environment in India. In this case the court gave preference to 'environment' over 'employment' and 'revenue generation'. During this period the Rio Declarations, 1992 was also cited in the *Law Society of India case*.¹⁹

Speaking about sustainable development in *Narmada Bachao Andolan v Union of India*,²⁰ a case concerning the construction of a dam, a majority of the Supreme Court of India defined sustainable development to mean "what type or extent of development can take place which can be sustained by nature / ecology with or without mitigation". It further stated "in cases pertaining to the environment, the onus of proof is on the person who wants to change the status quo and, therefore, it is for the respondents to satisfy the Court that there will be no environmental degradation".

The Indian courts have particularly embraced the precautionary principle also with sustainable development. In *Vellore Citizens Welfare Forum v Union of India*,²¹ the petitioners filed a petition in the public interest under Article 32 of the Constitution of India, directed against the pollution caused by enormous discharge of untreated effluent by the tanneries and other industries in the State of Tamil Nadu. The Supreme Court recognised that a balance must be struck between the economy and the environment. It further stated that "The traditional concept that development and ecology are opposed to each other is no longer acceptable;

¹⁶R.L.E.K., *Dehradun v. State of U.P.* (Doon Valley Matter) was the first case in which the Supreme Court recognized a fundamental "right to live in a healthy environment with minimum disturbance of ecological balance". AIR 1985 SC 625 at 656.

¹⁷*Ibid* at 652.

¹⁸*M.C. Mehta, v. Union of India* AIR 1988 SC 1037.

¹⁹*Law Society of India v. Fertilizer & Chemical Travancore Ltd.*, AIR 1994 Ker. 308.

²⁰AIR 2000 SC 3751.

²¹AIR 1996 SC 2715.

‘Sustainable Development’ is the answer. ‘The Precautionary Principle’ and ‘The Polluter Pays’ principles are essential features of ‘Sustainable Development’.²²

In *M.C Mehta v Kamal Nath*,²³ the Supreme Court of India affirmed the decision in *Vellore Citizens’ Welfare Forum v Union of India*, upholding the precautionary principle as part of the environmental law of India. It stated that precautionary principle is based on ‘public trust doctrine which is part of law of the land’. In *AP Pollution Control Board v Prof. M V Nayudu*,²⁴ the Supreme Court of India comprehensively reviewed the precautionary principle. The Court noted that uncertainty in science in the environmental context has led international conferences to formulate new legal theories and rules of evidence. One of these is the precautionary principle. In *Sujatha v A. Prema*,²⁵ the High Court of Kerala, applying the principle stated in *Vellore* case, considered the precautionary principle in the context of the emission of chemicals from a tyre factory which, according to the petitioner, were creating a health hazard.

In *State of Himachal Pradesh v Ganesh Wood Products*,²⁶ a writ petition was filed seeking issuance of a writ restraining the government of the State of Himachal Pradesh from permitting the establishment of any factory units for the manufacture of Katha in the State. Katha is derived from the Khair tree which is found in considerable numbers in the State. The Supreme Court delivering the judgment stated that, “The considerations of environment and ecology and preservation of forest wealth are absolutely relevant considerations which the Government must keep in mind while devising its policies and programmes.”

Equally with the adoption of precautionary principle and sustainable development our Apex Court has stressed on the impact of both on climate change. In *Rural Litigation and Entitlement Kendra v State of Uttar Pradesh*,²⁷ petitioners were rural villagers concerned about the unauthorised and illegal mining of limestone in the Mussorie-Dehradun belt in the State of Uttar Pradesh which adversely affected the ecology of the area and led to environmental disorder. The Supreme Court stated that this was going to pollute the air, water and the forest which is the main concern of our environment.

²² *Ibid* at 2720.

²³ (1997) 1 SCC 388.

²⁴ AIR 1999 SC 812.

²⁵ ILR 2005 (3) Kerala 258.

²⁶ AIR 1996 SC 149.

²⁷ AIR 1988 SC 2187.

Taking biodiversity seriously, Supreme Court in *Indian Council for Enviro-Legal Action v Union of India*,²⁸ a number of private companies operated chemical factories without the required licences and had not installed equipment for the treatment of highly toxic effluent which they discharged. The discharge polluted water aquifers and the soil in the area. An environmental nongovernmental organization filed a petition on behalf of the villagers whose right to life had been endangered by the pollution caused by the companies' actions. The Supreme Court of India dealt with the liability of the companies to defray the costs of the remedial measures. One of the ways that the liability of the companies could be viewed was from the "polluter pays" principle wherein the polluter is to pay for harming biodiversity.

There are numerous public interest litigations filed on environmental issue where the concern is at large claiming damages as 'public nuisance'.²⁹ Recently, in *Sterlite Industries (India) Ltd. v/s Union of India & Ors*,³⁰ Supreme Court asked Sterlite Industries to pay Rs 100 crores as compensation for polluting environment through its copper smelting plant in Tuticorin.

V Conclusion

The global concerns for environmental crisis have led the evolution and remarkable growth of international environmental law.³¹ Climate change is becoming increasingly certain with more and more extreme events happening around the world. India, too, is extremely vulnerable to the impacts of climate change and needs to develop adaptation strategies urgently. The Supreme Court of India, with its vast body of jurisprudence may play a significant role in adaptation to predicted climate change impacts. The recent setting up of the National Green Tribunal (NGT) by the Parliament has created sort of history in India as this new court would try only environmental cases first time ever in the country. India is only the third country in the world to set up a separate judiciary for environmental cases, after Australia and New Zealand. The Green Tribunal is empowered to order the violators of environmental laws to pay civil damages to any amount that it finds fit to be compensated. Though it is definitely a positive step towards

²⁸ AIR 1996 SC 1446.

²⁹ Lavanya Rajamani, 'Public Interest Environmental Litigation in India: Exploring issues of access, participation, equity, effectiveness and sustainability', 19, *Journal of Environmental Law*, (2007), pp. 293-321.

³⁰ (2013)6 SCR 574.

³¹Philippe Sands, '*Principles of International Environmental Law*', (Cambridge University Press, Second Ed. 2003), p. 14.

environmental protection but the Supreme Court, with its rich precedent will continue to play a significant role in facilitating adaptation to climate change.

If the Apex Court is taking care through its verdicts on protection of environment, intergenerational equity is an umbrella concept which is based on the premise that “the present generation is required to ensure that the health, diversity and productivity of natural resources are maintained or enhanced for the benefit of future generations”. The role of the judiciary in relation to the law of sustainable development is thus of the greatest importance. Based on case to case, it is up to the judiciary to clearly define the circumstances of application and the means of implementation of the principles of sustainable development so that this body of law can continue to develop. If individual members of the judiciary work towards the common goal of achieving an environmentally sustainable future, the law on sustainable development will gain strength and through collective effort the goal will be reached.

VI Suggestions

1. It is just not enough if there are legislations and judicial pronouncements. Public awareness in the matter of environment protection and its impact on climate change plays a pivotal role in protecting the future generation from harmful effects of global warming.
2. The legislations on environment in India has well knit provisions except for the penalty. It has left to the discretion of the court to decide the quantum of penalty and rich even escape by paying the penalty. The question is what next? They continue harming the environment because the penalty is nothing to them. Hence the legislation should impose imprisonment for acts which harm the environment.
3. Precautionary principle and sustainable development are only concept spoken not in action. The Green Tribunal should take into consideration these concepts while delivering judgments.