



Contact- +91-9336853484  
Email- editor.lexrevolution@gmail.com  
Rimjhim Smriti, At PO Nuaon, Krishnabrahm, Buxar-802111 (Bihar)

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*“The judiciary even without the sword or the purse remains the guardian of the Constitution. Its sole strength lies in the public confidence and the trust.”*

***Dr. A. K. Sikri, J.*** in

*Bhusan v. Supreme Court of India,*  
*(2018) 8 SCC 396, para 36*



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Periodical Indexed Journal of Social & Legal Studies

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Lex Revolution welcomes and encourages scholarly unpublished papers on various fields of Law, Human Rights and Social Science from students, teachers, scholars and professionals. The Journal invites the submission of papers that meet the general criteria of significance and academic brilliance. Authors are requested to emphasize on novel theoretical standard and downtrodden concerns of the mentioned areas against the backdrop of proper objectification of suitable primary materials and documents. The papers must not be published in parts or whole or accepted for publication anywhere else.

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- + To provide a platform to discuss the problems related to socio-legal and research issues.

The most valuable and suggestive comments of all the readers are always awaited and welcomed in order to achieve the ultimate goal. We are looking forward for your contributions. All communications shall be made only in electronic form e-mailed to: **EDITOR(DOT)LEXREVOLUTION(AT)GMAIL(DOT)COM**. The submission guidelines are available at website.

#### **Contact**

#### ***Lex Revolution***

Rimjhim Smriti, At PO Nuaon, Krishnabrahm, Buxar-802111 (Bihar)

**Email:** [editor.lexrevolution@gmail.com](mailto:editor.lexrevolution@gmail.com)

**Website:** <https://www.lexrevolution.in>

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## **MESSAGE**

It is with great pleasure we announce the release of Volume IV Issue-3 (2018) of ***Lex Revolution*** ISSN 2394-997X as an intellectual platform for contemporary issues pertaining to various fields of Law, Human Rights and Social Science. Research and dialogue is the sine qua non for the development of any legal system. Our goal is to provide scholars worldwide with comparative papers on recent legal developments on the international level. The journal focuses on education, research and existing legal concerns with an editorial board comprising of academicians, professionals, researchers, advocates and students.

We owe our sincere gratitude to legal luminaries Prof. Gopal Krishna Chandani, Prof. S. K. Gaur & Sr. Advocate Mr. K. N. Chaubey for their valuable guidance and motivation for making this journal a reality. We thank guest editors of this special edition Maj. Gen. Praveen Kumar Sharma (Retd.) and Mr. Pranshul Pathak for their kind support and guidance. We would like to acknowledge the generosity of AdvocateKhoj who have been the continuous platform for us encouraging various forms of legal dialogue with our readers and contributors.

Finally, we would like to thank all prominent members of our Editorial Board for joining us in this new fascinating and promising academic voyage.

We are indebted to the various Contributors, teachers and Research scholars whose views and opinions have been incorporated in the text.

- **Editorial Board**

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## **USE OF THE RIGHT TO INFORMATION IN BATTLING FOR ENVIRONMENTAL JUSTICE IN SRI LANKA**

K.M. Chetana Rukshani Karunatilaka\*

### **INTRODUCTION**

Right to information<sup>1</sup> is a basic human right in democratic societies. It allows the natural and incorporated citizens of a country to freely access governmental information. There are number of international human rights instruments that identify the RTI. The Universal Declaration of Human Rights provides “*Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.*”<sup>2</sup> Further, the Article 19(2) of the International Covenant on Civil & Political Rights also identifies the RTI as an integral part of freedom of expression. Based on these international instruments the contemporary approach taken towards RTI ensures good governance, transparency and accountability of the government bodies and officers.

RTI is a pre-requisite of litigating environmental rights and access to environmental justice. Lack of proper information flow would result in the concept of environmental justice becoming an utter failure. The simple meaning that can be attributed to the term ‘environmental justice’ is equitable distribution of environmental benefits and costs. When it comes to environmental benefits, every person is entitled to live in a healthy environment. Further, in case if equal environmental rights or benefits are denied, such party should have open access to justice. For the purpose of effectively implementing equal environmental benefits and access to environmental justice, accurate and proper information flow has become an essential element.

### **RIGHT TO INFORMATION IN SRI LANKA**

Constitution of the Democratic Socialist Republic of Sri Lanka 1978 contains fundamental rights in its Chapter III. The RTI was not initially identified or guaranteed under the Sri Lankan Constitution. Due to the traditional approach taken towards governmental activities, all the information was kept in a confidential manner. Citizens of the country were denied of certain governmental information based on several grounds.

However, the higher Courts of Sri Lanka had taken the preliminary step in protecting the citizen’s RTI through judicial activism. In the case of *Visualingam and Others v. Liyanage*<sup>3</sup>, Wanasundara J. mentioned that “*it is man's right as the recipient of information to look to as many sources- of information as he likes; and it is equally the duty of the Press which provides the information to seek it from as many sources as possible. If, however, the sources*

\* Lecturer @ Department of Law, University of Peradeniya, Sri Lanka

<sup>1</sup> Hereinafter referred as RTI

<sup>2</sup> Article 19, UDHR 1948

<sup>3</sup> 2 Sri LR 311(1983) at 322

*of information become concentrated in one, or restricted to a few bodies, then the formation of ideas is limited. It is in such circumstances only proper that the sources of information available to the public should be enlarged rather than restricted; therefore there can be no justification for interference with the freedom of the press".* Even though this case was not related to an environmental issue, the Judgment is marked as the first case that the Court attempted to secure the citizen's RTI.

Access to environmental information was recently questioned in *Environmental Foundation Ltd v. Urban Development Authority of Sri Lanka and Others*<sup>4</sup>, The issue in this case was whether a non-profit making organization, duly incorporated under the Companies Act in Sri Lanka, can seek to obtain information related to a natural heritage of the country. Urban Development Authority has refused a request to access information made by the Company and therefore, the Petitioner sought relief under Article 12(1) and Article 14(1) of the fundamental rights chapter of the Constitution. Justice Sarath N. Silva inter alia held, "*Although the right to information is not specifically guaranteed under the Constitution as a fundamental right, the freedom of speech and expression including publication guaranteed by Article 14(1) a, to be meaningful and effective should carry within its scope an implicit right of a person to secure relevant information from a public authority in respect of a matter that should be in public domain. It should necessarily be so where the public interest in the matter outweighs the confidentiality that attaches to the affairs of state and official communications."*"

This case is set to be the landmark judgment that changed the history of access to environmental information. Soon after the delivery of this judgment, the legislature realized the paramount interest of identifying RTI as a statutory right in Sri Lanka. 19th Amendment to the Sri Lankan Constitution which was brought in 2015 contained a separate Section to include RTI in to the Fundamental Rights Chapter. Section 02 of the 19th Amendment introduced the new Article 14(A) to the Constitution, ensuring the explicit protection of the Citizen's RTI. Article 14A reads as follows,

- 1) Every citizen shall have the right of access to any information as provided for by law, being information that is required for the exercise or protection of a citizen's right held by:
  - a) the State, a Ministry or any Government Department or any statutory body established or created by or under any law;
  - b) any Ministry of a Minister of the Board of Ministers of a Province or any Department or any statutory body established or created by a statute of a Provincial Council;
  - c) any local authority; and
  - d) any other person, who is in possession of such information relating to any institution referred to in sub-paragraphs (a ) (b ) or (c ) of this paragraph", Art 14A, (1978)

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<sup>4</sup> 1 Sri LR 123 (2009) at 129-130

A RTI bill was submitted to the Parliament on the 24th of March 2016 and was certified as a law on the 04<sup>th</sup> of August 2016. Though there are some notable differences, Sri Lankan RTI Act is mostly based on the Indian RTI Act No. 22 of 2005. Since the Constitution guarantees the RTI in Article 14A related to administrative and executive actions, there was a need to foster a culture of transparency and accountability in other public authorities too. This Act promotes a social context in which the citizens of Sri Lanka would be able to participate in public life through combating corruption and promoting accountability and good governance.

Under this legal backdrop, it is a timely requirement to study whether the new law on RTI promotes the environmental justice? The focal objective of this research study is to evaluate the use of newly enacted RTI laws as a mechanism in battling for environmental justice. The study will also involve in a comparative analysis of the use of RTI in establishing environmental justice in the South African context. Hypothesis for the research suggests that the RTI law in Sri Lanka is well equipped to fight for environmental justice, provided if necessary practical knowledge and awareness is in place.

## **METHODOLOGY**

This study has utilized both library and field research methodology. Library research was conducted using primary and secondary data resources. Under the primary legal resources, a number of Legislative enactments and case law were referred to whereas under the secondary legal resources, a collection of peer reviewed articles and internet resources were used. This library research was conducted utilizing the following line of literature:

- Identification of the significance of RTI in battling for environmental justice
- How the Sri Lankan Courts have identified the importance of ensuring environmental justice through RTI
- The provisions related to RTI in Sri Lanka, foreign jurisdictions and in international level
- Does the current law assist in establishing equal environmental benefits as well as equal access to justice?
- How other countries encourage environmental transparency
- What improvements can be suggested to the current law in Sri Lanka?

Field Research was conducted under the standard qualitative methodology and for the purpose of collecting data, 10 individual experts were consulted. Standard semi structured questionnaire was used for collecting data and opinions from the experts and the sample was selected as follows,

- ➔ Sample 10: Lawyers 4, Academicians 4, Environmentalists 2

## **ANALYSIS**

The information possessed by the Government is of paramount interest in establishing environmental justice. Citizens of a country are unable to analyze whether they are given

equal benefits of the environment, if they do not have proper information. Quest for environmental justice is driven by available information. Public knowledge and awareness of the environmental injustice, would give them the opportunity to raise their voices against such violations. Therefore, proper and correct environmental information flow, would allow the present generation to protect their as well as the future generations environmental justice. As a preliminary access point to the study, researcher tried to evaluate the knowledge of the data contributors regarding the existence of the RTI as a fundamental right and a statutory right. All the experts who contributed to the data collection process had a general knowledge that RTI is now a constitutionally and statutorily recognized right. They also accepted the fact that RTI is one of the sources in obtaining government held information for evaluating whether the benefits of the natural environment are equally shared among the citizens of a country. Further they pointed out the full and frank disclosure of information as a prerequisite element in successfully litigating the environmental rights.

The outcome of the research suggested that the public RTI can be used as a weapon in battling for equal environmental benefits and access to justice, due to several reasons. One such reason identified by the Experts is the wide scope of definitions provided by the Act, allows covering a wide range of illicit activities, public authorities and undiscovered information related to environment. Firstly, people who are protected under the RTI law or who can seek access to environmental information through the provisions are wide. Article states that ‘citizen’ includes a body whether incorporated or unincorporated, if not less than three-fourths of the members of such body are citizens, Art 14A(3) (2015) whereas the RTI Act provides that every citizen shall have a right of access to information in the possession, custody or control of a public authority, Section 3(1) (2016). This provision read together with Section 43 of the Act, guarantees the RTI of natural and legal citizens of the country. However this right is not available to non-citizens and non-legal entities. This position was established by the Supreme Court of Sri Lanka in *Environmental Foundation Ltd v. Urban Development Authority of Sri Lanka and Others*<sup>5</sup>, where Justice Sarath N. Silva clearly stated, “*the word ‘persons’ as appearing in Article 12(1) should not be restricted to natural persons but extended to all entities having legal personality recognized by law*”. He further upheld that he is of the view that even if the Article 14(1) refers to the term ‘citizen’, any distinction should not carry with it and it would enable a body corporate to vindicate an infringement.

Environmental matters are necessarily matters that come under the public domain. If there is a likelihood of causing a severe long-term wide spread environmental damage, such damage would cause a negative impact on the present and future of environmental justice. Therefore, the scope of information made available to the public is of utmost importance. According to the opinion of the Experts, the definition given to the term ‘information’ also can be a positive factor in ensuring environmental justice. This covers the right to access both information and records/documents that are in either physical (printed) or in electronic form as well as electronic media such as video tape, sound recordings etc, Section 43 (2016).

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<sup>5</sup> Supra note 3 at 131

Fundamental rights protectionism is guaranteed only against an action which comes under the administrative or executive head. Unlike the Constitution, the term ‘public authorities’ is also being given a broad definition under the RTI Act. A list of public authorities that comes under this purview is identified and the remarkable inclusions are public corporations, private educational institutions, Courts and other tribunals, Section 43 (2016).

As the experts identified, the most important provisions of RTI Act that can be used to protect environmental justice are Section 3 and 9. They argue that RTI Act can be used to ensure environmental justice in a right based approach as well as a responsibility based approach. According to them, Sec 03 of the RTI Act recognizes the every citizen’s (natural or incorporated) right to access information. Experts are of the view that this provision enable the public to make an application to any identified public body for obtaining information about an ongoing or a proposed development activity or project that create a possible negative impact on equal benefits of natural environment. If one class of people is denied of clean air, pure drinking water or healthy environment due to a development activity, it is known as violation of environmental justice. They are deprived from the equal protection of law as well as the equal benefits of the environment.

If proper information is accessible to the public under Section 3 of the RTI Act, they can take action to prevent any discrimination on environmental justice beforehand. Public participation in environmental decision making process would be less effective, unless the access to environmental information is granted. Therefore, the experts are of the view that Section 3 enables the public to access environmental information for active involvement of establishing equal benefit of environment.

Sec 9 of the RTI Act delivers the responsibility based approach to environmental justice. According to the provisions of the Section, a responsibility is casted up on Ministers to inform the public about any initiation of a project. A project for the purpose of this Section means a foreign funded project which exceeds hundred thousand US Dollars (US\$ 100,000) or a locally funded project which exceeds five hundred thousand rupees (Rs. 500,000), Section 9(3), (2016). Experts consider this as a very progressive provision where the liability casted up on the minister can be utilized in the mission for environmental justice. Since the Ministers have a statutory obligation to disclose regarding a proposed development activity, the public would be given a broad opportunity to evaluate the possible environmental effect and the impact on their lives, before actively participating in the assessment or decision making process.

Another important element of environmental justice is accessibility of remedies, in case if equal benefits are deprived. Therefore, one of the positive features of the RTI Act, in accessing environmental justice is the appeal opportunity. Three appeal opportunities are being identified by the Act, namely, appeal to the Designated Officer, appeal to the RTI Commission and finally appeal to the Court of Appeal. This wide range of appeal options expands the access to justice in case if the citizen’s freedom of environmental information is violated. The experts are of the view that it clearly provides better access options to the administration of justice process in case of violation of equal environmental benefits.

Even though there are number of progressive points to be noted under the RTI law in Sri Lanka that assists environmental justice, existence of some drawbacks is inevitable. Every system in the world cannot be completely successful or 100% progressive, but some shortcoming are also coupled with that,

Some of the shortcomings identified by the experts are:

- Lack of public awareness of the use of RTI for environmental matters,
- Lack of training provided for the staff in public authorities,
- Costs involved in the appeal process

The two fold elements of environmental justice, namely equal environmental benefits and open access to justice in environmental matters are clearly incorporated in to the statutory framework in Sri Lanka. Constitutional RTI as well as the RTI Act No. 12 of 2016 play a vital role in balancing the environmental information flow for a better implementation of public benefit. The practical implementation of the environmental justice has become the major failure in the process.

Article 24 together with Article 32 of the South African Constitution, provide Constitutional protectionism for RTI, whereas the Promotion of Access to Information Act No. 02 of 2000 also supports right to environmental information. In the Trustees for the time being of the *Biowatch Trusts v. Registrar, Genetic Resources and Others*<sup>6</sup>, the question that the Court had to decide up on was related an environmental information denial. The Court decided mainly up on two regards, firstly, whether Biowatch can file this action since it is a public interest non-governmental organization, to which the Court answered affirmatively. Secondly, whether it can litigate not on its behalf but in the public interest, for which the Court again answered positively.

Therefore, it is clear that right to environmental information can be legitimized used the existing RTI law in a country. Further, judicial activism relating to open environmental information flow also would mark a paramount remark in the process of setting up environmental justice.

## **CONCLUSION & RECOMMENDATIONS**

Since sufficient statutory regulations are in place for protecting environmental justice through RTI, lack of awareness of the general public needs to be properly addressed for the purpose of implementing the process. Persistently low level knowledge of the people regarding the RTI and how it can be used to access environmental information had become a major barrier. Therefore, the Right to Information Commission and other public authorities such as Central Environmental Authority can take the initiative steps to commence awareness programs all around the country. The public should be given proper education of their rights and enforcement of those rights.

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<sup>6</sup> ZACC 14, (2009)

Secondly, the Information Officers appointed for each public authority must be given a proper training regarding the RTI law. Most of the public officers are not people with a legal background, therefore interpreting the provisions of RTI law and deciding the scope of limitations available to RTI could be a hard task for them, unless a proper training is given. Further, a culture that fosters the open information flow, transparency, accountability and good governance must be promoted in public authorities. Human psychology of all the officers in public authorities should be altered to reduce seriously deficient administrative actions and to support open information flow mechanism.

When equal environmental benefits are denied, there are number of remedies provided by the Constitution as well as the RTI Act. However one of the disadvantages identified in these remedial processes is the high cost involvement. In case if environmental information are denied by a public authority, two fold remedies are available;

- Making a Fundamental Rights petition to the Supreme Court and
- Making an appeal under the RTI Act; where final appeal lies in the Court of Appeal.

However both the final remedial options available are considered to be high costly litigation process. Therefore, the members of the public are hesitating to go to the adjudication system, in case of violation of their environmental benefits.

A recent approach taken by the South African Constitutional Court can be taken as an example in this natured situation. In the Trustees for the time being of the *Biowatch Trusts v. Registrar, Genetic Resources and Others*, the costs attached had been recognized as the single most significant barrier to access to environmental justice.

The South African Constitutional Court held that it is the duty of the State to cover costs of environmental litigation, if the applicant becomes successful in a constitutional litigation. This decision is a positive approach that can be adopted by the Sri Lankan Courts, in helping the public for open access to environmental justice. If the state can implement a mechanism in overcoming the above mentioned drawbacks, the RTI law in Sri Lanka, can be effectively and efficiently used as a weapon in the process of battling for environmental justice in the country.

## **PROTECTION OF ENVIRONMENT THROUGH SPS MEASURES UNDER THE WTO: DILEMMAS & CHALLENGES**

Muhammad Omar Faruque\* & Sk. Md. Habibullah\*\*

### ***Abstract***

*Sanitary and Phytosanitary (SPS) measures are measures in international trade under the World Trade Organization (WTO) legal regime those tend to protect the human, animal and plant health, the core component of our environment. Although the SPS mechanism under WTO projects to safeguard the environment ultimately, this paper will examine how far SPS measures can offset the harmful impact on the environment and will argue that SPS measures are often being undermined by WTO dispute settlement board labelling it a non-tariff trade barrier. When protection of environment and trade liberalization comes in a conflict, the WTO regime often goes in favor of trade liberalization rather than allowing SPS measures. In the SPS agreement itself, it does not cover environmental issues comprehensively. For instance, capacity to resort to precautionary approach by member states for protection of environment is limited. Even the compliance challenge in third world can even endanger the environment protection as it is. For an environment-friendly international trade regime, SPS measures need to be modified and WTO dispute settlement should prioritize it where it requires most.*

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\* Daffodil International University, Dhaka, Bangladesh

\*\* Daffodil International University, Dhaka, Bangladesh

*"Every part of this earth is sacred to my people. Every shining pine needle, every humming insect, all are holy in the memory and experience of my people. We know the sap which courses through the trees as we know the blood that courses through our veins. We are part of the earth and it is part of us. The perfumed flowers are our sisters. The bear, the deer, the great eagle, these are our brothers. The rocky crests, the juices in the meadow, the body heat of a pony, and man, all belong to the same family."*

- *Chief Seattle's Letter to the President of the United States, 1852*

## INTRODUCTION

If a single plant or animal suffers, the whole environment suffers since those are inseparable and integrated part of our environment. For a viable environment, it is much needed to ensure the wellbeing, health and overall better life conditions of the plants and animals in addition to our age-old anthropocentric bias towards humans. Sanitary and Phytosanitary (hereinafter mentioned as SPS) measures are a set of measures in international trade regime under the World Trade Organization (WTO) those tend to protect not only the health of human but also the health and wellbeing of animal and plant, the core component of our environment.<sup>1</sup> Although trade-obsessed scholars often argue that such measures are disguised form of trade protectionism, very few can defy the importance of striking a balance between a green environment and a liberal trade environment free from protectionist mindset.

It is evident the proliferation of international trade has contributed to spreading of diseases more than ever.<sup>2</sup> We have witnessed that how far disease like Ebola could do in the very recent past. If we pledge to ameliorate the present standard of degrading environment by improving the standard of environmental components, a better treatment to the health and safety of flora and fauna is must in addition to general human well-being. Although the SPS mechanism under WTO projects to safeguard the environment by pledging a deep commitment to these standards, we will examine how far they could perform in turning their pledges into a reality. In doing so we will compare how far the overall WTO regime guided by the SPS agreement along with the interpretations of WTO dispute settlement body comes in conformity with the general principles of international environmental law. In doing so this paper tends to analyze Precautionary approach, Harm Prevention, Sustainable Development, Polluter Pays Principle and other general and customary international principles of International Environmental law to show how far the overall WTO set up could echo this overarching environmental principles.

## HISTORICAL EXPERIENCE: FROM GATT TO WTO

<sup>1</sup> Cambridge Dictionary defines environment as 'the air, water, and land in or on which people, animals, and plants live'.

<sup>2</sup> Charles Perrings, 'Options for managing the infectious animals and plant disease risks of international trade' (February 2016) 8(1) 27 Springer <<https://link.springer.com/article/10.1007/s12571-015-0523-0#citeas>> Accessed on: 16 October 2017

At the inception of GATT, environment was not focused and this continued till the Seventies. Before the rise of environmental issues in GATT arena in order to gain economic growth reckless trade practices took place. In 1972, at Stockholm environmental issues grabbed a small foothold. A Group on Environmental Measures and International Trade (EMIT Group) was formed and it met only once in 1991 prior to the 1992 United Nations Conference on Environment and Development in Rio<sup>3</sup>.

After the Stockholm Conference awareness regarding environment began to grow and several activities took place in order to hold the horses of profit maximization mentality. In Tokyo Round Agreement on Technical Barriers on Trade (TBT) was negotiated. In 1982, concern by the developing countries were raised regarding export of harmful products to them from the developed countries where such products were prohibited to use for being environmental hazard or risk to health and safety.<sup>4</sup> Brundtland report of WCED- Our Common Future brought more focus on sustainable development. Rio Earth Summit took place in 1992 and sustainable development built a bridge between environmental protection and development in a more useful way.

Marrakesh agreement established the new WTO regime and gave more importance to environment as the preamble of the agreement suggests optimal use of world's resources in order to achieve sustainable development and preservation and protection of environment. The hopes and dreams of pro-environment thinkers were still not given the demanded importance within the new framework as no WTO agreement contained trade-environment issues and GATT Article XX brought only two exceptions of the non-discriminatory principle under which environmental measures may be taken by any member.

Art XX (b) permitted measures for protection of human, animal or plant life or health and Art XX (g) permitted measures for conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption. These measures can be availed of after wearing the shackles of conditions mentioned in the Article and it was intended that these measures do not become non-tariff trade barriers to trade liberalisation<sup>5</sup>. Particularly to elaborate rules for the application of the provisions of Article XX(b) for the use of sanitary or phytosanitary measures Agreement on the Application of Sanitary and Phytosanitary Measures came into existence.

## **GLOBALIZATION OF TRADE: ENVIRONMENT AT A STAKE**

It is evident that the globalization of international trade has contributed to a rapid transmission of human, plant and animal diseases. In particular livestock, rural habitats, native wildlife population have been adversely affected throughout breaking of different pests

<sup>3</sup> M Rafiqul Islam, *International Trade Law of the WTO* ( 1st Edition, Oxford University Press 2006) p515

<sup>4</sup> World Trade Organisation, 'Early years: emerging environment debate in GATT/WTO' <[https://www.wto.org/english/tratop\\_e/envir\\_e/hist1\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/hist1_e.htm)> Accessed on: 16 October 2017

<sup>5</sup> M Rafiqul (n 3) p516

and viruses. For instance Ebola virus has marked a massive widespread adverse effect on environment resulting in more than 1300 human deaths only in West Africa.<sup>6</sup> It has significant effect on the economies like Guinea, Liberia, and Sierra Leone.<sup>7</sup> In Europe the number of plant disease has quadrupled during the 20th century.<sup>8</sup> Many animal diseases like Foot and Mouth, H9N2 Avian Influenza, Swine Fever and Bovine Spongiform Encephalopathy have increased keeping pace with the ever expanding new markets and new species under international trade regime.

Diseases like Cinnamomi root, Dutch elm, Chest blight, Raspberry collar rotm dogwood anthracnose, Box blight, various phytophthora diseases including oak root rot, sudden oak death and other diseases had been frequent before 1990 but these have expanded like anything in the realm of international trade under WTO resulting in gross negative impact on environment. Moreover disease linked with macroparasites was a notable one found at national frontiers. Bacterial,Viral and Fungal crop diseases have been opened out with the help of trade in risk materials.

The mechanism of trade-related disease risks of plants and animals is generally covered by the WTO Agreement on Sanitary and Phytosanitary measures (SPS Agreement). Current assessment of risk procedures for pathogens spread via trade activities aim at SPS capabilities of member states. In particular it focuses on exporting countries. Still the possibility of transmission in different location depends mainly on the prevalence of trade routes between them, be it direct or indirect. The other factors are the volume of goods and the third being biosecurity.<sup>9</sup> In terms of epidemic disease spreading, Dixit-Stiglitz trade model has demonstrated how international trade can facilitate the transmission of infectious diseases<sup>10</sup> So, it is apparent that with the passage of time, in the era of liberalized economy we have witnessed more vulnerable state of our core environmental components.

Secondly, if we tend to visualize the problem from another viewpoint, we remark how trade contributes to a negative development in environment. A critical issue has had attention and recently been discussed in the WTO forum. That is about Invasive Alien Species. Invasive alien species can be threatening to a particular new area as a consequence of export and import. Those who enter in a new habitat are said to be alien and since they threaten the biodiversity, they are often called as invasive. Biodiversity consists of domestic and agricultural species and also it cover wildlife. The very reason behind taking this as threat is likelihood of food competition, spreading of disease and predators. It is inevitable that one

<sup>6</sup> William B. Karesh and others, 'Wildlife Trade and Global Disease Emergence' (July 2005) 11(7) Pubmed <<https://www.ncbi.nlm.nih.gov/pubmed/16022772>> Accessed on: 16 October 2017

<sup>7</sup> Richard Hamilton, 'Ebola Crisis: The Economic Impact' (BBC, 21 August 2014) <<http://www.bbc.com/news/business-28865434>> Accessed on: 16 October 2017

<sup>8</sup> Charles (n 2)

<sup>9</sup> Charles (n 2)

<sup>10</sup> Tuotuo Yu, 'Epidemic Geography: A Theory of International Trade and Disease Transmission' <<https://www.parisschoolofeconomics.eu/IMG/pdf/jobmarket-1paper-tuotuo-pse.pdf>> Accessed on: 16 October 2017

species which is in a balanced ecology can be invasive in a new habitat. Since Through fasten trade regime such alien species can be placed into new set up. Domestic pets, ornamental plants, farm animals or crops and even introduction of predators in controlling pests and unintentional spread in shipment of goods can be few example of this.<sup>11</sup> Realizing the necessity of such trade and environment crossroads, the WTO secretariat has held a special seminar on this very recently.

From the real experience that we have encountered in recent past, we can feel the importance of having a proper balance between the indiscriminate inclinations towards liberalization and maintaining a viable safer, and sustainable environment with utmost well-being of its core components.

## THE SPS AGREEMENT OF WTO: AN OVERVIEW

SPS agreement sets a set of rules which an importing country can set including any measure, requirement, rules and detailed process to protect the life of human, plants and animals. Not only to protect life but also they can be inflicted to save human, flora and fauna from potential risks arising from the spread of pests, diseases, organisms those cause diseases and from toxins, contaminants, additives in trade channels. In doing so the SPS agreement tends to ensure the standard of international standard setting organizations. In terms of food safety SPS agreement ensures the standards of Codex alimentarius commission (Codex) under the auspices of World Health Organization, for plant safety- the international Plant protection Convention, 1951 and for the protection standards of animals, International Office of Epizootics. However, according to the agreement, SPS measures cannot be used to create barrier in international trade.<sup>12</sup> It is apparent from the agreement that, it is indeed another tool of trade liberalization and has been introduced to offset the erstwhile protectionist use of SPS mechanisms under the then GATT and to promote a transparent, consistent and predictable trading regime.<sup>13</sup> Critical scholars argue that it does not cover environmental interests primarily.<sup>14</sup>

Although Both Technical Barriers to Trade Agreement<sup>15</sup> and SPS agreements tend to protect the environmental interests externally but the very fabric of these instrument along with their pro-liberalization construction in judicial forum has undermined the environmental concerns repeatedly. Although in few instances the Dispute Settlement Board of the WTO has underscored the importance of environmental protection but the overall approach of the adjudicating board towards environment is secondary in comparison to their ultimate inclination to trade facilitation.

<sup>11</sup> World Trade Organisation, 'Defending Biodiversity from 'alien species'- role of trade rules examined' <[https://www.wto.org/english/news\\_e/news12\\_e/sps\\_18jul12\\_e.htm](https://www.wto.org/english/news_e/news12_e/sps_18jul12_e.htm)> Accessed on: 16 October 2017

<sup>12</sup> The WTO Agreement on the Application of Sanitary and Phytosanitary Measures, Preamble

<sup>13</sup> M Rafiqul (n 3) p119

<sup>14</sup> ibid

<sup>15</sup> Agreement on Technical Barriers to Trade 1994

Unlike past times SPS agreement has ensured a harmonized system of compliance. It has introduced a system of complying by mutual recognition of standards and the equivalence of those standards.<sup>16</sup> Where the measures are supposed to be different country to country generally, the SPS agreement requires the members to accept equivalent measures as much as the other state party. Thus an exporting country needs to comply the standards not less than that of the importing country. Such mutual recognition of SPS standards has paved the way to build up certainty and harmonisation which is ardently important for multilateral trading regime. It is permitted to engage in bilateral recognition understanding in the shadow of SPS agreement without violating the basic Most Favoured Nations treatment.<sup>17</sup>

Under SPS Agreement, SPS measures need to be taken based on risk assessment procedure made according to befitting mechanisms and tools developed by relevant international authorities.<sup>18</sup> However there must be a causal link between the probable risk and the measures taken for mitigating those risks.<sup>19</sup> And an important feature of the SPS agreement is it is incumbent upon member states to maintain utmost transparency.<sup>20</sup> Control, inspection and approval procedures including national systems for approving the use of additives or for establishing tolerances for contaminants in foods, beverages or feedstuffs are to be maintained within the tenets of Annex C<sup>21</sup>. Such procedures cannot be less favorable than they are towards domestic like products and cannot cause undue delay thus resulting in loss of exporting countries.

But the systems are too complex to avail its intrinsic benefits for a number of reasons. Although Developing countries are entitled to enjoy a bit longer period of time to comply the SPS measures undertaken by a member, it cannot enable the exporting developing and least developed countries to come up with environment friendly production to cater the needs of erstwhile market. Since the developed countries are mostly the consumers of those agricultural products those comes under SPS regulation, they indirectly contributing to such environmental vice at the starting point of supply chain. But unfortunately the hefty price has to be extracted from the direct producers not from the consumers for whom such products are being made. So, it is apparent that polluter does not pay all the time.

## **WHY SPS MECHANISMS ARE FAILING TO ADDRESS THE NEED:**

### **A) A *trade obsessed SPS regime***

It should be kept in mind that the SPS agreement came into force in encountering the protectionist attitudes of different countries in disguise. So, the main focus was never to improve the human, animal and plant health or the environmental considerations. All it did

<sup>16</sup> SPS Agreement (n 12), Article 4

<sup>17</sup> SPS Agreement (n 12), Article 4(2)

<sup>18</sup> SPS Agreement (n 12), Articles 5(1) and 5(2)

<sup>19</sup> M Rafiqul (n 3) p112

<sup>20</sup> SPS Agreement (n 12), Article 7 read with Annex B

<sup>21</sup> SPS Agreement (n 12), Article 8

was setting up a mechanism to make the SPS very cumbersome to apply and use. This intrinsic pitfall has shaped the SPS regime leaving a very limited scope of improvement. Such intentional complexities are seen in different set up of SPS agreement along with different judicial decision relating to it.

*A1. Excessive procedure complexity to comply which makes sanitary and phytosanitary measures to be very tough to apply*

The procedure of control and inspection is very complicated for the importing countries. Annex C provides that the importing country is duty bound to inform the time period of completion of such procedures and has to explain any kind of delay. Importing country has to have a body that has to review complaints by the exporting countries regarding control and inspection procedure. The most common complaints are that importing countries are not following the international standards. Long delays in completing risk assessments or allowing imports is another frequent complaint.<sup>22</sup>

*A2. It needs a costly and time-consuming procedure to assess the risk to meet the threshold of the agreement*

According to Article 5.2 of the agreement, there is a list of different factors ranging from certain scientific factors to technical factors that members need to keep in mind while assessing risks. These factors are available scientific evidence, sampling and testing methods, prevalence of specific diseases or pests, relevant processes and production methods, existence of pest- or disease-free areas, relevant inspection, relevant ecological and environmental conditions and quarantine or other treatment<sup>23</sup> Each and every method of assessing risk calls for a sizeable amount of money and time, which makes the whole regulatory system very troublesome for the country who needs environmental protection. Even in emergency situation consequence may come too imminently to bother these complex procedures.

As a result the Agreement itself has been serving the interest of trade liberalization more than any other consideration. Even the face of the agreement guide us to think it pro-environment, it tends to ensure the agenda of capitalist market economy.

*A3: Tension between local standards and a ‘desirable’ global standard*

In WTO regime if members blindly obey the standards set internationally, it is comparatively less likely to be legally challenged.<sup>24</sup> The chances of being challenged under SPS measures become higher if any particular member state tries to set their own formulas although they are, functionally, at liberty to fix their befitting standards according to scientific requirements

<sup>22</sup> World Trade Organisation, ‘Current issues in SPS’ <[https://www.wto.org/english/tratop\\_e/spse/spse\\_issues\\_e.htm](https://www.wto.org/english/tratop_e/spse/spse_issues_e.htm)> Accessed on: 16 October 2017

<sup>23</sup> Appellate Body Report WT/DS26/AB/R; WT/DS48/AB/R European Communities- Measures Concerning Meat and Meat Products(Hormones) [187]

<sup>24</sup> World Trade Organisation (n 22)

and national necessity. In realm of this textual flexibility, the practical data shows that such departure can negatively affect them since they have to face legal challenges every now and then. Should not particular countries have some customized standards that best suits with their respective environment and ecology?

Generally, even after underscoring the importance of SPS measures, private sector exporters presuppose that the original intent of SPS is offsetting protectionism that shields the producers rather than shielding crops, livestock and consumers.<sup>25</sup>

#### A4: *Judicial attitudes towards SPS regime*

In interpreting the SPS agreement the WTO panel opined in EC- Approval and Marketing of Biotech products<sup>26</sup> that SPS agreement through its subparagraph (d) included the risks to environment in general along with other economic and property damages. However the panel even emphasized on adverse effects on biodiversity, population dynamics of species or biogeochemical cycles by expanding the protection from mere health of plants and animals. In doing so the panel rejected the European Communities' argument that SPS did not intend to cover the risks of environment in general.<sup>27</sup> However, we see that the EC's argument is not tenable since there is a specific mention of adverse consequence on environment in the risk assessment procedure of the agreement.

Although Panel and appellate board liberally construed the agreement to encompass the environmental issues, at many instances they have shown over inclination towards trade liberalization through undermining the environmental safeguards. For example with regard to the risks, it has been mentioned in the Appellate Body of EC-Hormones that, in the process of risk management, risk must be actual not theoretical.<sup>28</sup> Such pro-liberalization construction of the agreement has paved the way of unregulated free market often resulting in environmental vulnerability.

In some cases, DSB has showed their concern on negative impact on environment. For instance, in Beef hormone, the judges said that scientific evidence needs not to be corroborated by mainstream scientific authority/opinions.<sup>29</sup> In a separate para the panel held that even minority science cannot be discounted outright. However, the political reality and the invisible force of free market economy have often led the forum to champion liberalization agendas.

#### B) *Trade Liberalization vis-a-vis Environmental Protection: How far SPS regime resonates the International Environmental Law principles*

<sup>25</sup> World Trade Organisation (n 22)

<sup>26</sup> Panel Report WT/DS291/R ; WT/DS292/R ; WT/DS293/R

<sup>27</sup> ibid[197] - [211]

<sup>28</sup> Appellate Body Report (n 23) [184] - [186]

<sup>29</sup> Appellate Body Report (n 23) [116] - [117]

### B1: Scientific Surety vis-a-vis the principle of 'Precaution'

SPS measures can be applied only after availing sufficient scientific evidence<sup>30</sup> and may not be availed where the evidence is not certain. This principle directly clashes with one of the significant environmental principles 'Precautionary approach'. This approach suggests that where there are threats of serious environmental damage, scarcity of detailed scientific certainty should not be used as a reason for postponing cost effective measures to prevent environmental damages.<sup>31</sup> Although debatable, many regard this principle as a customary international law.<sup>32</sup> If not customary it is agreed to be one of the general principles of international environmental law. But the panel rejected precautionary argument in Beef Hormone dispute decision. The AB also reiterated its stand by saying that precautionary approach is yet to be placed in the SPS agreement and thus cannot be placed in a place superior to the liberalization obligations. The stringent threshold of fulfilling 'Three-Tier Test' as laid by Australia- Measures Affecting Importation of Salmon<sup>33</sup> is very difficult to achieve. For passing the test it must be shown that there is an alternative SPS measure which is, *inter alia*, significantly less trade restrictive than the present one. The AB in Australia-Measures Affecting Importation of Apples from New Zealand<sup>34</sup> also resonated Salmon to explain article 5.6 of the agreement.

AB in Australia-Salmon<sup>35</sup> has held that

*"If the level of protection achieved by the proposed alternative meets or exceeds the appropriate level of protection, then the importing member's SPS measure is more trade-restrictive than necessary to achieve the its desired level of protection"*

In crux of this difficult test many countries are not being able to safeguard their environment and health issues. However provisional measures can be taken in case there is insufficiency of scientific evidence.<sup>36</sup> But no way can't the measures be more trade-restrictive than necessary, which is a reproduction of GATT Article 20.<sup>37</sup> And provisional measures can only be taken for a definite period of time. In Japan- Measures Affecting Agricultural Products<sup>38</sup> the AB opined that the reasonable period of time depends on obtaining necessary information for forming the review decision.<sup>39</sup> Although this provisional measure echoes the precautionary

<sup>30</sup> SPS Agreement (n 12), Article 2

<sup>31</sup> UNESCO, The Rio Declaration On Environment And Development 1992, Principle 15

<sup>32</sup> Patricia W. Birnie and Alan E. Boyle, *International Law and Environment* (Clarendon Press,Oxford 1992) p122

<sup>33</sup> Appellate Body Report WT/DS18/AB/R

<sup>34</sup> Appellate Body Report WT/DS367/AB/R

<sup>35</sup> Appellate Body Report (n 33) [200] - [201]

<sup>36</sup> SPS Agreement (n 12), Article 5(7)

<sup>37</sup> SPS Agreement (n 12), Article 5(6)

<sup>38</sup> Appellate Body Report WT/DS76/AB/R [93]

<sup>39</sup> ibid

principle<sup>40</sup>, the final decision of SPS measure is in no way in conformity with Precautionary Principle.

#### B2 : No Extraterritorial Application vis-a-vis principle of Harm Prevention

The principle of harm prevention generally deals with trans boundary harm between states which reflects the idea of extraterritorial measures by any state.<sup>41</sup> A state has to stop actions in its own territory if it causes harm to the environment of another state.<sup>42</sup> The production or processing system is not a matter of consideration under the SPS Agreement. So, if any trans boundary harm is committed by any state no measures under the SPS Agreement can be availed of. Trans boundary harm can also extend to harm caused in global common areas like Antarctica or areas beyond national jurisdiction as the high sea, deep sea and outer space<sup>43</sup>. So, for protecting such areas harm prevention principle may apply. Such extra jurisdictional measures in the nature of SPS are not available for protecting global common areas i.e. areas beyond national jurisdiction or common property goods are those to which everyone has free access under the SPS Agreement. Consequently, they can be over utilized because when producers use common property goods or global common areas they do not consider the impact of their use.

By virtue of Annex A(1)(a) of the SPS agreement, SPS measures can only be taken to protect the importing country from the negative effects on its environment which may take place from the imports of any goods. So the Shrimp Turtle case<sup>44</sup> will clearly show that how SPS agreement has become incapacitated to protect environment. In this case, the complaint was brought by India, Thailand, Pakistan and Malaysia against United States that its restriction on import of Shrimp was violative of the WTO rules. The US imposed import ban on shrimp and shrimp products which was according to its own Endangered Species Act 1973 which states that all shrimp imported into the US must be caught with methods that protect marine turtles from incidental drowning in shrimp trawling nets. The legislation required that the US government would certify that (a) the importing country has comparable laws to the US regulations on incidental taking of sea turtles, and (b) the average rate of incidental taking is comparable to the US. US lost the case not because the Appellate Body found that US cannot put any restriction on territories outside of it.

The AB dismissed the validity of the restriction by the US because there was discrimination by the US and the right of sovereign states to protect endangered species or otherwise protect

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<sup>40</sup> Appellate Body Report WT/DS321/AB/R US/Canada-Continued Suspension [680]

<sup>41</sup> Trail Smelter Case, (United States, Canada), 3 UNRRAA, 1905

<sup>42</sup> Md. Iqbal Hossain, *International Environmental Law: Bangladesh Perspective* (Dhaka, 4th edition, Ain Prokashon 2011) p172

<sup>43</sup> ASEAN Convention on the Conservation of Nature and Natural Resources 1985, Article 20

<sup>44</sup> WT/DS58/AB/R United States – Import Prohibition of Certain Shrimp and Shrimp Products

the environment was hailed<sup>45</sup>. The Caribbean countries were favored as they were technical and financial assistance and longer transition periods for their anglers to start using turtle-excluder devices and the Asian countries were discriminated. Only because of this discrimination the validity of the measures of US rejected or otherwise such measures would have been found valid under article XX.<sup>46</sup> The measure in question taken by the US was under article XX(g) and not under XX(b) by dint of which SPS measures can be taken by a member. If the extraterritorial application was not barred, states could impose restriction on importing countries to protect environment in the importing country.

The preservation of the global environmental commons has to be the most significant talking point in the existing scenario of world trade. Physical or biological systems that are wholly or largely outside the jurisdiction of any of the individual members of society but that are valued resources for many members of society are considered as global commons.<sup>23</sup> For example, atmosphere, the ozone layer, and endangered species can fall within the category of the global environmental commons. It would be possible to deal with the problems of over utilizing the global environmental commons by invoking Environment-orient Trade Measures (ETMs). For example, in *Shrimp/Turtle*, the US tried to preserve seven kinds of sea turtles, which are listed in Appendix 1 of Convention on International Trade in Endangered Species of Wild fauna and flora( CITES), by banning the imports of shrimps from those countries which did not adopt regulatory programs comparable to those of the US in order to prevent the incidental capture of sea turtles by shrimp trawlers. This US measure can be regarded as an ETM aimed at dealing with problems concerning the overutilization of a common environmental good. Once again, it is also hotly discussed to what extent ETMs for preventing the overuse of the global environmental commons should be allowed under the WTO.

### B3: Pro-liberalization vis-a-vis Principle of Sustainable Development

No discrimination can be made between like products i.e. some consider the debate regarding definition of like product has stayed in the heart of the in trade or environment struggle.<sup>47</sup> Through WTO case law four categories have been set to determine the likeness of products<sup>48</sup> and process and production methods are not included in them. Unless process and production methods have an impact on the final characteristics of the product they are not to be considered to determine likeness.<sup>49</sup> So, if a product is produced or processed in a manner which is detrimental to environment the importing country cannot put objection and impose ban or create barrier to stop or reduce import of such product. From environmental

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<sup>45</sup> WTO, 'India etc versus US: shrimp-turtle' <[https://www.wto.org/english/tratop\\_e/envir\\_e/edis08\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/edis08_e.htm)> Accessed on: 16 October 2017

<sup>46</sup> ibid

<sup>47</sup> UNCTAD, *Trade, Environment and Development* (Module 2) p19

<sup>48</sup> WTO, 'WTO rules and environmental policies: key GATT disciplines' <[https://www.wto.org/english/tratop\\_e/envir\\_e/envt\\_rules\\_gatt\\_e.htm](https://www.wto.org/english/tratop_e/envir_e/envt_rules_gatt_e.htm)> Accessed on: 16 October 2017

<sup>49</sup> UNCTAD (n 47)

perspective one may consider it essential to take into account the environmental effects of production of any goods during its production. For example, a consumer may want to know whether or not timber or timber products came from sustainable managed forests, or whether tuna which he is going to buy has been harvested in a manner which does not involve incidental killing of dolphins. To put ban or restriction on the import of such product the importing country itself has to produce the product in the way it wants the exporting country to produce it. If the country is not the producer it cannot easily reflect its pro-environment mindset while going beyond internationally set standards. The Principle of Sustainable Development started to get recognition worldwide after Rio Declaration in 1992. It is actually a combination of various principles<sup>50</sup> and it was argued by the principle that the environmental protection is not be isolated from development process<sup>51</sup>. The cornerstone of sustainable development has been argued to be integration of environmental, social, and economic concerns into all aspects of decision making.<sup>52</sup> SPS agreement can be justified if they are taken for the safety of animal and plant.<sup>53</sup> As the agreement has kept process or production system out of its arena, the safety of animal or plant which are part of environment cannot be in consideration to enable the importing countries to take SPS measures. Moreover, excessive trade practice by hampering the environmental standard can deteriorate the sustainability of environment. Principle of sustainable development tends to ensure the sustainable and judicious use of natural resources without compromising the need of future generation but the current trade regime with delicate SPS mechanism is indifferent to the needs of future rather obsessed with instant profit.

## RECOMMENDATIONS

In light of aforementioned arguments we can remark how SPS mechanism is underperforming to meet the increasing necessity of global environmental protection. To make the SPS regime more environment friendly without compromising trade facilitation few recommendations can be made here.

*Firstly*, SPS regime should reflect the main principles of international environmental law. In an immediate revision, the agreement should reshape its structure to cater the need of environmental upliftment.

*Secondly*, besides resonating international environmental law principles, SPS agreement should comply with different international conventions like Convention on Bio Diversity, The

<sup>50</sup> Liaquat Ali Siddiqui, 'The Legal Status of the Emerging Principles of International Environmental Law' IX(1) The Dhaka University University Studies (Part-F) 47

<sup>51</sup> The Rio Declaration (n 31) Principle 4

<sup>52</sup> Rachel Emas, The Concept of Sustainable Development: Definition and Defining Principles (Brief for GSDR 2015)

<[https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015\\_SD\\_concept\\_definiton\\_rev.pdf](https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf)

↪ Accessed on: 16 October 2017

<sup>53</sup> WTO, *The SPS Agreement: An Overview*, (The WTO Agreements Series)10

<[https://www.wto.org/english/res\\_e/booksp\\_e/agrmntseries4\\_sps\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/agrmntseries4_sps_e.pdf)> Accessed on: 16 October 2017

Cartagena Protocol on Biosafety to the Convention on Biological Diversity etc. to meet the ever-growing challenges of biodiversity.

*Thirdly*, the agreement should ensure a less complex mechanism to avail the aid of SPS. In the earlier part it has been shown how tough it is to get an environmentally sound remedy.

*Fourthly*, the Panel and Appellate board of WTO should demonstrate its positive attitude to environment. Since we are in the era of rampant climate degradation, they should bear the very fact in their mind. In addition, in the issues where Human Rights and Environment are intrinsically related, appeal provision can be made to International Court of Justice. That can avoid the conflict of interest of WTO panel members.

*Finally*, what is most needed is the whole scenario should be seen from a balancing point of view. Trade facilitation should not be overemphasized over the environmental necessity. It is expected that the SPS mechanism will be more pro-environment if these measures can be taken.

## **CONCLUSION**

It is inevitable that, free trade obsession dictated by free market economic force will tend to imprint its notorious influence in every sphere of our life. Global trade instruments like SPS is one of such instances where the business interest has been injected thoroughly. But the dilemma is we cannot indiscriminately and whimsically dominate the environment. If we cannot ensure the safe life and health of core environmental components, then the ecology where we thrive in will suffer resulting in disastrous environmental consequences. The main challenge we face today, how to strike a balance between the trade interest and the environmental protection. For the sake of our very existence we should opt for green since it is linked with our very existence.

# **INTERNATIONAL REGULATION OF PLASTIC WASTE POLLUTION IN THE OCEANS AND EFFECTS ON HUMAN LIFE AND MARINE ENVIRONMENT**

Jennifer Inez Martina Ehrenström\*

## **PROBLEM AND HYPOTHESIS**

**Problem:** Pollution with plastic materials is an ongoing increasing global environmental problem threatening human health and marine wildlife, despite current international laws and conventions regulating the responsibilities of the states. **Hypothesis:** There is a great need for more effective legal international and national actions and room for great improvement of the environment in order to preserve global wellbeing.

## **INTRODUCTION TO THE ISSUE**

The seas and oceans are home to some of the biggest and most important resources in our world today. The waters provide us with food, oil and a magnificent marine life filled with vastly shifting flora and fauna. Unfortunately, with the great possibilities that have risen from the industrialization and growing economy the marine environment in the waters has taken a toll. In recent times, the issues of plastic waste pollution in the seas have become a very real and serious issue which is having deadly effects on the marine environment. Though the size of the seas and oceans are enormous, the problem of plastic waste pollution is growing, rapidly. Even if major Conventions are in place in order to protect the marine environment and its inhabitants, it seems to not be a sufficient solution to the problem. With a growing population of people and globalisation occurring it is worth discussing whether the current obligations of “protection and preservation” in United Nations Convention on Law of the Sea (UNCLOS) is fulfilled by the state parties to the Convention. The Convention, though having good intentions, possibly has certain shortcomings which enable the continuation of plastic waste pollution. The Convention and the outcome of its regulations need to be examined and discussed with reference to the problem of plastic waste pollution as it is a current issue that is speculated to only get worse.

## **DEFINING PLASTIC AND IMPORTANT HISTORICAL ASPECTS**

“Plastic is the general common term for a wide range of synthetic or semi-synthetic materials used in a huge, and growing, ranges of applications.”<sup>1</sup> A very simple question one might think, but an important one to have a clear answer and understanding of before discussing

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\* Masters of Law @ Law Faculty at Stockholm University, Sweden; Email: [jennifer.ehrenstrom@hotmail.com](mailto:jennifer.ehrenstrom@hotmail.com)

<sup>1</sup> Plastics Europe, *What is plastic?*, ASSOCIATION OF PLASTIC MANUFACTURERS, <<http://www.plasticseurope.org/what-is-plastic.asp>> Accessed on: Oct. 12, 2017, 02:16 PM

further implications of the product. It is the material that our containers, toys and clothing are in large numbers made of, packaged or wrapped in. Plastic it is a product that has have changed the world greatly. The cheap production and long durability is one of the key aspects that make the compound so attractive to producers. Even though plastic has been around for a millennium and a half before Christ with rubber balls found created by the Olmecs in Mexico, the big "revolution" of this compound can be said to have happened in 1907 as the first synthetic plastic was created.<sup>2</sup> The plastic as a product become enormously successful as it could easily replace more expensive products such as cotton and iron.<sup>3</sup> However, with the revolution also came a responsibility, which is questionable if states have followed.

In 2013, 299 million tonnes of plastic was produced in the world, of which 57 million tonnes were produced in Europe and China being the largest producer includes plastic materials thermoplastics and polyurethanes and other plastics thermosets, adhesives, coatings and sealants. Does not include the following bers: PET-, PA-, PP- and polyacryl- bers<sup>4</sup>, However, in 2014 only 7,5 million tonnes of plastic were collected for recycling.<sup>5</sup> About 50% of plastic is used for single-use disposable applications, such as packaging, agricultural products and disposable consumer items.<sup>6</sup> Of course, it is not possible to trace where all produced plastic ends up, but one can begin to worry when there is such an enormous difference between recent productions of plastic in comparison to the re-collection of plastic material. Even if it is impossible to collect or recycle all plastic that has been produced, it is frightening how low the recycling-quota is. So where does the plastic end up? It has been reported that in a recent global study, an overall of 83% of the tap water tested was polluted with plastic particles with the US being the top country of pollution and a contamination rate of 94%.<sup>7</sup> Hence, it is showing up in our waters.

## THE EFFECTS ON THE MARINE ENVIRONMENT

To understand the importance and necessity of authority regulation of pollution of the marine environment on an international level, it is of great importance to first look at the environmental effects that the plastic waste pollution leads to. As stated previously, the increase in production of plastics has resulted in a greater amount of the material ending up in the oceans and waters. The property that plastic substances once were appreciated for, durability, is now a huge part of the problem since it stays and accumulates in the

<sup>2</sup> Laurence Knight, A briefhistoryof plastic, natural and synthetic, BBC NEWS, <<http://www.bbc.com/news/magazine-27442625>> Accessed on: (Oct. 7, 2017, 02.30 PM

<sup>3</sup> ChemicalHeritage Foundation, *Plastics: An AmericanSuccess Story*, Conflicts in Chemistry: The Case of Plastics, <<https://www.chemheritage.org/case-study-plastics-an-american-success-story>> Accessed on: Oct. 8, 2017, 10.10 AM

<sup>4</sup> Messe Düsseldorf, *Plastics –the Facts 2016*, PLASTICS EUROPE, 3, 8, 2016

<sup>5</sup> Ibid at 9

<sup>6</sup> European Commission, *Plastic Waste: Ecological and Human Health Impacts* , SCIENCE FOR ENVIRONMENT POLICY, 4, 4, 2011

<sup>7</sup> Chris Tyree& Dan Garrison, *Invisibles*, ORB MEDIA, <[https://orbmedia.org/stories/Invisibles\\_plastics](https://orbmedia.org/stories/Invisibles_plastics)> Accessed on: Oct. 7, 2017, 06.35 PM

environment. Most plastic, cannot be broken down naturally, but instead remains in the ocean eco-systems forever.<sup>8</sup> In the past years, the increase in plastic as an environmental pollutant in the waters has been shown to have had damaging effect on the marine environment and the biological life within it. The plastic waste has in studies shown to carry a heavy toll on wildlife as thousands of animals, all from small finches to great white sharks die horrific deaths from ingesting or getting caught in plastic material.<sup>9</sup> Fish in the North Pacific ingest between 12,000 to 24,000 tons of plastic each year which can cause intestinal injuries or death. It is more problematic when this plastic transfers up higher in the food chain to bigger fish and mammals, as sharks and whales, as it increases the amount of plastic microfibers in each animal.<sup>10</sup>

Sea turtles as well as seabirds are two animal groups that are heavily affected by plastic pollution as they ingest the material, mistaken for food, which leads to internal failures of different kinds and eventually leads to death. The Center for Biological Diversity states that “Nearly all Laysan albatross chicks — 97.5 percent — have plastic pieces in their stomachs; their parents feed them plastic particles mistaken for food. It is estimated that 60 percent of all seabird species have eaten pieces of plastic, and that number is predicted to increase to 99 percent by 2050. Based on the amount of plastics found in seabird stomachs, the amount of garbage in our oceans has rapidly increased over the past 40 years.”. <sup>11</sup>Larger marine mammals are also being affected by the large increase in plastic pollution causing the monk seals to be on the brink of extinction, as well as the endangered stellar sea lion. In 2008, it was horrific to find out that two sperm whales were stranded along the California coast with gross amounts of plastic debris in their stomachs. As shown, the world and global community has a huge environmental problem with plastic pollution, the production of the modern and easily-accessible matter does not go unnoticed and is showing its damaging the marine environment.

## UNITED NATIONS CONVENTION ON LAW OF THE SEA

When discussing environmental aspects of pollution of the oceans and the respective state responsibilities to ensure that the marine environment is preserved, there are many aspects to be considered. One of the most important aspects for maintaining an environmentally friendly and preventive attitude is to have proper and strict international legislation that clearly expresses what is required of the states to enforce the laws and conventions. It is also important to have a clear understanding/definition of what is meant by “protection and

<sup>8</sup> Chemical Heritage Foundation, *Plastics: An American Success Story*, Conflicts in Chemistry: The Case of Plastics, <<https://www.chemheritage.org/case-study-plastics-an-american-success-story>> Accessed on: Oct. 8, 2017, 10.10 AM

<sup>9</sup> Center for Biological Diversity, *Ocean Plastics Pollution – A Global Tragedy for Our Oceans and Sea Life*, CENTER FOR BIOLOGICAL DIVERSITY, <[http://www.biologicaldiversity.org/campaigns/ocean\\_plastics/](http://www.biologicaldiversity.org/campaigns/ocean_plastics/)> Accessed on: (Oct. 7, 2017, 07.00 PM)

<sup>10</sup> Ibid

<sup>11</sup> Ibid

preservation” of the environment. One of the currently biggest and most important international conventions controlling the sea and marine environment is the UNCLOS. This Convention came into force in 1994 after the third extended United Nations Conference on Law of the Sea.<sup>12</sup> With 164 parties to the Convention it is one of the most successful international conventions as it has managed to unite a large number of states to have the similar goals and aims.<sup>13</sup> The purpose of the Convention was to define the responsibilities and rights of states and nations with regard to the oceans and marine life. The Convention focuses on 7 key provisions; 1) limits of Maritime Zones; 2) rites of passage and navigation; 3) Peace and Security of oceans and seas; 4) conservation and management of marine living resources; 5) protection and preservation of the marine environment; 6) marine scientific research and 7) dispute settlement procedures. The protection and preservation came about as there was an increasing need and an expression for the protection of the marine environment and its wildlife, as the globalisation and industrialization grew with time.<sup>14</sup> The articles regulating the marine environment is mostly focused on the issue of pollutions of the waters and how such incidents can be prevented and controlled. Further the United Nations states that “...*the biggest threat to the health of the marine environment stems from land-based activities. Pollutants and nutrient input into the marine environment can disrupt the delicate balance of marine ecosystems and destroy particularly vulnerable ecosystems. This type of pollution poses danger to human health by contaminating shell fisheries water intakes and bathing.*” confirming the extent of the problem of plastic pollution in the seas and oceans.<sup>15</sup>

In article 1(4) of part 1 of UNCLOS the term “pollution of the marine environment” is defined as "the means the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities", and is based on a definition produced by United Nations Educational, Scientific and Cultural Organization's (UNESCO) Inter-governmental Oceanographic Commission and the UN's Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP).<sup>16</sup> The definition suggests that the aim of international law is not to prevent all substances from being put into the oceans and seas, but especially those who have or might have harmful effects.<sup>17</sup> The definition is often criticized for being insufficient as it does not take into account changes of the marine environment, but only immediately identifiable possible deleterious effects.<sup>18</sup>

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<sup>12</sup> United Nations, *UNCLOS at 30*, United Nations Convention on Law of the Sea, 1, 1, 2012.

<sup>13</sup> Ibid 2-7

<sup>14</sup> Ibid 7

<sup>15</sup> Ibid 16

<sup>16</sup> GUDMUNDUR EIRIKSSON, THE LAW OF THE SEA, 328 (1<sup>st</sup> Ed. 2000)

<sup>17</sup> Ibid 329

<sup>18</sup> Ibid

In section 1 part XII of UNCLOS, “Protection and preservation of the marine environment” the issue of pollution and its regulations are present. The section of the Convention has as a purpose to define actions that are required from the states to fulfil the requirement to protect the marine environment, and with this perspective, particularly when it comes to plastic pollution. Article 192, 194 and 197 of UNCLOS are the most vital regulations concerning pollution and the state parties’ obligations. The concept of protection and preservation is introduced in article 192, general obligation, stating “States have the obligation to protect and preserve the environment.” There is no doubt that the state parties do have an obligation to protect the marine environment from plastic pollution. The problem and challenge is to determine how far the responsibility stretches, which leaves room for differential interpretations of the convention.

Whilst the purpose of article 192 is to prevent and protect the marine environment, article 194 of the Convention discusses the scope of this obligation, which is of great importance to the examination of this paper. Article 194 requires states to take “all measures consistent with this Convention that are necessary” in order to “prevent, reduce and control pollution of the marine environment from any source”.<sup>19</sup> There are two requirements set out within this article when trying to prevent, reduce and control pollution - the measures have to be in accordance with the Convention, as well as needed. The requirement that measure have to be in accordance with the convention means that the actions need to have legal backing in the Convention. Secondly, the requirement to use all measures that are necessary provides an outer-boundary for the state obligations that no less, or more, than what is practically needed to prevent and protect the marine environment from pollution is required. Article 197 of the Convention states that “States shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features.” Thus, enforcing a global cooperation between the parties, as well a sovereign responsibility.

## **ARE OBLIGATIONS AND ENFORCEMENT BY STATE PARTIES BEING FOLLOWED?**

The meaning of “prevent and preserve” regarding the marine environment, what it entails and the scope of the term is defined when reviewing the above three articles. The question is whether the purpose of the convention is practically met. When discussing if the state parties are following their obligation to prevent and protect there are two vital articles of UNCLOS that need to be taken into account, to understand how each state should enforce the laws. Firstly, section 5 of part XII of UNCLOS, “International rules and national legislation to

<sup>19</sup> Global CCS Institute, *United Nations Convention on the Law of the Sea (UNCLOS)*, GLOBAL CCS INSTITUTE, <https://hub.globalccsinstitute.com/publications/offshore-co2-storage-legal-resources/united-nations-convention-law-sea-unclos> Accessed on: Oct. 8, 2017, 08:35 AM

prevent, reduce and control pollution of the marine environment” article 207 regarding “Pollution from land-based sources” stating that states “shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources” as well as they” shall take other measures as may be necessary” in order prevent, reduce and control pollution. Secondly, under section 6 part XII, Enforcement, article 213, ”Enforcement with respect to pollution from land-based sources”, is found. The article has a great impact on the Convention as it mandates the state parties a responsibility of self-enforcement. The outcome of the article, “States shall enforce their laws and regulations adopted in accordance with article 207 and shall adopt laws and regulations and take other measures necessary to implement applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the marine environment from land-based sources.”, is therefore that it is entirely up to the states to prevent the plastic waste pollution through international cooperation and national legislations.

A problem with the above mentioned articles that is important to emphasize is how vague the articles are. The articles do not provide strict obligations on how the states should make sure that the obligation of “protection and prevention” is followed but only that the responsibility is given to the states. Arguably, sovereignty and self-determination is important and one of the key pillars of the UN. On the other hand one may argue that such rights are only to be given when it does not have a negative impact or allows one of the main purposes of the Convention to be disregarded. Even though UNCLOS seems to have an extensive legislation and grand goals regarding the protection of the marine environment, studies suggest and highlights that the problem of plastic waste pollution is not under control but rather increases with time. United Nations Environment Programme (UNEP) states that more than 8 million tonnes of plastic waste leaks into the ocean each year, which is equal to a garbage truck of plastic waste every minute of the day.<sup>20</sup> The European Commission also stated in their report “Plastic waste: Ecological and Human Health Impacts” that plastic waste in the oceans is in fact a growing concern, the despite the legislative matters that are in place.<sup>21</sup>

Thus, despite current international conventions meant to protect the marine environment the problem of plastic pollution of the seas progresses and from a global perspective, this threatens both future human and marine life if this trend continues. There is an urgent need to strengthen international laws and more clearly define the responsibilities for action both internationally and nationally. A problem with international law, not only from an environmental aspect, is the issue with enforcement upon the states. Even if there are Commissions and Tribunals, there is no “One Authority” to ensure that the state parties follow the Convention, as well as there is no sanction if the Convention is breached, other

<sup>20</sup> UNEP, *UN Declares War on Ocean Plastic*, UN ENVIRONMENT, <<http://www.unep.org/newscentre/un-declares-war-ocean-plastic>> Accessed on: Oct. 8, 2017, 09.15 AM

<sup>21</sup> European Commission, *Plastic Waste: Ecological and Human Health Impacts*, SCIENCE FOR ENVIRONMENT POLICY, 1, 1, 2011.

than possible public shame. It has been argued extensively that the problem with enforcement on an international level is one of the failures of international law we have today. Because of the problem with enforcement of international laws and in this case, the enormous amount of responsibility given to the states, there needs to be a change within the national legislation of states in order to prevent the issue from further deterioration.

## FUTURE PREDICTIONS AND SUGGESTIONS

As of now, it has been predicted that unless there is a collective change in the way in which we handle out plastic waste, the amount of plastic and micro plastic in oceans and seas will only increase.<sup>22</sup> According to studies by the UNEP, at the rate plastic waste is being dumped now, by 2050 oceans will carry more plastic than fish and around 99% of seabirds will by then have ingested plastic.<sup>23</sup> Not only will this continue to harm and endanger species of the environment but also affect the overall human health as we use the water and ingest the contaminated fish.<sup>24</sup> The UNEP has on the 23<sup>rd</sup> of February this year launched their “Clean Seas Campaign” urging governments to pass plastic reduction policies which are targeting industry to minimize plastic packaging and redesign products as well as the consumers and how to change their throwaway habits.<sup>25</sup>

Erik Solheim, Head of UN Environment has said that “It is past time that we tackle the plastic problem that blights our oceans. Plastic pollution is surfing onto Indonesian beaches, settling onto the ocean floor at the North Pole, and rising through the food chain onto our dinner tables. We’ve stood by too long as the problem has gotten worse. It must stop. In order to tackle this problem I believe there are some areas that need to be targeted by states nationally. The issue of plastic waste pollution needs to be addressed both from a political, jurisdictional, financial and educational perspective.

Firstly, the backbone of any nation and its sovereignty is the political agenda and stance in issues. The political and judicial agenda are very much related and will thus be discussed together. Many countries have moved towards more environmentally friendly governments. However, the environmental problems do not get the sufficient attention needed to create practical resolutions to the problem. An example of a government policy with an aim to decrease the use of plastic is a treaty that came into force 13th of December 2016 in Sweden. This treaty imposes a strict responsibility for shops and shop owners to inform the customer of the negative environmental effect of using plastic bags.<sup>26</sup> This has resulted in that many large companies, such as H&M, have decided to charge the customer an extra fee if they want

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<sup>22</sup> United Nations, *UNCLOS at 30*, United Nations Convention on Law of the Sea, 1, 7, 2012.

<sup>23</sup> UNEP, *UN Declares War on Ocean Plastic*, UN ENVIRONMENT, (Oct. 12, 2017, 08.55 AM)

<sup>24</sup> European Commission, *Plastic Waste: Ecological and Human Health Impacts*, SCIENCE FOR ENVIRONMENT POLICY, 4, 4, 2011.

<sup>25</sup> UNEP, *UN Declares War on Ocean Plastic*, UN ENVIRONMENT, (Oct. 12, 2017, 09.15 AM)

<sup>26</sup> Svensk Handel, *Nya regler kring plastkassar*, SVENSK HANDEL, <<http://www.svenskhandel.se/verksam-i-handeln/radgivning/plastkassar/>> Accessed on: Oct. 14, 2017, 08.30 PM

a plastic bag for their purchase. The purpose is to change the consumer's attitude towards less use of plastic bags and awareness of the throw-away culture it maintains. The aim is thus to reduce the use of plastic bags per person in Sweden to a maximum of 40 bags a year.<sup>27</sup> If more policies restricting the use of plastic bags or mandating requirements for shops to openly inform their customers about the environmental problem with plastic waste pollution, the attitude towards the issue will hopefully turn towards a more positive direction.

Secondly, the financial approach is one that can be problematic when discussing as there is not "one united economic situation", meaning that states have very differing economic resources and possibilities. It is understandable that in poorly developed countries where there is possible famine, low levels of education and a large poor population, environmental issues might not have a key focus. However, there are possible ways to increase the improvement of the environmental standards by creating monetary incentives. An example of this is the state funded recycling-mechanisms that occur in Sweden. Plastic bottles are handled into state-owned recycling stations and for each plastic bottle a small amount is paid back on returning the bottle. This provides both a monetary incentive to recycle the plastic bottles and by that avoiding unnecessary littering. This incentive has made Sweden into one of the most successful states to recycle used bottles and cans with 1.6 billion cans and bottles being handed in for recycling each year.<sup>28</sup> In states where economic assistance for environmental issues such as plastic waste pollution is a possibility there should be an incentive to increase the subsidization and an aim to do so. The financial means needed to help clean the oceans and seas are huge but need to receive a much larger focus, international funding may potentially be necessary. Ocean pollution by plastics needs to be acknowledged as a serious global problem that needs action now and not in the future.

Finally, and what I believe to be a key-aspect in the battle of environmental issues relating to the plastic waste pollution of the seas, is education and an altered attitude of the people. This can be provided on different levels, starting at home with parental guiding, continued in schools and throughout life. We need to educate children from early age of the impacts of littering and the consequences on the global environment in general and marine environment in particular. For instance, on a national level, both radio and TV campaigns are options to increase the awareness of the consequences of global pollution. The world needs a change in the mind-set of how we view environmental issues, not as something occurring distant and far away, but a collective responsibility in that every small action counts and that we all share the same planet.

## **CONCLUSION**

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<sup>27</sup> Ibid.

<sup>28</sup> Panta Mera, *BURK & PET*, PANTAMERA <<http://pantamera.nu/pantsystem/fakta/burk-pet/>> Accessed on: Oct. 14, 2017 11.10 PM

Plastic waste pollution of the seas is a growing and serious environmental problem and has been shown to have deleterious effects on marine wildlife and has started to move up into the human food chain, putting us at risk of serious harm. It is projected that this vicious circle will continue without a serious action plan. The United Nations Conference on Law of the Sea (UNCLOS), has protection and preservation of marine environment as one of the key goals. However, it can view as being insufficient as it allows the state parties much freedom of enforcement without specific goals or aims. The always present issue with enforcement on an international level is a challenge that UNCLOS experiences as well. Despite the existing convention, the lack of proper enforcement mechanisms leaves it up to the states to be responsible and ensure that the marine environment is kept safe. There are several possible ways that states can approach the problem, depending on their political ability and financial systems. The issue of plastic waste pollution needs to be addressed not only from a political and jurisdictional, but also from a financial and educational perspective in order to change this dangerous development.

## EXPLOITATION OF NATURAL RESOURCES: WITH SPECIAL REFERENCE TO SAND MINING IN TAMIL NADU

Dr. P.R.L. Rajavenkatesan\*

### INTRODUCTION

The natural resources have been considered as valuable property for lives of human being. Exploitation if any would affect the day-to-day activities of the human kind. The globe was in perfect before 1850 but because of subsequent exploitation by way of increasing population around the world resulted in the exploitation of natural resources. Over exploitation of natural resources will definitely lead to problems of humanity in entirety. There is no doubt that India is full of rivers and it plays a major role in the lives of Indian People. It is pertinent to note here that rivers systems provide irrigation, potable water, electricity, cheap transportation and provide livelihoods for a large numbers of people all over the country.

In India, river, channels and its adjoining areas have long been exploited for construction grade aggregates like sand. It is crystal clear that indiscriminate sand mining from rivers and its basin areas imposes many harmful effects. The loss of sustainable livelihoods can have a major impact on the economy of the area. In addition to this, the riparian land owners are affected as the river banks are prone to erosion consequent to indiscriminate sand mining.

### HISTORY OF PROTECTION OF NATURAL RESOURCES

Society interacts and attaches with the natural resources like river, forest, water, land and grassland for its economic and socio-cultural needs. For utilization and management of it, communities create different types of ownership regimes as well as institutions. The concept of environment protection is an age old idea imbibed in the Indian cultural ethos since time immemorial. '*Paryavaranam*' is a Sanskrit word for environment that was prevalent in ancient India<sup>1</sup>. It is an evident from history that awareness about environment can be said to have existed even in the pre-vedic Indian valley Civilization which flourished in northern India about 5,000 years ago for an example Harappa and Mohenjo-Daro. It was the best example of prominent cities of the civilization. Their awareness about hygiene and sanitation as evident from their constructions of ventilated houses, orderly streets, numerous wells, bathrooms, public baths and covered underground drains<sup>2</sup>. Rigveda says that "Environment provides bliss to people loading their life perfectly". River bliss us with the sacred water, and medicines provides us health, might, morning, vegetation, sun bliss us with peaceful life. Our

\* Assistant Professor (Senior) @ VIT School of Law, VIT University, Chennai Campus- 600127 (T.N.)

<sup>1</sup> Ms.RajaniRao U, "Environmental Awareness in Ancient India", International Journal of Life Sciences Research (2014), p.1.

<sup>2</sup> Jonathan Mark Kenoyer, "The Indus Valley tradition of Pakistan and Western India", Journal of World Prehistory, (1991), p.42

cows provide us sweet milk<sup>3</sup>.

## **ILLEGAL SAND MINING**

The Tamil Nadu is witnessing for illegal sand mining and it is rampant in many areas (rivers) such as the Pennaiyar, Vaigai, Amaravati, Bhavani and Vellar. In these places, the riverbeds are full of pits and trenches, some even 20 meters deep. It is pertinent to mention here that people residing in villages on the banks of the rivers now have to struggle to get water, which was once available in plenty<sup>4</sup>. Further, the rivers in Tamil Nadu are fast turning into streams of despair because of exploitative and unscientific mining, leaving the traditional river-based irrigation system in a shambles, destroying drinking water sources and causing irreparable damage to the riverine ecosystem, besides leaving the main stakeholders, farmers, in distress. Unsustainable sand mining from riverbeds can have huge social, environmental, geomorphic and disastrous impacts for rivers. The Cauvery is one of the important rivers of India and Hindu People used to treat Cauvery as a God. It is interesting to note about the source of Cauvery. It is called as Talakaveri located in the Western Ghats about 5,000 feet (1,500m) above sea level<sup>5</sup>. The Cauvery is known as the lifeline of the State, supporting agriculture across nine districts and providing drinking water to many more but nowadays the river has been sustaining the booming construction industry too. It is true that rampant sand mining from the Cauvery's bed is harming the river itself, destroying its groundwater recharging itself.

The State Public Work Department in Tamil Nadu took direct control of sand quarrying in the State and decided to sell sand only through online booking. The measures were intended to control the amount of sand mined, as well as to do away with corruption and profiteering. The government created a Special Project Circle in the PWD, exclusively for sand mining and also appointed a Project Director to oversee sand mining operations in the State.

## **ROLE OF JUDICIARY FOR THE REGULATION OF SAND MINING**

The historical behind the sand mining and role of the Indian Judiciary are as follows: The Madurai Bench of the Madras High Court in its order dated July 26, 2002, directed the State government to constitute an appropriate committee of experts to study the rivers and riverbeds so as to find out the damage caused on account of haphazard sand quarrying. This was the first-ever attempt by the higher court to solve the dispute in a speedy manner. The Government of Tamil Nadu brought an initiative to an amendment in Rule 38-A of the Tamil Nadu Minor Minerals Concession (TNMMC) Rules, 1959, by which it cancelled the existing quarrying leases given to private players through Government Order No.95 of the Industries

<sup>3</sup> RajibSarmah, “Environmental awareness in the vedic literature: An assessment ”, International Journal of Sanskrit Research(2015), 3

<sup>4</sup> Ilangovan Rajasekaran, The mother of all loot, Frontline, July 24, 2015

<sup>5</sup> Available at <[http://www.india-wris.nrsc.gov.in/wrpinfo/index.php?title=Major\\_River\\_System\\_in\\_India](http://www.india-wris.nrsc.gov.in/wrpinfo/index.php?title=Major_River_System_in_India)> Accessed on: 17 July 2017

Department, on October 1, 2003 by the Public Works Department with the job of quarrying by keeping in mind to eliminating indiscriminate mining and ensuring uninterrupted supply of sand for construction activities. Later this was upheld by the Supreme Court in 2006.

Subsequently, The Supreme Court of India in *Deepak Kumar, etc. v. State of Haryana and Others*<sup>6</sup>, held that the Public Work Department would identify the areas that could be mined and forward the list to the Department of Geology and Mining. Then after obtaining the necessary environmental clearances from agencies such as the State-level Environmental Impact Assessment Authority (SEIAA) under the Union Ministry of Forests and Environment (MOEF), the proposals would be sent to the respective District Collectors, who have all the powers and the authority to issue licenses for mining for competent persons.

The Madurai Bench of the Madras High Court on December 12, 2010, in *M. Periyasamy v. State of Tamil Nadu*<sup>7</sup>, had an opportunity to look in the issue of illegal sand mining known as the Tamiraparani river case and banned the mining for five years in the entire Tamiraparani river and then asked the State to form a State-Level Monitoring Committee under the guidance of former High Court judge as its chairman to supervise the quarrying operations across the State. It also passed severe guidelines against the State for using heavy machinery in quarries. Again in the year of August 3, 2012, the above mentioned court passed similar order in Cauvery Water Resources Protection Association and underscored its earlier directions with regard to river mining and its impact on the environment and ordered the closure of quarries that were more than five years old across the State. Twenty-seven of them were closed accordingly. It is pertinent to mention here that there are circumstances where government officials were not co-operated led to much-needed time to the sand mafia. Apart from this, there is inordinate delay in the National Green Tribunal to dispose the appeal as it takes eight to 10 weeks for every appeal to even get listed.

It is well settled principles as per the provisions of the Tamil Nadu Minor Minerals Concession Rules, 1959, mining activities should be avoided within 50 metres from rail tracks, reservoirs, canals and public works such as roads, and within a radical distance of 500 metres from bridges, buildings, waterworks, etc. and the pits also should not be more than one metre deep. Apart from this, no machinery should be used to quarry sand from riverbeds except with the permission of the Secretary to the Government, Industries Department and it has been monitored by the field level officers.

Again in the year of 2015, the bench, comprising Justices V. Ramasubramanian and V.M.Velumani, made the remark after the government failed to disclose the exact quantity of river sand mined from the quarries designated by it and it criticised the State government for using heavy machinery to quarry river sand, which is classified as a minor mineral using the Mines and Minerals (Development and Regulation) Act,1957 but government submitted reply

<sup>6</sup> Special Leave Petition (C) NO. 19628-19629 OF 2009

<sup>7</sup> W.P.No.11562/2010,Before the Madurai Bench of Madras High Court

that mechanised mining is taking place with two Poclains (earth movers) and no in-stream mining taking place<sup>8</sup>. It is interesting to note here that a public interest litigation petition was filed on 06-08-2017 before the Madurai Bench of the Madras High Court by Mr.Srinivasan, who was the ex-Councillor, Musiri Municipality andhighlighted the impact of sand mining on ground water levels in the region that was facing a shortage of water, both for drinking and irrigation purposes and further cited that water levels had gown down to 60-70 feet from 25-30 feet and it had turned saline. He vehemently argued that sand mining was being carried out by manipulating records and exceeding permissible levels. After hearing the arguments of the petitioner, a division bench of Justices K.K.Sasidharan and G.R.Swaminathan, granted an interim stay on sand mining in the region.

A similar writ petition was filed by the Cauvery Neervalaa Aadhar Paathukappu Sangam, citing irregularities and corruption in mining activities. The same bench set up three member committee to inspect the areas of sand mining and directed the project director, sand quarrying operations to assist it. The committee in its findings said “Due to chaotic and indiscriminate sand mining, the entire river is riddled with pits and ponds”. The monitoring mechanism had failed and this could not have happened without the knowledge of the authorities. It is also important to note here that the committee’s inspection revealed flouting of rules and the use of unscientific methods of mining at all sites. In addition to this, the State Environment Impact Assessment Authority clearance was not complied with. There was disregard for environment disturbances and degradation. There was no mechanism to check and counter check details contained in the applications to obtain environment clearance. It is true that the State Environment Impact Assessment Authority is not having independent powers to inspect the quarries; it had to rely on information submitted to it. This was the major reason for the violations going unnoticed. Also, the officials lacked knowledge and expertise in the field of mining and needed training<sup>9</sup>. Till now, the High Court has not passed any order and directed the Public Work Department to file report. Because of interim stay there are demands for sand but able to operate only upto 4,000 loads a day against a demand of 25,000 loads across the State. Now people used to pay Rs.1, 800 a load but they have to wait 35 days to get a load.

At present, sand prices are going through the roof. A truckload comprising 300 cubic feet of sand costs up to Rs.35, 000 in the Chennai suburbs. The authorities from the PWD says that sand quarries on the Cauvery and Coleroon rivers in Karur and Tiruchi District of Tamil Nadu contributed nearly 80% of the State output. The quarries functioning in Thanjur,Nagapattinam and Cuddalore Districts together in Tamil Nadu account for an output of about 3,000 loads of 200 cubic feet each day. The normal average demand in the State is about 8,000-9,000 loads a day. In fact, other rivers, too, are on the verge of annihilation.

<sup>8</sup> Available at <<http://www.frontline.in/cover-story/a-requiem-for-rivers/article7391540.ece>> Accessed on: 19 August 2017

<sup>9</sup> L.Renganathan, Why Sand Mining needs a solution set in stone,TheHindu,Sunday,September 17,2017.

## **CONCLUSION**

The exploitation of the natural resources has been witnessed in many areas but it is the duty of the State to act as a guardian angel then only fragile ecology of the entire river system in the State would be restored and rejuvenated. There was an incident where the illegal sand mining in the southern Tamil Nadu gained considerable strength with the government transferring the officials including the Collector in the year of 2013 who ordered a crackdown on some mining units run by politically influential persons. The government as well as Judiciary repeatedly tried to stop the indiscriminate mining of sand from riverbeds in northern India. Even though many orders have been passed, the order remains in paper. The government should take initiatives that there should be no delay in tackling the task of solving the exploitation of natural resources particularly sand mining as these problems have a cumulative impact.

## ACCESS TO JUSTICE AND LITIGATION ON ENVIRONMENTAL MATTERS

Dr. Shabnam Mahlawat\*

### **INTRODUCTION**

Collective and Individual rights, encompasses almost all arenas of international and national legal systems of the states, where environmental rights are enforced. Environmental rights infringed, often been have talked and formally represented at national and international forums. Where right to life is taken away by an economic or profit making activity, it is collective, and in certain cases, individual rights are trespassed, which have a massive bearing on the lives of people. In practice, it means excessive litigation and a lot of work at the trial where lawyers, activists, citizens, state and the judiciary are involved to the detrimental effects of pollution created. The activity is perceived as having a detrimental effect to the very existence of citizens whereby the wholesome lives may be affected. The more of such activities, calls for a law to be in place, lawyers who have a thorough information on such litigation, affected citizens knowing and informing the government agencies to control the activity, government officials taking note and drawing reports and finally the judiciary judging the activity for injunction, compensation for the environment and the citizens as well as restoration of environment as far as possible to its original form. The enforcement of rights contemplated under environmental issues calls for ally systems in place for an effective trial and restoration of environment to take place. The global commons affected by any activity, calls for retribution where access to justice be speedily granted. For speedy justice to prevail, cognizance of environmental damage and life threatening incidents should find quick remedies under the law. Liability for public nuisance is the earliest forms of wrongs recognized under the International arena. Nuisance crossing borders or within borders calls for action work calling for injunction on such activity. Industrial and other forms of environmental disasters have been relentlessly carried out in the race to be recognized as an advanced country of the world. Conscious efforts have yielded positive results, but the effect is dimmed when other activities are not so controlled, so alternate harm takes place. Recognition of rights not only for the current generation but also future generations affected by detrimental activities is causing a loss so great, that rejuvenation seems impossible to achieve in the coming years. A battered planet is the inheritance where disappearance of all life forms and even the natural forms of earth would be passed to the future generations.<sup>1</sup> Those of the present generation have certain fundamental duties to perform, be it the government or be it the citizens of a country. A need to invoke the fundamental rights is felt when duties of citizens and the State are not complied, with leading to chaos in the society. It is imperative that along with substantive and procedural measures, a speedy justice is made

\* Assistant Professor (Senior) @ Faculty of Law (LC-II), University of Delhi, Delhi.

<sup>1</sup> See, Mitchell Cameron Robert et al, *Twenty Years of Environmental Mobilization: Trends among National environmental Organizations*, Society and Natural Resources, Volume 4, pp.219-234, July 1991.

available, or delay can also lead to denial for rights to be enforced. Different Nations follow different systems for enforcement of the fundamental rights which includes ‘Right to life’. Indian legal system also provides certain substantive and procedural rights to be followed and implemented. The legal order needs to be in place where fundamental rights can be enforced.

## INTERNATIONAL LAW

International law<sup>2</sup> formally introduced environmental aspects into the international forum in 1972<sup>3</sup> with principles governing the Nations of the world. The Magna Carta had to offer a framework based on certain principles expecting the nations to follow into the domestic framework of their lands. It based environment as being our ‘global commons’ which should be protected and preserved from the adverse effect of activities not environmentally benign. From 1972 to 1982 with the World Charter for Nature<sup>4</sup> was a soft law era where enforcement of rights in environmental context were not spoken. It was after The Brundtland Report in 1987<sup>5</sup> for ‘Our Common Future’ and ‘Vienna Convention of Depletion of Ozone layer, 1985’<sup>6</sup> were negotiated that action work or hard law obligations were recognized for environment. In 1992, The Earth Summit<sup>7</sup> brought in a vast framework of hard law obligations with principles, Agenda 21<sup>8</sup> and Conventions on Climate Change<sup>9</sup> and Biodiversity<sup>10</sup> were asked to be imbibed in the domestic legislations of participating Nations for action work on protection against degradation on environment. The Aarhus Convention in 1998<sup>11</sup>, though was a regional European convention introduced procedural rights for environmental laws with acceptance of its principles by almost all Nations of the world. It also brought in, ‘Access to Justice’ as an essential component for procedural rights. In 2002, the Johannesburg Summit<sup>12</sup> took place in South Africa and discussed the problems of the third world countries for environment and other protections to be invoked. International law has progressed along with environmental developments, but what remains is action work for problems like climate change and Protection of biodiversity and perishing life forms on the earth.

## INDIAN LAW

<sup>2</sup> See, Goldston A. James, *Public Interest Litigation in Central and Eastern Europe: Roots, Prospects, and Challenges*, Human Rights Quarterly, Volume. 28, pp. 492–527, 2006

<sup>3</sup> The Stockholm Declaration, 1972; <<http://www.un-documents.net/aconf48-14r1.pdf>> Accessed on: 01 October 2017

<sup>4</sup> See, <<http://www.un.org/documents/ga/res/37/a37r007.htm>> Accessed on: 01 October 2017

<sup>5</sup> See, <<http://www.un-documents.net/our-common-future.pdf>> Available on: 01 October 2017

<sup>6</sup> See, <<http://ozone.unep.org/en/treaties-and-decisions/vienna-convention-protection-ozone-layer>> Accessed on: 01 October 2017

<sup>7</sup> See, <<http://www.un.org/geninfo/bp/enviro.html>> Accessed on 01 October 2017

<sup>8</sup> See, <<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>> Accessed on: 01 October 2017

<sup>9</sup> See, <<http://environment-ecology.com/climate-change/599-united-nations-framework-convention-on-climate-change.html>> Accessed on: 01 October 2017

<sup>10</sup> See, <<https://www.cbd.int/doc/legal/cbd-en.pdf>> Accessed on: 01 October 2017

<sup>11</sup> See, <<http://ec.europa.eu/environment/aarhus/>> Accessed on: 01 October 2017

<sup>12</sup> See, <<http://www.un-documents.net/jburgdec.html>> Accessed on: 01 October 2017

The Indian law has percolated all elements of International environmental law into the domestic legislative framework of the legal system. The Indian law has both its substantive and procedural laws in place for enforcement of violated environmental rights. It has a central legislations, and rules and procedures for various forms of harmful environmental activities. The Government and various departments are involved in the protection of environment, water and air, wild life etc. To check pollution it has Central and State boards, which with the help of central and state laboratories are authorized to check pollution, prepare reports not only as records but for the public to be well informed of all activities. It has various departments for granting licenses for working of hazardous activities with continuous monitoring systems and mechanisms for checks on polluting activities. It also has a judicial system present at the district, state and the central level for trial of cases. In 2010, a National Green Tribunal<sup>13</sup> with various benches of seating has been set to try on environmental litigation.

#### A) THE LEGISLATURE

The drafting of the Legislature includes, Fundamental Rights guaranteed to the citizens under the Constitutional law calls for protection of ‘Right to Life’ under Article 21<sup>14</sup>, Right to Equality under Article 14,<sup>15</sup> Right to carry on Trade or business under Article 19(1)(g),<sup>16</sup> which should not trespass on others rights. The Directive Principles of the State Policy accommodates duties of the Citizens and the State to follow namely, Articles 47, 48-A and 51 (A)(g).<sup>17</sup> The earliest drafted legislation in India was of the Indian Forest Act, 1927<sup>18</sup> during the British rule in India. Then post-colonial rule came, the Wildlife (Protection) Act, 1972.<sup>19</sup> Then came The Water (Prevention and Control of Pollution) Act, 1974.<sup>20</sup> Then, The Forest (Conservation) Act, 1980.<sup>21</sup> Then The Air (Prevention and Control of Pollution) Act, 1981<sup>22</sup> came into force. After the Bhopal Disaster, The Environment (Protection) Act, 1986<sup>23</sup> was brought into effect. Along with it came, The Public Liability Insurance Act, 1991.<sup>24</sup> The National Environmental Tribunal Act, 1995<sup>25</sup> was drafted but never saw the light of the day as it did not come into force. Similar was the case of, The National Environment Appellate Authority Act, 1997<sup>26</sup> which was not enforced. Then the Biological Diversity Act, 2002(18 of

<sup>13</sup> See, <<http://www.greentribunal.gov.in/>> Accessed on: 01 October 2017

<sup>14</sup> Case Material of Faculty of law, University of Delhi, July 2016

<sup>15</sup> Ibid

<sup>16</sup> Ibid

<sup>17</sup> Ibid

<sup>18</sup> Ibid

<sup>19</sup> Ibid

<sup>20</sup> Ibid

<sup>21</sup> Ibid

<sup>22</sup> Ibid

<sup>23</sup> Ibid

<sup>24</sup> Ibid

<sup>25</sup> Ibid

<sup>26</sup> Ibid

2003)<sup>27</sup> was brought into effect. Besides this, to deal with specific problems like ozone Depletion, hazardous waste etc, rules and regulations were enforced to regulate hazardous activities.

### B) THE STATE

The valued judgment by the Indian State comes through its own mechanisms to deal with cases of pollution. Decision makers are insulated by the government policies with the help of Ministry of Environment and Forests<sup>28</sup>, a Central Pollution Control Board<sup>29</sup>, State Pollution Control Boards<sup>30</sup> set up in various states, Central Laboratories<sup>31</sup> set up to draw samples and account for the levels of pollution prevalent and otherwise constantly monitoring the levels and likewise for Forests and Wildlife. The crippling effect on the environment by such activities despite conscious efforts to control pollution is guided by several factors as uneducated citizens, poverty, uninformed decision making, rituals and festivals where practices often tend to leave a polluted environment.

### C) JUDICIARY

The legitimacy of judicial intervention in environmental matters is bolstered by the Constitutional law backing judicial power to take cognizance of environmental pollution. The right to Constitutional remedies<sup>32</sup> and power of High Court<sup>33</sup> justifies judicial power in pollution matters. The judicial adjudication of environmental matters has dominated the entire environmental jurisprudence in India. The environmental litigants, lawyers, courts affected people are guided by principles of representative standing for environmental litigation. A few citizens are aware of the citizens standing rule as this is not much prevalent under the Indian law. "Article 32 is designed for the enforcement of Fundamental Rights of a citizen by the Apex Court. It provides for an extraordinary procedure to safeguard the Fundamental rights of a citizen. Right to live is a fundamental right under Article 21 of the Constitution and it includes the right of enjoyment of pollution free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws, a citizen has right to have recourse to Article 32 of the Constitution for removing the pollution of water or air which may be determined to the quality of life. A petition under Article 32 for the prevention of pollution is maintainable at the instance of affected persons or even by a group of social workers or journalists. But recourse to proceeding under Article 32 of the Constitution should be taken by a person genuinely interested in the protection of society on behalf of the

<sup>27</sup> Ibid

<sup>28</sup> See, <<http://envfor.nic.in/>> Accessed on: 01 October 2017

<sup>29</sup> See, <<http://cpcb.nic.in/>> Accessed on: 01 October 2017

<sup>30</sup> See, <<http://www.indiaenvironmentportal.org.in/category/3884/thesaurus/state-pollution-control-board-spcb/>> Accessed on: 01 October 2017

<sup>31</sup> See, <<http://www.envfor.nic.in/legis/env/so728e.htm>> Accessed on: 01 October 2017

<sup>32</sup> Article 32, Constitution of India

<sup>33</sup> Article 226, Constitution of India

community.”<sup>34</sup> The Constitutional legality for environmental trials finds way through writs issued of habeas corpus, mandamus, certiorari and prohibition thereby providing environmental remedy under the law. Judicial calling under the writ of mandamus is issuance of action to be done by an administrative or judicial branch; excessive use of an authority is restrained by writs of certiorari and prohibition.<sup>35</sup>

#### D) FORMS OF LITIGATION

*Public Interest Litigation* in India is an interesting mix of features of both the adversarial and inquisitorial systems. Approach based on public interest litigation is one of the most viable methods of providing environmental justice to the citizens while providing efficacy to the environmental laws.<sup>36</sup> “Public interest litigation<sup>37</sup> contemplates legal proceeding for vindication or enforcement of fundamental rights of a group of persons or community which are not able to enforce their fundamental rights on account of their incapacity, poverty or ignorance of law.”<sup>38</sup> Features of public interest litigation are non-adversarial, collaborative, cooperative and investigative in India. The litigations<sup>39</sup> pro bono publico where the litigation is filed on behalf of the public<sup>40</sup> on account of poverty or disability or socially or economically disadvantaged position cannot approach the Court for relief, such member of the public may move the Court and in certain trials the courts has considered letters and even newspaper articles are maintainable as appropriate proceeding.<sup>41</sup> The report to the Indian Ministry of Law, Justice and Company Affairs by Justice Bhagawati and Justice Krishna Iyer, “expressly recommended lowering the locus standi requirement as a means of allowing concerned citizens to file cases on behalf of the underprivileged.”<sup>42</sup> The other kind of litigation more common in Australian, New Zealand and in American courts is the *Citizen Suit provision*,<sup>43</sup> whereby a citizen files a suit not as a representative of others<sup>44</sup> but on his

<sup>34</sup> Subash Kumar v. State of Bihar, AIR 1991 SC 420: SCC 1991 (1) 598

<sup>35</sup> Jaswal S. P. et al, *Environmental law*, Allahabad Law Agency, Third Edition, pg.79, 2009

<sup>36</sup> See, Lee J. Christine, *Pollute First, Control Later No more: Combating Environmental Degradation in China Through an approach based in Public Interest Litigation and Public Participation*, 17, Pacific Rim Law and Policy Journal, 795 (2008).; Wang L. A. et al, *Environmental Courts And The Development Of Environmental Public Interest Litigation In China*, Journal of Court Innovation, Volume 3, pp 37-50, 2010.

<sup>37</sup> See, John Denvir, *Towards a Political Theory of Public Interest Litigation*, North Carolina Law Review, Volume 54, pp.1133-1160, 1976. Available at: <<http://scholarship.law.unc.edu/nclr/vol54/iss6/1>>Accessed on: 01 October 2017

<sup>38</sup> *Bandhu Mukti Morcha v. Union of India*, (1984) 2 SCR 67 : (AIR 1984 SC 802); *Sachidanand Pandey v. State of West Bengal*,(1987)2SCC 295 at p 331 : (AIR 1987 SC 1109); *Ramsharan Autyanuprasi v. Union of India*, (1989) Supp 117 SCC 251 and *Chhetriya Pardushan Mukti Sangharsh Samiti v. State of U.P.*, (1990) 4 SCC 449.

<sup>39</sup> Zygmunt J.B. Plater and Joseph H. King Jr., *The Right to Counsel Fees in Public Interest Environmental Litigation*, Tennessee Law Review, Volume 41, pp. 27-39, 1973.

<sup>40</sup> Meadow Menkel Carrie, *When Litigation is not the only way: Consensus building and Mediation as Public Interest Lawyering*, Washington Journal of Law & Policy, Volume 10, pp. 37-61, 2002.

<sup>41</sup> Supra note 39

<sup>42</sup> See, Michael G. Faure & A.V. Raja, Effectiveness Of Environmental Public Interest Litigation In India: Determining The Key Variables, Fordham Environmental Law Review, Vol. XXI, pp. 239-294, 2010.

<sup>43</sup> Cass R. Sunstein, *What's Standing After Lujan? Of Citizen Suits, "Injuries," and Article III*, Michigan Law Review, Volume 91,pp. 163-236, 1992.

own behalf whereby his rights are effective. This provision is also available to citizens under the Indian Law.<sup>45</sup>

## PUBLIC INTEREST LITIGATION AS REPRESENTATIVE STANDING

Public interest litigation with the backing of the law and the Supreme Court and other courts of India finds an aggressive use of this form to deal with environmental cases. It is this form of litigation that has maximized litigation for environmental matters. The courts have placed liabilities on Industrial activities based on ‘polluter pays principle’ for compensation not only for damage to the environment<sup>46</sup> but also to people living in those areas. Compensation goes not only to citizens but also the reformation of environment back to its original form wherever it is possible.<sup>47</sup> The court has further directed the State not to allow detrimental activities to be started before assessing the harm caused by such an activity is made by the Government through its environmental impact assessment measures. “The ‘uncertainty’ of scientific proof and its changing frontiers from time to time has led to great changes in environmental concepts during the period between the Stockholm Declaration, 1972 and the Rio Conference, 1992.” The burden lies on a developer to show how his activity is environmentally benign. In Indian Cases, the courts have relied on the ‘precautionary principle’ as the new ‘burden of proof’ for giving out environmental clearance to a project.<sup>48</sup> Judgments based on ‘Inter-generational equity’ for resources to be protected as an inheritance which we pass to our future generations were called for in cases where leather tannery Industry in Tamil Nadu created an environmental havoc.<sup>49</sup> State as a trustee of our natural resources has a duty not to divert natural resources even for a ‘fair cash’ equivalent. It should be protected in a manner which is freely available to all citizens and be used only for a ‘public purpose’.<sup>50</sup> The procedures to safeguard the fundamental rights of citizens where environmental rights violations take place were deliberated by courts in environmental trials.<sup>51</sup> The court stopped mining activities in Dehradun as it was detrimental for the environment and causing health problems to people living in that area.<sup>52</sup> The courts took a newspaper item as recognition of violation of fundamental rights of citizens of ‘kullu manali’

<sup>44</sup> Zinn D. Matthew, *Policing Environmental Regulatory Enforcement: Cooperation, Capture, and Citizen Suits*, Stanford Environmental Law Journal, Volume 21, pp.81, January 2002.

<sup>45</sup> ‘The Water (Prevention and Control of Pollution) Act, 1974; ‘The Air (Prevention and Control of Pollution) Act, 1981

<sup>46</sup> *Indian Council for Enviro Legal Action v. Union of India*, AIR 1996 SC 1446; *Vellore Citizens Welfare Forums v. Union of India*, AIR 1996 SC 2715

<sup>47</sup> Ibid

<sup>48</sup> *A. P. Pollution Control Board v. M.V.Nayudu*, AIR 1999 SC 2715.; *Narmada Bachao Andolan v. Union of India*, AIR 2000 SC 3751.; *Goa Foundation, Goa v. Diksha Holdings Pvt. Ltd*, AIR 2001 SC 184.; *Vellore Citizens Welfare Forums v. Union of India*, AIR 1996 SC 2715.

<sup>49</sup> *Vellore Citizens Welfare Forums v. Union of India*, AIR 1996 SC 2715

<sup>50</sup> *T.N. Godavarman Thirumulpad v. Union of India*, AIR 2005 SC 4256.; *Intellectuals Forum, Tirupati v. State of A.P.*, AIR 2006 SC 1350.; *Ms. Susetha v. State of Tamil Nadu*, AIR 2006 SC 2893.

<sup>51</sup> Supra note 39

<sup>52</sup> *Rural Litigation and Entitlement Kendra v. State of U.P.*, AIR 1982 SC 652

where a resort was built and because the river Beas was threatening to its existence, the laws were bent to allow the owner to change the course of the river. The court imposed injunction and placed compensatory and additional penalties for the damage and restoration work to be completed.<sup>53</sup> The Directive Principles of the State Policy where duties of the State and citizens were discussed while allowing a small portion of land of a zoo for tourism purposes was allowed under change of land use policy, with a proviso that there should be no construction which would either affect the environment or the path of the migratory birds which come in seasonally.<sup>54</sup> In pursuance of environment protection, restrictions need to be placed on Noise Pollution, The Noise pollution Rules, 2000 were framed whereby it is an infringement of right to life under Article 21 and no noise pollution can be permitted between 10 p.m. to 6 a.m. The relaxation can be given for two hours only during festival season.<sup>55</sup> The court allowed a onetime decision on development to take place where allocated land for industrial purposes was allowed for development of an Institutional area.<sup>56</sup> The Ganga pollution from Kanpur tanneries effluents was stopped and injunction was placed asking the tanneries to install treatment plants before letting off the effluents was upheld by the Supreme Court.<sup>57</sup> The installation of treatment plants for discharge of water effluents were upheld in all subsequent cases and asked to be installed in all Industrial units across the country before granting licenses to such activities. Such activities were also asked to be monitored after they start functioning as a part of the government policies.<sup>58</sup> Relocation of industries around the Taj Mahal and restrictions on Mathura refinery were made after the findings that the white marble of the Taj Mahal an International monumental heritage was under the threat of destruction. Popularly known as the Taj Trapezium case, the Court ordered a new Industrial area to be assigned for industries to be relocated and the modern equipment which did not create pollution to be installed in these industries.<sup>59</sup> Where studies depicted the effect on non-smokers by people who smoke in their vicinity called for a ban on smoking in public places in Delhi. It was based on the Rajasthan Prohibition of Smoking and Non-Smokers Health Protection Act, 1999 (Act. 14 of 2000).<sup>60</sup> The switch over of the pollution fuels as diesel to CNG as the new fuel which creates less pollution was ordered by the courts in 2002. They also banned the use of diesel vehicles as public transport systems for future use.<sup>61</sup> The courts ordered 'Shrimp culture' farming to banned, as it was detrimental for land ecology and for quick profits more and more people were shifting to shrimp farming method from traditional farming.<sup>62</sup> The first and the foremost cases on environmental pollution was the Bhopal

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<sup>53</sup> *M.C. Mehta v. Kamal Nath* (1997) 1 SCC 388; *M.C. Mehta v. Kamal Nath*, 2002(2) SCALE 654

<sup>54</sup> *Sachidanand Pandey v. State of West Bengal*, AIR 1987 SC 1109

<sup>55</sup> *Forum, Prevention of Environment & Sound Pollution v. Union of India*, AIR 2006 SC 348

<sup>56</sup> *Karnataka Industrial Area Development Board v. C. Kenchappa*, AIR 2006 SC 2038

<sup>57</sup> *M.C. Mehta v. Union of India*, AIR 1988 SC 1037 (Kanpur Tanneries case)

<sup>58</sup> *M/s Delhi Bottling Co. Pvt. Ltd. v. Central Board for the Prevention and Control of Water Pollution*, AIR 1986 Del. 152.

<sup>59</sup> *M.C. Mehta v. Union of India*, AIR 1997 SC 734 (Taj Trapezium case).

<sup>60</sup> *Murli. S. Deora v. Union of India*, AIR 2002 SC 40.

<sup>61</sup> *M.C. Mehta v. Union of India*, AIR 2002 SC 1696(CNG Vehicles case).

<sup>62</sup> *S. Jagannath v. Union of India*, AIR 1997 SC 811(Shrimp Culture case).

Disaster and the Oleum gas leak case<sup>63</sup> in Delhi responsible for environmental and protectionist legislations to be enacted. The court called for restraining all mining activities being carried out in the Sariska Tiger Reserve which is a protected reserve in Rajasthan.<sup>64</sup>

## CITIZENS SUIT PROVISION AS INDIVIDUAL STANDING

As environmental degradation in its high tide wave amidst policy, law and rules and regulations is countermanded, a small provision under the regulation whispers the rights of citizens to be enforced. This right is available to the citizens as Individuals only under Section 49 of ‘The Water (Prevention and Control of Pollution) Act, 1974’ and Section 43(1) (b) of ‘The Air (Prevention and Control of Pollution) Act, 1981. “One way federal courts ensure that they have a “real, earnest, and vital controversy” before them is by testing the plaintiff’s standing to bring suit. The plaintiff must allege at the pleading and later prove, an injury that is fairly traceable to the defendant’s challenged conduct and that is likely to be redressed by the relief sought.”<sup>65</sup> “Citizen-suit provisions create incentives for environmentalist plaintiffs to pursue their self-interest, in the form of settlements, remediation projects, and attorneys’ fees, or to pursue symbolic victories with other value.”<sup>66</sup> The Citizen Suit Provision<sup>67</sup> allows the citizens as affected parties to sue the State, not as representation of public detriment but of their own standing as Individuals to whom a public duty is owed by private individuals as well as the state. It is often referred to as ‘Citizen Standing.’<sup>68</sup> The check of abuse on citizens finds motivation in the doctrine.<sup>69</sup> India being not a novelty to this situation allows the same as a part of its legislation and to be challenged by citizens in the mannerisms prescribed under the law. “The need for this standing was as a check on the abuse of executive authority in a modern welfare state. In India, since the government’s regulatory competences give it enormous power, the misuse of power and authority is bound to happen. At times, government policy or inaction may threaten the environment. In such cases, application of the traditional standing doctrine could preclude citizens from seeking protection. Thus, the Supreme Court of India has expanded standing to enable citizens to challenge government actions in the public interest, even though the citizen himself suffered little or no harm.”<sup>70</sup>

## NATIONAL GREEN TRIBUNAL 2010

The National Green tribunal, 2010, was a step for courting the environment issues for the first

<sup>63</sup> *M.C. Mehta v. Union of India*, AIR 1987 SC 965 (Oleum Gas leakage)

<sup>64</sup> *Tarun Bhagat Sangh v. Union of India*, AIR 1992 SC 514 (Sariska case)

<sup>65</sup> Roberts G. John (Jr.), *Article III Limits on Statutory Standing*, Duke Law Journal, Vol. 42, pp. 1219-1232, 1993

<sup>66</sup> See, Jonathan H. Adler, *Stand Or Deliver: Citizen Suits, Standing, And Environmental Protection*, Duke Environmental Law & Policy Forum, Vol. 12, pp. 39-83, Fall 2001

<sup>67</sup> Adler H. Jonathan, *Stand or Deliver: Citizens Suits, Standing and Environmental Protection*, Duke Environmental Law & Policy Forum, Volume 12, pp. 39-83, Fall 2001

<sup>68</sup> *Gujarat Pollution Control Board v. Nicosulf Industries & Export Pvt. Ltd*, AIR 2008 (Supp.) SC 1118

<sup>69</sup> Manu Anand, *Managing Director v. Madhya Pradesh Pollution Control Board*, Legal Eagle 2016 (MP) 803

<sup>70</sup> See, Michael G. Faure & A.V. Raja, *Effectiveness Of Environmental Public Interest Litigation In India: Determining The Key Variables*, Fordham Environmental Law Review, Vol. XXI, pp. 239-294, 2010

time in India by way of 186th Report of the Law Commission of India. What was carried on as regular trial got the elevation of specialized trials for environmental purposes. The Act led to setting up of a specialized tribunal with various places of seating of the benches in almost all corners of India. Before this only a few developed countries had specialized courts. It was around 2010, almost forty countries across the world set up specialized courts with India taking the long awaited step to be brought into force.<sup>71</sup> The discussion of kinds of jurisdictions on environment, it is classified into three categories,” first, systems handing over environmental matters to general jurisdictions; second, systems relying on “internal specialization” of the judicial bodies (the creation of green benches or green judges without a formal change of the judicial structure); and third, systems creating innovative “Environmental Courts or Tribunals.” The third model is based on the constitution of environmental courts or tribunals, as courts specializing in only environmental cases.”<sup>72</sup> Specialized courts would be reference to people having specialized knowledge in relation to environmental matters such as Judges, lawyers, technical experts and people having specialized knowledge for environmental offence related judgments and specialized procedural guidelines. The procedure indicates that after cognizance of pollution has been taken by the pollution control board and after taking in samples, assessing the damage and monetary compensation imposed on the polluter, the aggrieved party from the decision of the board may approach the tribunal for redressal. Its composition of judges and technical experts calls for civil legislation and trials for environmental justice as lawyers appearing for matters pro bono publico envisaged by the Act. The Tribunal has both original and appellate jurisdiction for environmental trials. The final appeal however lies to the Supreme Court for the grand finale. The locus standi operates by way of Section 18 of the Act of creation of ‘Access to justice’ by Individuals as well as representative standing even by NGOs for environmental purposes. Since its inception, NGT has given many fast track judgments in various cases and has passed several orders to the respective authorities like ban on illegal sand mining, against noise pollution in Delhi, preservation of bio diversity of western ghats, wildlife protection in Kaziranga national park in Assam, suspended many environmental clearances and so on.<sup>73</sup> Judicial Activism remains in the forefront of all pollution matters, and a realization of protection of environment of fundamental rights and duties, by both Citizens as well as States is adhered to under the trials.

## CONCLUSION

<sup>71</sup> See, Pring George et al, *Increase in Environmental Courts and Tribunals Prompts New Global Institute*, Journal of Court Innovation, pp.13-21, 2010; Robert Carnwath, Institutional Innovation for Environmental Justice, 29 Pace Environmental Law Review 555 (2012) Available at:

<<http://digitalcommons.pace.edu/pelr/vol29/iss2/>> Accessed on: 01 October 2017

<sup>72</sup> Domenico Amirante, *Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India*, Pace Environmental Law Review, Volume 29, pp.441, Issue.2, winter 2012. Available at: <<http://digitalcommons.pace.edu/pelr/vol29/iss2/3>> Accessed on: 01 October 2017

<sup>73</sup> See, Patra k. Swapan & Krishna V.V., *National Green Tribunal and Environmental Justice in India*, Indian Journal of Geo-marine Science, Volume 44(4), pp.445-453, April 2015.

The cumulative effect of contested litigations in India, can be traced to mainly decisions of courts, where trials have taken as Public Interest Litigations. The environmental issues as appear worldwide, are linked to economic factors, such as cost benefit analysis, while determining an activity to be environmentally benign. "However, the Supreme Court of India demonstrates that even though the intervention of the court may not be optimal, it can successfully promote environmental quality where the legislative and executive branches fail."<sup>74</sup> The access to justice may be done by the government too, but the applicability of implementation appears to be feeble in the hands of the government. The aftermath of the Bhopal disaster not only triggered legislation but also the litigation for environmental activists, lawyers and judicial activism. The lesser known form of citizen suit provision, though subtle in our legislation, the citizens do not have enough awareness about the said provisions and therefore is not too frequent to be invoked. The Industrialist seems to pursue the single minded course of economic self-interest, which only when discovered appears to have curtailed by court decisions. Those polluted and gone for want of monetary means, do not leave a story well told to the citizens. It is the precedent set for future activities, that although, the government and courts call for establishing the 'onus of proof' before acceptance is given by way of a license to the activity, the truth is otherwise in most of the cases. Despite cases being in court and trials being undertaken, the river Ganga is more polluted than ever for want of disposal of waste in an uncaring manner. The corrupt unsaid practices take their toll in the care needed for protection of environment. Consequently the courts should take equal cognizance of Public Interest litigation and citizen suit provisions for future references. Exclusion of criminal liability calls for a stronger action by the legislature to enact and include provisions of criminal liability of a repeated offender. The tendency for administrative and action delays should not be a routine matter the government agencies. Monetary causes for environmental liabilities where the cash equivalence is insufficient for irretrievable losses, demands a penal liability for prosecution of a violator in environmental trials.

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<sup>74</sup> Supra note 70

## **LEGAL FRAME WORK TO CONTROL THE DISASTERS OF CLIMATE CHANGE IN INDIA**

Kiran Singh\* & Indra Kumar Singh\*\*

### ***Abstract***

*Climate Change is one of the major challenges faced by mankind. The increase in the global average air and ocean temperature, widespread melting of snow and ice and the rising global average sea level is evident. It poses a variety of challenges with wide-ranging effects. It is projected to have significant impacts on conditions affecting agriculture, including temperature, precipitation and glacial run-off. Agriculture is the mainstay of the Indian economy and provides food and livelihood security to a substantial section of our population. Agriculture will be adversely affected not only by an increase or decrease in the overall amounts of rainfall but also by shifts in the timing of the rainfall. Increased frequencies of drought, floods, storms and cyclones are likely to increase the variability of agricultural production. This paper examines the disaster brought to mankind by climate change and the legal framework to control the same. India has a very comprehensive framework of legal and institutional mechanisms in the region to respond to the tremendous challenges to the environment it is facing, owing to population growth, poverty and illiteracy augmented by urbanization and industrial development. India is one of the leading developing countries in so far as having incorporated into its Constitution the specific provisions for environmental protection. Article 48A of the Constitution of India provides that 'the State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country'. Similarly, Article 51A (g) makes it obligatory for every citizen of India, 'to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.' Despite the fact that India's contributions to greenhouse gas emissions are very small; the Government of India has taken many measures to improve the situation in this regard. India has initiated several climate-friendly measures, particularly in the area of renewable energy. India had adopted the National Environment Policy 2006, and has also taken many other measures and policy initiatives.*

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\* Asst. Professor @ Ram Swaroop Memorial University, Lucknow (U.P.)

\*\* Asst. Professor @ Ram Swaroop Memorial University, Lucknow (U.P.)

## INTRODUCTION

A healthy ecology is the basis for a healthy economy<sup>1</sup>. Climate change is one of the most critical global challenges of our times. Recent events have emphatically demonstrated our growing vulnerability to climate change. Climate change impacts will range from affecting agriculture, further endangering food security to sea-level rise and the accelerated erosion of coastal zones, increasing intensity of natural disasters, species extinction, and the spread of vector-borne diseases.<sup>2</sup> Rise in temperatures caused by increasing greenhouse gases is likely to affect crops differently from region to region. Erosion, submergence of shorelines, and salinity of the water-table due to the increased sea levels are the factors that mainly affect agriculture through inundation of low-lying areas. Increased frequencies of drought, floods, storms and cyclones are likely to increase the variability of agricultural production

As a large, emerging economy, India faces big challenges relating to energy and climate change. On the one side, the country has hundreds of millions of people without access to electricity and an economy demanding more energy to power growth. These pressures mean that energy use, and emissions, are likely to grow substantially over the next few decades.

Despite having no obligation, as a developing country, to tackle emissions, India is coordinating comprehensive policies across the economy covering both mitigation of greenhouse gas emissions and adaptation. India's approach has so far been one of policy rather than comprehensive climate change legislation.

For example, the National Action Plan on Climate Change from 2008 outlines eight national 'missions' that run up to 2017.<sup>3</sup>

## INDIA AND CLIMATE CHANGE: THREATS AND VULNERABILITIES

With an economy closely tied to its natural-resource-base and climate-sensitive sectors such as agriculture, water, and forestry, India faces a major threat because of the projected changes in climate. Crucial sectors in India like agriculture, water resources, health, sanitation, and rural development are likely to be affected by climate change. India's large population primarily depends on climate-sensitive sectors like agriculture and forestry for livelihood. The majority of the vulnerable population of India is poorly equipped to cope effectively with the adversities of climate change due to low capabilities, weak institutional mechanisms, and lack of access to adequate resources.<sup>4</sup>

The latest report from the U.N. Intergovernmental Panel on Climate Change (IPCC) places an emphasis on the impacts of global warming and attempts to make a stronger case for

<sup>1</sup> Claudine Schneider, U.S. Representative, *The Green Lifestyle Handbook*, 1990

<sup>2</sup> Available at: <<http://www.unep.org/themes/climatechange/about/index.asp>>

<sup>3</sup> Available at: <<http://www.climatechangenews.com/2013/02/19/in-focus-indias-climate-change-laws/>>

<sup>4</sup> Available at: <<http://www.pedz.uni-mannheim.de/daten/edz-ma/ep/08/EST19208.pdf>>

governments to adopt policy on adaptation and cut greenhouse gas emissions.

“This is the most extensive piece of science done on climate adaptation up until now,” Aromar Revi, one of the lead authors of the report, told a news conference. “The key issue as far as India is concerned is vulnerability and exposure.”<sup>5</sup>

The report says that a warming trend is ‘unequivocal’ and that temperatures were likely to rise by between 0.3 and 4.8 degrees Celsius (0.5 to 8.6 Fahrenheit) by the late 21st century. The low end of the range would only be achieved if governments sharply cut carbon emissions.<sup>6</sup>

Freak weather patterns will not only affect agricultural output and food security, but will also lead to water shortages and trigger outbreaks of water and mosquito-borne diseases such as diarrhea and malaria in many developing nations.<sup>7</sup>

The IPCC lead authors said India, like many other developing nations, is likely to suffer losses across all major sectors of the economy including energy, water, transport, agriculture, insurance and tourism. India ranked the most vulnerable out of 51 countries in terms of beach tourism, while Cyprus is the least vulnerable in one study which was examined by the IPCC scientist’s.<sup>8</sup>

## **THE LEGAL RESPONSE: CLIMATE CHANGE TREATIES AND INDIA’S NATIONAL ACTION PLAN**

### *India and International climate change law*

India’s national policy on climate has essentially drawn its reference from its international position in climate negotiation and therefore, it would be worthwhile to have a look at India’s stance at global climate negotiations.

India has been one of the important countries to have acknowledged importance of having development strategies integrated with objectives of environmental and social protection. Mrs. Indira Gandhi was one the only Head of the State to have participated in the famous Stockholm Conference (1972), which for the first time brought environment on the global political agenda. Subsequently, Rio Conference on Earth and Development (UNCED, 1992) reiterated this global intention by listing impressive outcomes in the UN Convention on Biological Diversity (UNCBD), UN Convention against Desertification (UNCCD), and UN

<sup>5</sup> Available at: <<http://news.trust.org/item/20140331143243-tmzfq/?source=spotlight>>

<sup>6</sup> Available at: <<http://www.hindu.com/2016/12/11/stories/2010121156641500.html>>

<sup>7</sup> Mehra M. India’s Role in Confronting Climate Change: From Vulnerability to Opportunity. In: Michel D, Pandya A, Editors. Indian Climate Policy: Choices and Challenges. Washington: Henry L. Stimson Centre; 2009. p. 61

<sup>8</sup> IPCC WG I contribution to the Fourth Assessment Report, 2007

Framework Convention on Climate Change (UNFCCC), and Agenda 219. India played a significant role in shaping global environmental policies.

Prime Minister of India declared in 2008 that India's per capita emission will never surpass those of the developed countries. However, gradually India could understand that the position has led to its isolation in the international community, and a shift was necessitated to maintain its leadership role globally and among developing countries. Preceding the Copenhagen COP Meeting (2009), India declared in the Major Economies Forum Meeting at La, Aquila that India will reduce its emission intensity (emission per unit of the GDP). In Copenhagen COP, following China's declaration, India declared that it would reduce its emission intensity by 20-25% (on a 2005 baseline) by 2020.<sup>10</sup> Since then India has steadfastly guarded its position and India's domestic policies have also targeted 20-25% reduction in emission intensity, and have been essentially based on India's international pledge. The nature of the current paper does not allow us to go deeper to explore whether this target is ambitious enough, however, it will suffice to say that many countries have understood that having ambitious climate policies is in their national interest, and have gone beyond their international pledges and adopted more ambitious national and sub national policies.<sup>11</sup>

#### *National Laws*

Nationally also India enacted a slew of legislations for protection of environment, biodiversity, water and ambient air etc. 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 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.<sup>12</sup>

In *MC Mehta v. Union of India*<sup>13</sup>

It was held by Supreme Court of India that "In order for the human conduct to be in accordance with the prescription of law it is necessary that there should be appropriate awareness about what the law requires. This should be possible only when steps are taken in the adequate measures to make people aware of the indispensable necessity of their conduct being oriented in accordance with the requirements of law.

<sup>9</sup> S. Sivkumar, "Environmental Protection: International and National Perspectives", *CULR*, 2004, p. 291

<sup>10</sup> Subramanian, A., N. Birdsall and A. Mattoo, 2009, India and climate change: Some international dimensions. *Economic and Political Weekly* XLIV:43–50.

<sup>11</sup> Available at: <<http://apnet.org/wp-content/uploads/2014/08/India%20National-Response-to-Climate-Change-and-Peoples-Participation.pdf>>

<sup>12</sup> Role Of The Judiciary In Environmental Protection, Dubey Amit & Tiwari B.K; Department of Law, Barkatullah University, Bhopal (INDIA)

<sup>13</sup> AIR 1992 SC 362

*Policy Imitative:*

- 1) **National Action Plan on Climate Change 2008-** The Plan outlines eight “national missions” running until 2017. These include solar, energy efficiency, sustainable habitat, Green India (REDD & LULUCF), water, Himalaya ecosystems, agriculture and strategic knowledge of climate change.<sup>14</sup>
- 2) **National Electricity Plan 2012-** The Plan’s 4th chapter deals with initiatives and measures for GHG mitigation, and aims to keep CO<sub>2</sub> intensity declining while massively expanding rural access and increasing power generation to meet the demands of a rapidly growing economy.
- 3) **Post Copenhagen Actions 2010-** On 10 May 2010, India released its Greenhouse Gas (GHG) Emissions Inventory for 2007, with the aim of enabling informed decision-making and to ensure transparency. India has become the first “non-Annex I” (i.e. developing) country to publish such updated numbers.

India has announced a levy, a clean energy cess, on coal, at the rate of Rs. 50 (US\$1) per tonne, which will apply to both domestically produced and imported coal. This money will go into a National Clean Energy Fund that will be used for funding research, innovative projects in clean energy technologies and environmental remedial programme.<sup>15</sup>

- 4) **Tariff Policy 2006-** Under the Electricity Act 2003 and the National Tariff Policy 2006, the central and the state electricity regulatory commissions must purchase a certain percentage of grid-based power from renewable sources.

## CONCLUSION

Overall, the analysis of India’s policy culture with respect to climate change at different levels of governance illuminates a complex interplay between levels and between drivers at each level. It is our hope that this analysis provides a more nuanced understanding of why India’s approach looks the way it does, since the basis of effective policy cooperation at any level needs to be mutual understanding of the many needs and norms that influence decision makers.

Climate change is the defining issue of our times. It is perhaps, the greatest challenge to sustainable development. It should be addressed by all countries with a shared perspective, free from narrow and myopic considerations. The developed countries need to look beyond their narrow self-interests and work jointly with the developing countries to evolve

<sup>14</sup> India: National Action Plan on Climate Change (NAPCC), Available at: <http://chimalaya.org/2012/01/21/indianational-action-plan-on-climate-change-napcc>

<sup>15</sup> Available at: [http://www.wwfindia.org/news\\_facts/infocus/index.cfm](http://www.wwfindia.org/news_facts/infocus/index.cfm)

cooperative and collaborative strategies on the issue of climate change, which is of immense relevance for the future of mankind. However, the efforts so far in the direction of meeting the challenges of climate change have been sporadic and incoherent. We urgently need a new economic paradigm, which is global, inclusive, cooperative, environmentally sensitive and above all scientific. According to Jeffrey Sachs, a perceptive commentator, “The world’s current ecological, demographic and economic trajectory is unsustainable, meaning that if we continue with “business as usual” we will hit social and ecological crises with calamitous results”. Sustainable development based on addressing the needs of the poor and optimal harnessing of scarce resources of water, air, energy, land, and biodiversity will have to be sustained through more cooperative endeavours. Then alone, we could make some headway in saving our lone planet from the brink of climate disaster.

## **EMISSION TRADING: AN UNEXPECTED CHALLENGE TO THE ENVIRONMENT**

Dr. E. Prema\*

### **INTRODUCTION**

Environment is interlinked life-chain which enables human being to live in the earth. It is believed that human being is the creature dominating and controlling the other living being on the earth. On the other hand, it is a well proven fact that human being not only for the survival on the earth destroy the existence of other living being on the earth but for a luxurious and comfortable living. Environment is degraded by the human being in many ways. The emission of carbon is one such activity which is a dangerous human –induced interference with climate system. One of the important objective of United Nations Framework Convention on Climate Change, 1992 is to stabilize GHG concentrations in the atmosphere at a level that would reduce and prevent the GHG released by the human activity that interfere with the climate system. In the first instance it is the Paris Agreement in 2015 which made all efforts to bring world nations into a common cause to agree upon the ambitious efforts to combat climate change and adapt to its effects.

In between these two Agreements it is the Kyoto Protocol, 1997 the world's first GHG emission reduction treaty, which was considered as a greatest achievement and a milestone in the history of Environmental protection conventions. The Marrakesh Accords, 2001 is the result seventh conference of the Parties which formed as a basis of ratification of Kyoto Protocol and thus become a formalize agreement on operational rules for International Carbon Emission Trading and paved way for various emission reduction mechanisms for this new trade. As a result, in 2005 the European Emission Trading Scheme was launched which is the first and largest emission trading scheme in the world.

The COP 21- the historic Paris agreement, about 168 member States as on 5<sup>th</sup> October 2016 have ratified it to unleash actions and investments toward a low carbon, resilient and sustainable future. Subsequently it was believed that the world nations are striving to regulate the carbon emission. This new trade found to be a control mechanism which is criticized as it is a permit or licence to pollute. Eva Filzmoser, a programme director of CDM Watch, a Brussels based watch dog organization has criticized CDM is basically a farce.<sup>1</sup> The Wiki leaks Cable from 2008 has revealed that a number of CDM projects are ineligible to regulate the carbon emission .Further in countries like India, the *off-set* projects failed to meet the

\* Asst. Professor (Senior) @ VIT School of Law, VIT University, Chennai Campus; Email: [premadhanyu@gmail.com](mailto:premadhanyu@gmail.com)

<sup>1</sup> Carbon-Credits System Tarnished by WikiLeaks Revelation, Available at: <https://www.scientificamerican.com/article/carbon-credits-system-tarnished-wikileaks/> Accessed on: 21 Sept. 2017

CDM requirements set by the UNFCCC and the Kyoto Protocol<sup>2</sup>. Aditya Gosh, Center for Science and Environment who is a senior coordinator agrees that the people manipulate CDM projects for their own personal benefit. Therefore it can be said that the as assessed by the historical Climate change conventions the solutions are now resulting for the mushrooming issues like double counting of carbon credits and doubts arise regarding these CDM projects are actually have sustainable development benefits.

## **INTERNATIONAL SCENARIO ON CARBON TRADING**

For tackling climate change Carbon trading has become one of the policy framework of various governments worldwide. Carbon trading is also one of the key element of UNFCCC's Kyoto Protocol<sup>3</sup>. Still it is a debatable and highly controversial as it is being considered as a false solution for confronting climate change. The subject is pigeonholed by mathematical formula, technical particularities, abstract concepts and jargon. For a simple understanding carbon trading is a process of buying and selling quotas that allows the quota holder to emit the equivalent of one tonne of CO<sub>2</sub> (CO<sub>2</sub> equivalents/ CO<sub>2</sub>e). Subsequently, if a country or a company's carbon emissions is lesser than its permitted quota, the surplus can be sold. On the other hand, if it exceeds, the country is permitted to buy additional quota on the market.

Carbon trading can be understood in two aspects

- i. Emission Trading –cap and trade
- ii. Trading in carbon credits from “offset” or “carbon-saving” projects.

## **CARBON CREDITS<sup>4</sup>**

It is undeniable fact that carbon credit is definitely a very lucrative proposition for the countries involved both in buying and selling. In this process it is the environment which pays the unrecoverable price and put into question due to the GHG emitting countries causing environmental degradation by polluting and damaging the environment. In 2002, India signed and ratified Kyoto Protocol. The Kyoto Protocol has recognized the developing countries that are chiefly responsible for the GHG emission at a highest rate in the atmosphere which is the result of more than 15 decades of industrial activities by these countries. The Kyoto Protocol under the principle of “common but differentiated responsibilities” have imposed a heavier burden on the developed nation. The Kyoto Protocol has formulated three market based

<sup>2</sup> Wiki leaks : How India is Manipulating Carbon Credits; Available at: <<http://www.firstpost.com/politics/wikileaks-how-india-is-manipulating-carbon-credits-94984.html>> Accessed on: 21 Sept 2017

<sup>3</sup> An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC, The Kyoto Protocol, among other things, sets binding targets for the reduction of greenhouse gas emissions by industrialized countries. Glossary of Climate Change Acronyms, UNFCCC; Available at: <[http://unfccc.int/essential\\_background/glossary/items/3666.php#E](http://unfccc.int/essential_background/glossary/items/3666.php#E)> Accessed on: 21 Sept. 2017

<sup>4</sup> Carbon credits are also commonly referred to as “emissions certificates” or “emissions allowances”, as each unit allows a person to emit one metric tonne of carbon dioxide (CO<sub>2</sub>) or carbon dioxide equivalent (CO<sub>2</sub>e).

mechanisms. The Protocol has also imposed the countries to meet out their targets to control GHG through national a measure which includes:

- i. International Emission Trading
- ii. Clean Development Mechanism (CDM)
- iii. Joint Implementation (JI)

Article 17 of the Kyoto Protocol, permits states that have emission units to spare the permitted emission granted to them which is in excess. Thus allows these types of countries sell excess credits to the countries that are in need and are over their target.

## **CLEAN DEVELOPMENT MECHANISM**

The Clean Development Mechanism is considered as a trailblazer. CDM is one of the first global environmental investment and credit scheme. It further provides a standardized emission offset instrument, CERs.<sup>5</sup> Article 12 of the Kyoto Protocol defines the Clean Development Mechanisms. It permits a state for an emission –reduction or emission-limitation commitment which is formulated under the Protocol (Annexure B Party) to execute a project on emission-reduction in a developing country. They can gain marketable credits by acquiring Certified Emission Reduction (CER)<sup>6</sup>. Each credit is equivalent to one tonne of CO<sub>2</sub> and it should be counted towards the requirements structured by Kyoto targets. Further CDM meets the expectations of the international community, as it stimulates sustainable development and emission reduction.

In India, the National Clean Development Mechanism Authority (NCDMA) is functioning under the Ministry of Environment and Forests (MoEF). Its chief role is to approve national level CDM Projects. The approved status of CDM projects until 2012 March was 2,195. Approximately Rs. 10,000 Crores and is a conventional assessment of the total returns gained through carbon credits sale.

The Delhi Metro Rail Corporation (DMRC) is the first project where the railway is using generative braking system in its rolling stock which will reduce 30% electricity consumption. India has been noted in the international arena for having highest number of Certified Emission Reduction units and hence is a strong supplier of Carbon Credits.

## **THE PROCEDURE FOLLOWED BY CDM**

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<sup>5</sup> Available at: <[http://unfccc.int/essential\\_background/glossary/items/3666.php#E](http://unfccc.int/essential_background/glossary/items/3666.php#E)> Accessed on: 08 Oct. 2017

<sup>6</sup> A type of carbon offset credit specifically under the Kyoto Protocol, equal to 1 metric tonne of carbon dioxide equivalent. CERs are issued for emission reductions from projects under the Clean Development Mechanism. Two special types of CERs are called temporary certified emission reduction (tCERs) and long-term certified emission reductions (ICERs) are issued for emission removals from afforestation and reforestation CDM projects. Available at: <[http://unfccc.int/essential\\_background/glossary/items/3666.php#E](http://unfccc.int/essential_background/glossary/items/3666.php#E)> Accessed on: 08 Oct. 2017

One must understand the basic procedure how the CDM projects proposed by the CDM<sup>7</sup>

- i. The project must provide details of emission reductions that are additional / surplus to what would otherwise have occurred. It must meet the criteria through a rigorous and public registration and issuance process.
- ii. The process of approval is given by Designated National authority.<sup>8</sup>
- iii. The Executive Board of the CDM supervises the mechanisms and ultimately is accountable towards national which ratified Kyoto Protocol.

Since 2006 the CDM became operational. Regarding the stand of India, being a developing country it has a forward move encouraging CDM projects. At times India has showcased that Indian companies like ITC, Reliance, Bajaj involved in CDM, thus got a better trading arena and price for CERs generated.

## CARBON OFFSET

Perhaps no element of recent cap-and-trade proposals has been as controversial as provisions for offset credits, under which sources whose emissions are limited may increase their emissions in exchange for reducing emissions from an unregulated source outside the cap. At the heart of nearly all offset programs is the requirement of “additionality”- offset credits should only be given for emissions reductions that would not have happened in the absence of the offset program.<sup>9</sup> To sell an offset project it has to prove “additionality” which is one of the key designs of the CDM Additionally is a key in crediting schemes for two separate but related reasons. Carbon crediting schemes have as a stated goal the certification of emission reductions from a baseline. If these emission reductions would have occurred anyway, their certification and later use as offsets that is, compensating for somebody else’s emissions, causes a net increase in emissions. In this situation emission in reality it has not been compensated. Thus, there a direct impact on environmental integrity for such non-additional credits.<sup>10</sup> Carbon offsets is one of the components of carbon trading. China and Russia<sup>11</sup>

## CARBON EMISSION AND ENVIRONMENTAL DEGRADATION

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<sup>7</sup> Available at: <<http://cdm.unfccc.int/index.html>> Accessed on: 11 Oct. 2017

<sup>8</sup> Designated National Authorities (DNAs)- An office, ministry, or other official entity appointed by a Party to the Kyoto Protocol to review and give national approval to project proposed under the Clean Development Mechanism. The major task of DNA is to asses’ potential CDM projects to determine whether they will assist the host country in achieving its sustainable development goals, and to provide a letter of approval to project participants in CDM projects. In India the DNA is Ministry of Environment and Forest and Climate Change. Available at: <[http://unfccc.int/essential\\_background/glossary/items/3666.php#E](http://unfccc.int/essential_background/glossary/items/3666.php#E)> Accessed on: 11 Oct. 2017

<sup>9</sup> Leigh Raymond, *Beyond Additionality in Cap-and-Trade Offset Policy*. Issues in Governance Studies, Number 36, July2010. Available at: <<https://www.purdue.edu/discovery>> Accessed on: 12 Oct. 2017

<sup>10</sup> *Carbon Credits and Additionality. Past, Present and Future. PMR Technical Note.13.*

Available at: <<http://documents.worldbank.org/curated/en/407021467995626915/pdf/105804-NWP-PUBLIC-PUB-DATE-5-19-2016>> Accessed on: 12 Oct. 2017

<sup>11</sup> Lancaster, R., Mitigating Circumstances, *Trading Carbon*, December, 2007, pp.36-37

A recent report by World Bank a greater cooperation among the world nations through carbon trading could reduce the cost of climate mitigation by 32% by 2030. Worldwide environmentalists have expressed and criticized carbon trading as pollution trading. This view has sprouted out when the cap is poorly enforced or when trading companies or States are able to exploit other. The critiques challenged that these policies or projects for reducing carbon emission cannot meet out environmental standards. The atmosphere, terrestrial biosphere, the oceans and the sediments including fossil fuels which are the Earth's four major reservoirs of carbon. The exchange of carbon through a cycle among these reservoirs is called Carbon cycle. The carbon cycle is one of the fundamental prerequisite for the life on earth. Its nearly 50% of the carbon dioxide released into the air by human activity has been absorbed by the land and ocean. Processes, regions or systems that absorb Greenhouse gases are called Carbon Sinks. Carbon sinks are essential sources that influence the total quality of GHS in the atmosphere. Thus any reduction in the capacity of sinks will ensue in increased global warming. It is therefore questionable that the CDM projects are balance this particular requirement of the earth's environment to support life on it. For instance, there are potential risks to the rural poor who are dependent on forest resources for their subsistence and livelihood in terms of labour and food. Due to the entry of many players of carbon market and their entry in forest and utilizing the adjacent natural resources, it put many indigenous community and their livelihoods to risk.

## CARBON CREDIT FRAUD AND ENVIRONMENTAL CRIMES

Environmental crimes are mounting at scandalous rate. UN Environment Programme and INTERPOL published a report in June 2016 which says that the value of environmental crime has increased 26% than previous estimates. It was \$70-213 in 2014 and in the year 2016 increased to \$91-258. Ironically, complication observed in this kind of criminality needs cross-sectorial sector action underpinned via cooperation among the world nations. Thus it also leads to upswing of white collar crime, other dimension of carbon credit fraud that involves money exchange and returns which hooked on millions of dollars.

One commonly used “scam” is to frame a project which is proposed to look like an economic loser on its own, but offset in come is factored in it turns as a profitable earner. The International Emission Trading Association (IETA)<sup>12</sup> has stated that proving the intent of developers who apply for the approval of the CDM “is an almost impossible task. It has been opinioned by the Industry representatives that “good storytellers” get their project approved and “bad storytellers” projects which is really additional thus fail.<sup>13</sup> It clearly explains how an internationally framed goal to combat environmental degradation is turned out to be an eye washer for merely mending money. Thus, turns out to be an environmental crime. For instance, the Indian wind developers who failed to explain the CDM on the lucrative tax

<sup>12</sup> Available at: <<http://www.ieto.org>> Accessed on: 14 Oct 2017

<sup>13</sup> *Emission Trading, Discredited Strategy*, Available at: <<https://www.theguardian.com/environment/2008>> Accessed on: 14 Oct.2017

credits their projects were earning.<sup>14</sup> Further these activities leads to white color crimes such as tax fraud, money laundering, tax havens, double counting and reclaiming of carbon credits. The carbon trading market at international level is a riddle with fraudulent carbon credits, which are essentially *permission slips* to pollute. The concept of *additionality* which can only be proved theoretically as there is difficulty to prove with certainty what could or would have happened in the absence of a projects implementation.

## CONCLUSION

In a report by the UNEP Executive Director Achim Steiner has expressed his opinion on increasing environmental crimes not only leads to destructive results to environment and local thriffts, it also includes persons jeopardized by the criminal organizations. Further World nations must join hands towards curbing and proceed with effective actions both at domestic and international level to eradicate environmental crimes.<sup>15</sup>

As justified by the international community emission trading is not an effective economic instrument to combat the problem more cost-effective as it is structured to allow private sectors for whom change is most difficult to delay investment. Further, such changes of social and technological nature, the government agree needs instead to be undertaken immediately. Thus it is biased toward addressing a different problem or deviates from the track of solving climate change or global warming.it has been opinioned that due to the absence of adequate monitoring equipment to detect pollutants and the measurement on the emission of a particular plant of factories are releasing into the atmosphere. Expressively, there is inadequate explanation to answer or define the concept of additionality. Never has so much been said has much been said about a topic by so many without ever agreeing on a common vocabulary. Additionality has generated endless conflict over its exact meaning and how we should measure it(with even supporters agree that additionality is a difficult standard to test in practice).<sup>16</sup> Thus the policy framers may consider going beyond *additionality* to focus on other means or factors which paves way for creation of fair, practical, cost effective and environmentally effective and efficient offset credits. Additionality also has the perverse moral implication of favoring offset providers with a poor track record or previous behavior and lack of motivation to address environmental problems.<sup>17</sup>

Finally, Carbon trading not on the whole has imperfections, but with above study it can be opinioned that many individuals are gaming the system which they do not require to execute

<sup>14</sup> Available at: <<https://www.theguardian.com/environment/2008/may/21/environment.carbontrading>> Accessed on: 14 Oct. 2017

<sup>15</sup> Available at: <[www.unep.or](http://www.unep.or)> Accessed on: 16 Sept. 2017

<sup>16</sup> M.C.Trexler, D.J.Brockhoff and L.H.Kosloff. A statistically driven approach to offset-based GHG additionality determination: What can we learn? *Sustainable Development Law & Policy*. 2006

<sup>17</sup> Leigh Raymond, *Beyond Additionality in Cap-and-Trade Offset Policy*. Issues in Governance Studies, July 2010. Available at: [https://www.purdue.edu/discoverypark/climate/resources/docs/07\\_additionality\\_raymond.pdf](https://www.purdue.edu/discoverypark/climate/resources/docs/07_additionality_raymond.pdf) Last visited on 14 Oct. 2017

the projects and well established ethical distress among commodification of polluting privileges and fly-tippers/emitters “Buying their way out” of an obligation in wipe out the emissions. One has the basis for greater level of moral concern with offsets that are not additional. During negotiations over the CDM, for instance, arguments and discussions over offset credits being “additional” were often linked to concerns about such credits being “supplemental” to emissions reductions under the cap.<sup>18</sup> Supplementary standards continue in many programs, limiting use of offset credits to some fixed percentage of the total emissions reductions required.<sup>19</sup> Offset projects mostly are located in developing states that often cannot meet out the requirements to reduce emissions on their own. With all these glitches in the carbon trading, it is the accepted mechanism which is considered to be a viable solution for controlling carbon emission. Conclusively, greater transparency and more accountability in this *invisible* trade can give a fair result in environmental protection.

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<sup>18</sup> Ott, Hermann E. *Climate Change: An Important Foreign Policy Issue*. International Affairs, pp.277-297

<sup>19</sup> As reviewed briefly in Raymond, Leigh, 2010, ‘*The Emerging Revolution in Emissions Trading Policy*.’ In *Greenhouse Governance*, Ed. B. G. Rabe, Washington, DC: Brookings Press

## **WATER: BONE OF CONTENTIONS GROUND WATER MANAGEMENT: INDIA'S WAY FORWARD**

Aakriti Shahi\*

### **INTRODUCTION**

Groundwater is water that is found underground in the cracks and spaces in soil, sand and rock. Groundwater is stored in and moves slowly through layers of soil, sand and rocks called aquifers. The model bill of ground water conservation 2016 defines it as “water occurring under its natural state, where it exists below the surface in the zone of saturation whereby it can be extracted through wells or any other means or emerges as springs and base flows in streams and rivers.” India is the largest user of groundwater in the world. It uses an estimated 230 cubic kilometres of groundwater per year - over a quarter of the global total. More than 60% of irrigated agriculture and 85% of drinking water supplies are dependent on groundwater. Urban residents increasingly rely on groundwater due to unreliable and inadequate municipal water supplies. Groundwater acts a critical buffer against the variability of monsoon rains. And with climate change the water resources are going to get strained further in the coming time. Thus if the resource is not given the adequate attention now soon we will be facing an aggravated water crisis. What India needs today is a radical transformation of laws and policies to accommodate water resources at a better place than what they have been at till today.

### **REASONS FOR LACK OF GROUND WATER REGULATION**

Out of all the water resources ground water is still the most ignored water resource in terms of regulations and policies provided for it. This majorly happens because of a two-fold reason:

- i. It's an invisible resource, and
- ii. The legal perspective toward it has always been that of a complimentary good.

### **INVISIBILITY OF THE RESOURCE**

The invisibility of ground water has quite played a role in keeping the resource aside from drawing attention towards itself. As one cannot see the water table, its depletion is not as alarming to common folk as the disappearance of forests or drying of rivers and melting of glaciers. But nonetheless it's still depleting, amidst of our ignorance. Black's law dictionary defines water table as Ground water's upper surface of filled voids in soil where water pressure in the soil is equal to air pressure. The lowering of this surface leads to digging deeper

\* Student @ School of Law, Christ University, Bangalore

for locating a groundwater source, thus decreasing the feasibility of it in all (economic, social and technological) terms. Because doing so means more expenses, which is the greatest problem of all knowing that almost 30 percent of the Indian population falls below the poverty line and that the developing nation of ours is home to the world's second largest population. It also means hindering more with the natural state of things, thus leading to an imbalance however slight.

## COLONIAL LEGAL PERSPECTIVE

The legal perspective toward ground water has always been that of a complimentary resource for the owner or occupier of the land under which such water is present. The origin of this theory dates back to the India under British rule. British colonial water law had two main strands. First, control over water and rights to water were regulated through the progressive introduction of common law principles, emphasizing the rights of landowners to access water. For surface waters, riparian rights allow a landowner the right to take a reasonable portion of the flow of a watercourse. For groundwater, landowners had a virtually unlimited right to access water under their holdings. Common law principles, enshrined in the Indian Easements Act (1882)<sup>1</sup>, evolved over time but have substantially survived until the present day. Second, a series of regulatory statutes were enacted, including laws to protect and maintain embankments, to acquire land for embankments, and to entrust the Controller for implementing such laws. Water law even after the post-colonial period is shaped by the legacy of colonial times. Such laws will include Transfer of Property Act, Indian Easement Act, and land reforms Act and many other State Acts dealing concerning land. Transfer of Property Act<sup>2</sup> does not define land or groundwater specifically, but while interpreting immovable property in sec 3 of the act, it goes on to define '*attached to the earth*' as:

- a) Rooted in the earth, as in the case of trees and shrubs;
- b) Imbedded in the earth, as in the case of walls or buildings; or
- c) Attached to what is so embedded for the permanent beneficial enjoyment of that to which it is attached.

Registration Act 1908<sup>3</sup> define 'immovable property' as " it shall include land, buildings, hereditary allowances, right to ways, lights, ferries, fisheries or any other benefits to arise out of land or things attached to the earth or permanently fastened to anything which is attached to the earth but not standing timber, growing crops or grass".

After analysis the above definitions it may be concluded that the following objects and things are included in 'Immovable property': (1) Land – Land includes earth's surface, column of

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<sup>1</sup> Indian Easements Act (1882)

<sup>2</sup> Transfer of Property Act (1882)

<sup>3</sup> Registration Act (1908)

space above the surface, the ground beneath the surface, all objects which are on or under the surface in its natural state e.g. minerals, land covered by water e.g. lakes, river and ponds, object placed by human agency with the intention of permanent annexation e.g. buildings, walls and fences. (2) Benefits arising out of land – The benefits arising out of land are also known as ‘profit à prendre’. All benefits arising out of immovable property and every interest in such property are also regarded as immovable property as such benefits cannot be severed from the land e.g. hereditary allowances, rights of ways, right to collect fish from ponds and this also includes the right to draw ground water underneath the land.

Further The Right To Fair Compensation And Transparency In Land Acquisition, Rehabilitation And Resettlement Act, 2013<sup>4</sup> Section 3(p) states that ‘land’ includes benefits arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth, including ground water as a complimentary again.

Indian Easement Act<sup>5</sup> sec 7(g) The right of every owner of land to collect and dispose within his own limits of all water under the land which does not pass in a defined channel and all water on its surface which does not pass in a defined channel, gives the owner of a land exclusive and unfettered rights to exploit the water table of the place.

With all these laws in place, regulating ground water usage and exempting the land owners from their exercising their exclusive right over it, would need a change to be brought about on a much larger scale than what the legislature expects by introduction of a mere bill for groundwater regulation. The bill definitely is an important step towards ground water conservation and regulation, but its implementation demands amendments to be made on many other laws and policies which concern the subject matter directly or indirectly.

## **WATER AS A MATTER OF RIGHT**

Water is not an economic resource, but a human right. And hence it should not be priced but managed and shared and this can be done only with the help of an effective legislation. Article 21 of the Indian Constitution guarantees to all persons a fundamental right to life. As Supreme Court observed that right to life is not confined to mere animal existence but extends to the right to live with basic human dignity,<sup>6</sup> A.P High Court observed that enjoyment of life and its attainments and fulfilment guaranteed by Article 21 of the constitution embraces the protection and reservation of the nature’s gifts, without which life cannot be enjoyed.<sup>7</sup> The court further observed that protection of environment is not only the duty of the citizens but is also the obligation of the state and all other state organs including the courts. The Supreme Court in while dealing with Article 21 of the Constitution has held

<sup>4</sup> The Right To Fair Compensation And Transparency In Land Acquisition, Rehabilitation And Resettlement act (2013)

<sup>5</sup> Indian Easement Act (1882)

<sup>6</sup> *Maneka Gandhi vs. Union of India*, AIR 1978SC 597

<sup>7</sup> *T. Ramakrishna Rao v. Chairman, Hyderabad Urban* 2002 (2) ALT 193

that the need for a decent and civilized life includes the right to food, water and a decent environment.<sup>8</sup>

The Supreme Court further observed: "Water is a gift of nature. Human hand cannot be permitted to convert this bounty into a curse, oppression. The primary use to which water is put being drinking, it would be mocking nature to force the people who live on the bank of a river to remain thirsty<sup>9</sup>." The Supreme Court further observed in another case that "drinking is the most beneficial use of water and this need is so paramount that it cannot be made subservient to any other use of water, like irrigation. So the right to use of water for domestic purpose would prevail over other needs<sup>10</sup>." Thus water is a fundamental right, as is made evident by words of the judiciary but what we lack is the practical implementation of it, which hasn't been done yet.

Article 14 too guarantees to our citizens equal treatment before law, and this equality needs to be maintained in terms of life needs too, Article 14 has been interpreted by the judiciary as guaranteeing inter-generational equity<sup>11</sup> i.e. the right of each generation of human beings to benefit from natural and cultural inheritance from past generations. This therefore requires conserving the biological diversity and the sustainable use of other renewable and non-renewable natural resources including water) for future generations.

Regulation of ground water is necessary for sustainable development, which now has been accepted worldwide due to ongoing environmental deterioration. International conventions have accepted and suggested sustainable development as a way forward. Some salient principles of sustainable development as culled out from the Brundtland report which was published in 1987 following the WCED<sup>12</sup> and other international documents such as Rio Declaration<sup>13</sup> and Agenda 21 are as under:

- 1) Inter-generational equity,
- 2) Precautionary principle,
- 3) Public Trust Doctrine,
- 4) Polluter Pays Principle, and
- 5) Eradication of poverty.

Keeping in mind the first three principles, water conservation and regulation becomes an integral part of sustainable development.

<sup>8</sup> *Chameli Singh v. State of UP*, Appeal (Civil) 12122 of 1995

<sup>9</sup> *Delhi Water Supply and Sewage v. State of Haryana* 1996 SCC (2) 572

<sup>10</sup> *S.K. Garg v. State Of U.P.* (1998) 2 UPLBEC 1211

<sup>11</sup> *State of Himachal Pradesh v. Ganesh Wood Products*, AIR 1996 SC 149

<sup>12</sup> 1983 World Commission on Environment and Development (WCED)

<sup>13</sup> The Rio Declaration On Environment And Development (1992)

## ANALYSIS OF THE BILL

The Model Bill for the Conservation, Protection, Regulation and Management of Groundwater, 2016, drafted on 11<sup>th</sup> May, 2016 consists of 40 sections contained in 13 chapters and 3 schedules. The objects of the bill emphasize on the importance of water as a unitary resource and hence aim ensures groundwater security through availability of sufficient quantity and appropriate quality. In further statements the act emphasizes on climate change, over exploitation of underground water, leading to farmer suicides and the inappropriate status of underground water as reasons for introducing the bill, which should in this very form enacted by the legislature as an Act.

*Chapter I* of the bill states that the bill should commence into action 90 days after its adoption by the state legislature. It bestows power to individual states per say to manage their underground water resources and it goes on to define ‘Appropriate government’ as the lowest possible public authority, including gram sabhas, gram panchayats, block panchayats, district panchayats, ward sabhas, municipal authorities and the State Government; thus including all layers of governance in the management of the resource. This is an appreciable thing as the lower levels of authorities would be able to connect to people better and hence work well within the theory of “public trust doctrine” as emphasized in the statement of reason of the Act. It goes on to define important terms including groundwater, aquifers, and water for life which emphasizes on right to water being a fundamental right. But the definition clause does not define land within itself, further it adds a clause saying, “Terms not defined in this Act have the meaning assigned to them under other laws.” This would further the conflict which already exists between implementation of this act and the previous laws defining right to underground water as a complimentary right to the owners and occupiers of the land above it.

*Chapter II* of the act tittles water as an element of right to life, and goes on to elucidate about it further. It bars privatisation of water sources in any form and allows the appropriate government a maximum span of 12 months to act on a complaint in regard to the provisions of the bill.

*Chapter III* of the bill deals with basic principles to be imbibed in the act, which are equality decentralisation and precaution to be precise. The act aims at maintaining the intergenerational equity. It also allows states the leverage to have regulations as per their needs and usage. The question which arises here is regarding some states which may share the same aquifer, how would they address this issue? There is no clause in the bill to resolve such a situation, which may arise.

*Chapter IV* elucidates about the legal status and prioritisation in usage of underground water. It mentions that state shall be a mere trustee for the common pool resource and water would be allocated as per priority, i.e. , it will be made available for primary needs as drinking before its used for secondary ones as irrigation.

*Chapter V* of the bill talks about ground water protection zones and their security plans based on the need of the area. It obliges the state as well as the central water board to look into areas and demarcate them as per the water table levels there. The ones which are over exploited are to be placed under protection zones. But this too is done at state levels and it would not accommodate well the idea of two states sharing the same aquifer.

*Chapter VI* addresses the bill on the institutional level, that is, it allocates the powers and functions to the appropriate government at both rural and urban areas. Provisions are made for ground water advisory boards at district as well as state levels. The chapter however does not address the many differences between the rural and the urban area, else for the municipal level differences. These areas not only differ in the way their governance is appointed and managed, but also on the innate level of water usage and priorities. These differences would play a vital role when water resources are being allocated and hence provisions should be made for them as well.

*Chapter VII* elaborates on the duties and liabilities of the users of ground water, and their role to be in regulating and conserving it. The act specifies the ways of rain water harvesting, recycling and re-use of water for its conservation. The chapter also addresses the issues of water pollution and waterlogging prohibiting them with assigned sanctions for the same.

*Chapter VIII* of the model bill is associated with the regulations of ground water usage for irrigation and other livelihood purposes. Appropriate government is supposed to look after the same. They also are supposed to give permissions to the irrigation projects which may begin or are on-going. This may lead to a tussle between the state authorities and projects which are already in use by the residents may get affected, thus implementation for this part should be preceded with utmost planning and accuracy to prevent such happenings.

*Chapter IX* illustrates the procedure of abstraction of ground water, and the permits and authorisations required from the same. Schedule II of the bill elaborates further on the eligibility rules and cancellation reasons. The bill also prescribes regulations for transfer of permits and authorisations. Sec 22 of the chapter regulates mining activities, thus checking on the pollution of water which is caused by mining activities.

*Chapter X* is concerned with the SIA and EIA (social impact assessment and environmental impact assessment respectively) and transparency and accountability of the rules and regulations framed under the act. They set forth a grievance addressal mechanism for receiving complaints and objections with independent audits and enquiries at the state level, justifying the title of the chapter.

*Chapter XI* states about the offences and penalties in cases of violation of the rules established under the said act. The bill ensures peaceful settlements by stating courts as only a second stage option. All the cases coming before the authorities have to be mandatorily addressed the first stage options, i.e., opted for possible options of alternate dispute resolution

before coming to the second stage of options.

*Chapter XII* deals with the dispute resolution mechanism, appointment and disqualification rules for the authorities so involved, setting up of the “Nyaya Mitra” at local levels. The sections also specify jurisdictions, procedure and appeal provisions for dispute resolution.

*Chapter XIII* addresses miscellaneous issues needed for the smooth functioning of the bill and easy transition of the society towards its rules. It gives the authorities the power to make laws and bylaws. It also has provision for notices to be issued for removal of any difficulties which may arise in the way of implementation of the bill with a time limitation of two years for doing so. Further the chapter deals with drilling, and fund collection and most important of all the pre-existing rights. As per the section, all pre-existing rights along with any dues remaining for them will come to an end after one year of implementation of the act. The act also specifies that it would supersede any other law that it contravenes, thus addressing the conflicting laws but not resolving the conflict though.

## SUGGESTIONS/REFORMS

The bill represents a progressive and a well thought of step in direction of ground water regulation, but it in turn has its own drawbacks on paper as well as in the practical sphere. Some reforms which can be accommodated within the bill are:

- i. The bill does not talk about the financial aspects if it elaborately, which need to be addressed specifically,
- ii. Two states may happen to share the same aquifer and then laws which distinguish at the state level may lead to conflicts, there should be a provision addressing this situation,
- iii. The distinction between rural and urban areas is much more than on the mere appropriate authority level. These places differ in their very basic levels of usage and priorities. Hence the regulations for them should also be addressed that differently,
- iv. Chapter XII of the bill explicitly mentions its superseding effect on other acts, but chapter I says that any definition not mentioned in the bill will be taken from other laws, thus contradicting themselves in a matter where definition of land or immovable property is to be considered for the purpose of other acts,
- v. Although the bill in its very statement of reasons addresses the public trust doctrine, there is no mention of a public private partnership in the provisions. Accommodation of such norms would result in better involvement of public in the attempt of ground water conservation and hence have a better chances for the attempt to be a successful one,

- vi. Declaring water as a fundamental right, the bill talks about the right to easy access to water resources. But does not mention about people in places where supplying water is difficult and sometimes cannot be done at all. And if these people claim the right in such spaces, how will the government be able to accommodate their demands?

## **CONCLUSION**

The need for ground water regulation has always been there, but the attention it has received till now is evident enough to be categorized as inappropriate. The subject matter for a bill of 1950 is till date remained the subject matter of a bill itself, with mere 10 states adopting it as a law. With the depleting ground water resources and the inadequate method of dealing with the resource, the Model Bill For the Conservation, Protection, Regulation and Management of Groundwater, 2016 was more of a necessity than a mere initiative. The bill may have its own shortcomings, but it's indeed a well thought of step forward for the nation and now is the time to give it the attention and concern it has deserved since ages and protects this invisible resource from disappearing totally.

## ACCESS TO JUSTICE IN THE BENEFIT SHARING REGIME: AN INDIGENOUS PERSPECTIVE

Shachi Singh\*

### **INTRODUCTION**

The concept of Access to Justice in the context of access and benefit sharing (hereinafter ABS) is a matter that has seldom received the attention of the international community. Nevertheless, it is emerging as one of the most essential aspects of access to justice in respect of the indigenous and local communities (hereinafter ILCs). In order to understand the relevance of this theme, it is imperative to appreciate the reasons that led to the need for justice in this system and for which one has to look back into the historical aspects and emergence of the present ABS system.

#### ***Understanding the need for Justice in the process of Access and Benefit Sharing***

In the times of conquests, the invaders plundered and took away the wealth of invaded states, including components of their natural wealth. Similar policy was followed in times to come when the concept of nationhood emerged. The colonizing nations drained away the natural and biological resources of colonized states.<sup>1</sup> The export of agricultural and mineral raw materials from India to Britain including cotton, indigo and spices to be further sold to their manufacturers is one such example.<sup>2</sup> Not only was there no sharing of benefits but such forced access caused the colonized economies to reach deplorable levels. Even after gaining independence, these colonies could not be considered to be absolutely free from dominance especially in context of access to biological resources found within their territories. During the same time i.e. around mid-twentieth century, when colonized states were breaking free from shackles of the past, the developed countries in order to ensure protection to creators of plant varieties belonging to their jurisdictions came up with the UPOV Convention<sup>3,4</sup>. Under this system, state sovereignty was no hindrance to access plant genetic resources whether existing in wild or protected under plant breeder's rights.<sup>5</sup> It was agreed that the principle of common heritage of mankind shall cover plant genetic resources within its purview<sup>6</sup> which impliedly meant that their access was to be allowed freely.<sup>7</sup> In fact, as far as access

\* Research Fellow @ CELPR, National Law University, Delhi; Email: [shachi.singh@nlu-delhi.ac.in](mailto:shachi.singh@nlu-delhi.ac.in)

<sup>1</sup> 2 Elisa Morgera, Matthias Buck & Elsa Tsioumani, Unraveling the Nagoya Protocol: A Commentary on the Nagoya Protocol on Access and Benefit Sharing to the Convention on Biological Diversity 7 (2014)

<sup>2</sup> Bipan Chandra, Modern India 94

<sup>3</sup> UPOV Convention, Upov.int (2017), <<http://www.upov.int/upovlex/en/conventions/1961/content.html>> Accessed on: Sep 14, 2017

<sup>4</sup> Relationship Between Intellectual Property Rights and Access to Genetic Resources and Biotechnology, 3-4 (1990), <<https://www.cbd.int/doc/meetings/iccbd/bdewg-03/official/bdewg-03-inf-04-en.pdf>> Accessed on: Aug 24, 2017

<sup>5</sup> Ibid at 4

<sup>6</sup> Resolution 8/83 INTERNATIONAL UNDERTAKING ON PLANT GENETIC RESOURCES, 1 (1983), <[http://www.fao.org/wiews-archive/docs/Resolution\\_8\\_83.pdf](http://www.fao.org/wiews-archive/docs/Resolution_8_83.pdf)> Accessed on: Aug 18, 2017

<sup>7</sup> MORGERA, Supra note 1 at 6

to biological resources was concerned, it did not practically matter that whether a state is a party to the UPOV Convention or not.

It is a matter of fact that in the wake of industrial revolution, the world had been gaining new grounds in technological advancements especially in biotechnological field. The concept of access widened in two ways, firstly, access of biological resources no longer remained concentrated to their consumption but the idea of deriving commercially tradable commodities out of their utilization started gaining prominence at the global level. This has led to excessive exploitation of biological resources of the south by technologically rich business giants of the north. Secondly, it was found to extend to the traditional knowledge (hereinafter TK) that is held by ILCs. In general, the access to TK is considered significant as it reduces the cost of experimenting, saves valuable research time and ultimately enhances the certainty to arrive at commercially viable products.<sup>8</sup> This exploitation of biological resources and TK associated with such resources continued without any answers to the call for sharing of benefits with those who had been conserving these resources since ages and passing the valuable TK to next generations.

Therefore, the problem was two-fold; firstly, the access was free, without a condition of prior approval and secondly, there was no sharing of benefits with the providers of resources or the associated TK. This phenomenon in the history of human and environment is referred to as Biopiracy.<sup>9</sup> It was rampant during last two decades of the twentieth century especially after the grant of patent rights over a genetically modified organism by a US Court.<sup>10</sup> This decision as well as domestic intellectual property laws of several developed nations emboldened the users of biological resources to claim intellectual property rights over such resources in one manner or the other, permissible in law, to suit their commercial interests.<sup>11</sup> Hence, the struggle of developing states and their ILCs for a fair and equitable sharing of benefits arrived at by utilization of biological resources and TK associated with such biological resources started boiling up. This series of historical as well as continuing exploitation of biological resources and TK in various forms, lays down the foundation of the need of access to justice in the ABS system.

## STATEMENT OF PROBLEM

The efforts of the international community especially of the countries which were at the receiving end of Biopiracy culminated in the form of the Nagoya Protocol on Access to Genetic Resources and Fair and Equitable sharing of Benefits Arising out of their Utilization to the Convention on

<sup>8</sup> MORGERA, Supra note 1 at 28

<sup>9</sup> Global Biopiracy: Patents, Plants and Indigenous Knowledge, 11-12 (2006), <<https://books.google.co.in/books?id=q4MloBKv88MC&printsec=frontcover#v=onepage&q&f=false>> Accessed on: Sep 25, 2017

<sup>10</sup> *Diamond v. Chakrabarty*, 447 U.S. 303 79 (1980)

<sup>11</sup> MORGERA, Supra note 1 at 8, Biopiracy & Related Issues, simply decoded (2013), <<http://www.simplydecoded.com/2013/07/14/biopiracy-related-issues/>> Accessed on: Jul 24, 2017

Biological Diversity (hereinafter the Protocol).<sup>12</sup> The Protocol provides guidance to the state parties to frame domestic laws, administrative or policy measures in order to create legal certainty and transparency for providers and users of genetic resources and associated TK.<sup>13</sup>

Now, the inherent problem with this piece of international law is that, it has largely subjected the rights of ILCs to the regulations framed by respective state parties. That is to mean, ILCs shall be governed by and shall exercise such rights as are guaranteed within the domestic laws of their states.<sup>14</sup> The problem that arises out of this fact is the issue of access to justice for the ILCs in situations where in their right to a fair and equitable share in benefits is not guaranteed by the state or even if guaranteed in letters of law, is not realized.

Therefore, this paper seeks to look at this issue from the perspective of ILCs through an in depth discussion on the concept of access to justice in international law and multilateral agreements on ABS. In continuation, the domestic regulations of India with respect to ABS shall be analyzed from the same perspective. The justification of choosing India as part of this paper is that she is a part of the Like Minded Mega Diverse Countries (LMMCs)<sup>15</sup> and is also a party to the Protocol.<sup>16</sup> Given her rich biological diversity and being home to three biodiversity hotspots of the world<sup>17</sup>, she largely acts as the provider country in the functional aspect of the ABS system.

Following the above stated doctrinal methodology of research, this paper seeks to test the following hypothesis, which shall in turn play a crucial role to arrive at an objective conclusion and make necessary suggestions in this regard.

## HYPOTHESIS

‘The Nagoya Protocol on ABS does not provide effective mechanisms to enable ILCs to access justice in case of violation of their right to a fair and equitable share in benefits arising out of the utilization of genetic resources or TK associated with such resources, of which they are the rightful holders.’

## THE CONCEPT OF ACCESS TO JUSTICE IN INTERNATIONAL LAW

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<sup>12</sup> Tim K. Mackey & Bryan A. Liang, Integrating Biodiversity Management and Indigenous Biopiracy Protection to Promote Environmental Justice and Global Health, 102 American Journal of Public Health 1091-1095 (2012)

<sup>13</sup> About the Nagoya Protocol, Cbd.int (2017), <<https://www.cbd.int/abs/about/>> Accessed on: Oct 9, 2017

<sup>14</sup> Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing ff Benefits Arising From Their Utilization to the Convention on Biological Diversity, 6-7 (2011), <<https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>> Accessed on: Jun 3, 2017

<sup>15</sup> Group of Like Minded Mega Diverse Countries (LMMCs), Department of Environmental Affairs, Republic of South Africa (2017), <[https://www.environment.gov.za/likeminded\\_megadiversecountries\\_lmmc](https://www.environment.gov.za/likeminded_megadiversecountries_lmmc)> Accessed on: Jun 18, 2017

<sup>16</sup> Parties to the Nagoya Protocol, Cbd.int, <<https://www.cbd.int/abs/nagoya-protocol/signatories/default.shtml>> Accessed on: Jan 18, 2017

<sup>17</sup> CEPF.net - Asia-Pacific, Cepf.net (2017), <<http://www.cepf.net/resources/hotspots/Asia-Pacific/Pages/default.aspx>> Accessed on: Aug 18, 2017

Justice is one of the most essential components of the Rule of Law. It is a crucial factor in deciding the longevity of a legal system as it determines the faith of the people in it. Access to justice is not restricted to mean access to courts but in fact is a collection of various human rights and principles of natural justice such as right to be heard, right to a proper legal representation, right to a fair trial, access to information, right to a reasoned and unbiased decision, right of locus standi to espouse once cause and also the socio-economic right to be able to do so. Accordingly, The UNDP has defined access to justice as the ability of people to seek and obtain a remedy through formal or informal institutions of justice for grievances in compliance with human rights standards.<sup>18</sup> Interestingly and rightly so, the definition does not put emphasis on the kind of institution delivering the judgment or the applicable law but it puts a special and express emphasis on compliance with human rights standards provided for in various sources of domestic and international law.

#### *Access to Justice: the diminishing divide between International and Domestic Law*

The point where the concept of access to justice is actualized is when an individual exercises his right to seek redress from the court of law as soon as a legal right is infringed.

With the evolution of international law, individuals stand today as a recognized subject of International Law.<sup>19</sup> But simultaneously, they still continue to be subjects of their state; which was created by such individuals by way of social contract for their mutual preservation and safeguarding their own fundamental freedoms.<sup>20</sup> The grievances of individuals are primarily brought before domestic court of law. If the state has agreed to subject itself to an international court by way of a treaty, wherein its nationals can bring up a case against it, in that case an individual can institute a proceeding against his state under such court.<sup>21</sup> Therefore, it would not be wrong to argue that domestic law and domestic courts continue to be the main focal point of the concept of access to justice for individuals.<sup>22</sup>

But nevertheless, in today's time, the domestic courts do not stand in a position to ignore components of international law such as Customary Principles of International Law, General Principles of International Law, Jus Cogens, Erga Omnes Obligations, International Human Rights Standards and Treaty Laws to which their state is a party. It is quite evident from emerging

<sup>18</sup> Strengthening Judicial Integrity through Enhanced Access to Justice, 6 (2017), <<http://www.undp.org/content/dam/rbec/docs/Access%20to%20justice.pdf>> Accessed on: Sep 25, 2017

<sup>19</sup> Mark Weston Janis, Individuals as Subjects of International Law, 17 Cornell International Law Journal 2 (1984)

<sup>20</sup> Spark Notes: Jean-Jacques Rousseau (1712–1778): The Social Contract, Sparknotes.com (2014), <<http://www.sparknotes.com/philosophy/rousseau/section2.rhtml>> Accessed on: Sep 15, 2017

<sup>21</sup> European Convention on Human Rights, Art 34 (2010), <[http://www.echr.coe.int/Documents/Convention\\_ENG.pdf](http://www.echr.coe.int/Documents/Convention_ENG.pdf)> Accessed on: Mar 18, 2017

<sup>22</sup> Centre for Post Graduate Legal Studies O.P. Jindal Global University, [Lecture] ‘Access to Justice in International Law’ 1/2 - Prof. Yogesh Tyagi (2015), <<https://www.youtube.com/watch?v=OZbQ6XJBnqc>> Accessed on: Aug 12, 2017

domestic case laws<sup>23</sup> that it is crucial to appreciate the significance of international law as a whole in guaranteeing access to justice to an aggrieved individual who brings up a matter before a domestic court of law.

#### *Access to Justice and Multilateral Environmental Agreements*

Even in wake of such wider application of International Laws, the multilateral environmental agreements (hereinafter MEAs) seem to be weak instruments of law as far as access to justice is concerned. This is especially due to the nature of such agreements. MEAs cannot be put under the category of soft law or hard law in a straight-jacket manner. These instruments are in general a mix of hard and soft law provisions.<sup>24</sup> This fact is especially true in case of CBD and the Nagoya Protocol attached to it. Although, the convention as well as the protocol use the ‘shall’ terminology in several provisions of their texts but still a complete reading of these provisions brings into light the illusive character of it. The protocol leaves it to the discretion of state parties to fulfill the obligation enshrined in it and gives much legal space than is needed by states to act in accordance with the protocol. The use of phrases such as ‘as far as possible’ and ‘as appropriate’ in majority of its provision<sup>25</sup> dilute the binding force of the Protocol to a great extent. Also, there is no threshold level indicated by way of model laws/ model ABS Agreements to be indicative of desired standards of ‘appropriateness’ or ‘possibilities’ to be achieved by state parties depending on their respective capabilities. It is true that such leeway is required to be given to states to encourage them to become parties to international instruments and especially so in case of MEAs but it is equally required to set a limit to this flexibility in order to let the norms retain their ability to fulfill the purpose for which they were enacted. This is crucial from the point of view of ensuring access to justice. If the crafting of norms in international law itself is dubious and weak, then the domestic norms which are crafted by states in pursuance of or to give effect to such international law shall ipso facto be feeble. Also, ensuring compliance with such international or domestic laws shall become an uphill task for judicial system of a state. Resultantly, the larger purpose of ensuring access to justice and upholding the rule of law are bound to be affected in such cases.

In view of the above discussion, the next section shall analyze the international law on ABS in context to the concept of access to justice. It seeks to look at the ways in which relevant MEAs have created space for ILCs to be able to espouse their cause to a fair and equitable share in benefits arrived at by the utilization of biological resources and TK associated with such resources and by doing so whether these instruments have contributed substantially to ensure access to justice to ILCs in this regard.

<sup>23</sup> *Vishaka & Others v. State of Rajasthan & Others* (1997) 6 SCC 241; *Indian Council for Enviro-Legal Action v. Union of India*, AIR 1996SC 1446; *Vellore Citizens Welfare Forum v. Union of India*, AIR 1996 SC 2715

<sup>24</sup> Book Review: Daniel Bodansky, The Art and Craft of International Environmental Law, 10 Santa Clara Journal of International Law 4-6 (2013)

<sup>25</sup> Nagoya, Supra note 14, Art. 5, 6, 7, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

## **ACCESS TO JUSTICE AND INTERNATIONAL LEGAL REGIME ON ACCESS AND BENEFIT SHARING**

The fair and equitable sharing of the benefits arising out of the utilization of genetic resources is incorporated as one of the objectives of the CBD<sup>26</sup> which is a multilateral agreement of universal character.<sup>27</sup> In order to further this objective, the Protocol was adopted in 2010 and has come into effect recently.<sup>28</sup> Collectively, these two international instruments lay out norms for the purpose of ensuring fair and equitable sharing of benefits and aiding the state parties in curtailing Biopiracy to an appreciable extent. The protocol in particular, lays down certain key norms on fair and equitable sharing of benefits with ILCs holding TK or having established rights over a genetic resource that is accessed.<sup>29</sup> The protocol provides that in accordance with their domestic legislations, state parties shall take measures to ensure that the prior informed consent (hereinafter PIC) of ILCs has been taken where their right to grant access to genetic resources is established in law.<sup>30</sup> Similarly, the state parties need to ensure that TK associated with genetic resources that is held by ILCs is accessed with the PIC or approval and involvement of these ILCs.<sup>31</sup> At this juncture, it is important to reiterate that this paper is not a descriptive analysis of the provisions under the CBD or the Protocol; instead it seeks to bring forward the access to justice issues and implementation challenges that arise within an ABS system specifically in context of ILCs.

The most prominent challenge facing ILCs relates to the kind of recourse that is available to them in situations where in the state parties do not provide for legislative or policy measures within their jurisdictions in compliance with the requirements of the Protocol or even if it provides for such mechanisms, those appear insufficient to safeguard their legal interests. As stated earlier, the soft language of the Protocol provides enough leeway to state parties in their actions. Therefore, unless states agree to act in good faith, the laws within different jurisdictions are bound to vary in accordance with the interests of the state parties and seldom in accordance with the interest of the ILCs.

Another related issue in context of access to justice is regarding the kind of recourse that is available to ILCs in situations when mutually agreed terms (hereinafter MAT) have not been established between them and users or when such MAT provisions in the ABS agreement have not been complied with by users in cases where TK associated with genetic resources has been accessed. One of the very basic issues left unaddressed by the Protocol is that do these ILCs have any recourse against the state where the state does not provide them with an established right to grant access to those biological resources which they have been conserving and nurturing over

<sup>26</sup> Convention on Biological Diversity, 49 Art 1 (1992), <[https://treaties.un.org/doc/Treaties/1992/06/19920605%2008-44%20PM/Ch\\_XXVII\\_08p.pdf](https://treaties.un.org/doc/Treaties/1992/06/19920605%2008-44%20PM/Ch_XXVII_08p.pdf)> Accessed on: Jul 12, 2017

<sup>27</sup> List of Parties, Cbd.int, <https://www.cbd.int/information/parties.shtml> Accessed on: Oct 4, 2017

<sup>28</sup> About the Nagoya Protocol, Cbd.int, <https://www.cbd.int/abs/about/> Accessed on: Oct 4, 2017

<sup>29</sup> Nagoya, Supra note, Art. 5

<sup>30</sup> Ibid, Art. 6

<sup>31</sup> Ibid, Art. 8

generations and hence they are devoid of right to grant PIC when access to such genetic resource is granted by state. In the understanding of the author, the protocol leaves the matter of recognizing ILCs as holders of genetic resources to the discretion of state parties<sup>32</sup> and hence does not guarantee such right to the ILCs. The Protocol obliges the state parties to share the benefits arising from the utilization of genetic resources only when such genetic resources are held by ILCs in accordance with their domestic law.<sup>33</sup> The jurisdictions wherein ILCs are not recognized as holders of genetic resources by the state parties, they do not have a right to claim a fair and equitable share in benefits unless the state provides for such sharing in spite of not recognizing them as holders of such genetic resource. This is one of the serious flaws in the drafting of the text of the protocol as it does not sufficiently safeguard the rights of ILCs who have been playing a crucial role in conservations of biodiversity at large, since hundreds of generations.

It is evident from the current framework of ABS, that in most of the cases, parties to the ABS agreement are the user which could be any physical and/or legal entity and the state which provides the genetic resource or traditional knowledge to the user as per the agreement.<sup>34</sup> In short, the user shares the benefits with the state authority in accordance with the terms of the agreement which in turn channelizes this benefit for the purpose of conservation of biological diversity or for the upliftment of its ILCs. The issue that arises here is, in case when a mutually agreed term of such agreement is violated by the user, do ILCs have a locus standi against the user to bring up their claims in appropriate forums or as per the rule of privity of contract, is their locus standi restricted to bring up claims against their own governments in a court of law.

A related question is whether in such situations, this right needs to be expressly mentioned as part of their domestic law by way of recognizing them as benefit claimers. A similar issue can crop up in situations when in a particular ABS arrangement, the user has complied with his part of the agreement but the benefits have not been channelized by the concerned state authorities to the ILCs or not being utilized in conservation/ restoration of the resources that were accessed. If such right to these ILCs is restricted in law or left unaddressed, then it is a matter of grave concern as it ultimately leads to curtailing access to justice to the ILCs. It can safely be said here; that the environmental jurisprudence of some of the states has advanced to an extent where in the domestic court of law might admit the pro bono publico plea even in situations where the domestic law does not recognize them as benefit claimers or does not obliges the executive to share the benefits with the ILCs of the state but it still remains a significant issue of access to justice in jurisdictions wherein environmental jurisprudence still exists in its archaic form.

The ILCs are generally tribal people who reside in interiors of a state away from the hacks of everyday life of town people. Such communities practice sustainable lifestyle and live in close proximity with nature sharing a close bond with different components of it. These ILCs are not

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<sup>32</sup> Ibid, Art. 6 para 2

<sup>33</sup> Ibid, Art. 5 para 2

<sup>34</sup> MORGERA, Supra note 1 at 15-20

well versed with the law of the land, so they actually cannot be said to possess knowledge and means necessary to access justice even when the right to do so is guaranteed to them by the law.

Therefore, for the purpose of guaranteeing access to justice to these communities, it is not just required to guarantee rights to them by way of a legislation, but it is equally required that the state must take positive steps as part of various governmental schemes to enhance capacities of these people to claim their rights, provide legal aid to them, make them aware of their rights and the ways to ensure them. Only then, it shall be possible to bring to realization, the larger purpose of the Protocol.

After an initial discussion on access to justice challenges that crop up due to the dubious language of the protocol, it becomes necessary to look at the law of a state, party to it, in order to provide a domestic picture of the access to justice challenges with respect to ABS system.

## **EXPLORING THE ACCESS TO JUSTICE CHALLENGES IN ACCESS AND BENEFIT SHARING REGULATIONS OF INDIA**

In India, the law that regulates ABS is the Biological Diversity Act<sup>35</sup> (hereinafter the Act) of 2002. It was enacted in pursuance of the CBD and much before the coming into existence of the Protocol. Therefore, certain amendments are required in country's domestic law on ABS to bring it in conformity with the requirements of the Protocol. The Act expressly recognizes the ILCs as Benefit Claimers<sup>36</sup> but does not recognize them as holders of genetic resources. As these ILCs are recognized to be benefit claimers under the law, they have an option to seek justice in the court of law against the state authorities in situations wherein the benefits are not shared with ILCs in accordance with MAT provisions or their right to a fair and equitable share in benefits has been violated in any other manner. Under the Act, the requirement of sharing of benefits arising out of utilization of genetic resources or TK associated with it is expressly provided for the cases where user is a foreign entity, non-resident Indian or a body corporate with a foreign element.<sup>37</sup> Whereas, in case of national users, the requirement is to provide prior intimation to the state biodiversity board concerned<sup>38</sup> which shall in turn regulate granting of approvals.<sup>39</sup> This fact restricts access to justice for ILCs by not requiring the national users to share the benefits, expressly under the Act. The National Green Tribunal of India exercises jurisdiction over the disputes arising out of the Act<sup>40</sup>, and therefore, it shall be the appropriate forum for redressal of grievances in such cases. As such, the jurisprudence in relation to ABS is at a very nascent stage in India, and it remains to be seen as to the kind of approach that the court shall adopt to guarantee justice in disputes involving ILCs who move the court of law to enforce their rights as benefit claimers. As is evident from the

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<sup>35</sup> The Biological Diversity Act, 2002, India (2002)

<sup>36</sup> Ibid at Section 2 (a).s

<sup>37</sup> Ibid at Section 21

<sup>38</sup> Ibid at Section 7

<sup>39</sup> Ibid at Section 23

<sup>40</sup> Schedule VII, The National Green Tribunal Act, 2010, India (2010)

previous environmental case laws,<sup>41</sup> in a case of this sort, the Supreme Court shall along with the applicable domestic law, apply international laws that are not in conflict with domestic laws, have acquired a character of customary international law or are part of a treaty law to which India is a party including international human rights standards in general and dealing with the protection of indigenous peoples in particular.<sup>42</sup>

## SUGGESTIONS

The analysis of the access to justice issues in the current international ABS framework reveals that it is largely a subject matter of domestic laws on ABS of various state parties to the Protocol. Therefore, the above mentioned hypothesis of this research paper stands proved. The Protocol leaves it to the discretion of the state parties to provide the rights to their ILCs based on the state's capacity, its political will, public policy and other related factors. Access to justice issues in the ABS process can be minimized in following three ways. Firstly, through an effective domestic legislation framed in good faith and in pursuance of the obligations on states enshrined in the Protocol guaranteeing rights to the ILCs to a fair and equitable share in benefits. Secondly, a stronger executive commitment and decision making to enhance the implementation of laws in order to fulfill the larger purpose of conservation of biodiversity, sustainable use of its components and safeguarding the rights of ILCs; thirdly, by ensuring timely enforcement of judgments on ABS to ensure speedy justice. Following suggestions shall play a crucial role in strengthening domestic laws on ABS under various jurisdictions:

### *Express Recognition of ILCs as benefit claimers in law*

The ILCs must be given recognition for the role that they have played in conserving biodiversity and propagating TK since generations and must specifically be declared as benefit claimers under the domestic law on ABS as is found in the Indian law on ABS.

### *Inter-state and Intra-state Sharing of Benefits*

The experience says that domestic laws on ABS must provide for inter-state as well as intra-state sharing of benefits. The origin of the user must not be a criterion for discrimination in sharing of benefits.

### *The complete ABS process must include active participation of ILCs*

The domestic law must expressly provide for a mandatory requirement of PIC of ILCs and for their representation during the grant of approval to access genetic resources and negotiations of MAT

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<sup>41</sup> Dr. Sunil Kumar Agarwal, Implementation of International Law in India: Role of Judiciary pp. 1-14, <[http://oppenheimer.mcgill.ca/IMG/pdf/SK\\_Agarwal.pdf](http://oppenheimer.mcgill.ca/IMG/pdf/SK_Agarwal.pdf)> Accessed on: Oct 4, 2017

<sup>42</sup> United Nations Declaration on the Rights of Indigenous Peoples, (2008), <[http://www.un.org/esa/socdev/unpfii/documents/DRIPS\\_en.pdf](http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf)> Accessed on: Oct 4, 2017

wherein it is found that such resource is a part of their lifestyle and culture and they have been playing a crucial role in its conservation.

#### *Ensuring Transparency and Accountability*

The information of sharing of benefits in each ABS agreement, the manner in which the benefits are channelized for conservation of resources or upliftment of ILCs must be made available to representatives of ILCs in written form by the concerned states authorities.

#### *Awareness and Legal Aid to Ensure Speedy Justice*

As is recognized under the Protocol,<sup>43</sup> ILCs must be made aware about their legal rights as benefit claimers and must be provided legal aid by state authorities in cases of non-compliance of the laws on sharing of benefits in order to make them capable of raising their concerns before the court of law.

### **CONCLUSION**

‘To do justice is the aim of law’. The three wings of a state i.e. legislature, executive and judiciary, endeavour to achieve this aim within their respective domains. Access to justice becomes more crucial in the wake of high vulnerability of certain sections of society who lack legal awareness regarding their rights guaranteed under law. ILCs are one such section of the society whose interests need to be protected by their respective states in an ABS process. The crucial role that these people have played in conservation and sustainable use of biodiversity since the times when states were non-existent needs to be appreciated and rewarded. Access to justice for ILCs in context of ABS can only be enhanced through strong domestic laws and a stronger mutual cooperation between user and provider countries.

The fundamental point that this paper wishes to highlight is that the current focus of the international community is to codify rights of ILCs within their domestic laws. Access to Justice in context of ILCs is the next big issue that shall occupy the space of multilateral environmental challenges. Therefore, in the present phase of framing and amending of domestic ABS laws by the state parties in order to ensure compliance with the Protocol, it is the right time to bring forward the issue of access to justice in the process of access and benefit sharing to adequately safeguard the rights of ILCs.

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<sup>43</sup> Nagoya, Supra note at Preamble, S Art 21

## **IMPLICATIONS OF VALUE THEORY ON THE FEASIBILITY OF CONSTRUCTING A FUNDAMENTAL RIGHT TO WATER**

Dr. Shampa Dev\* & Mitranceshaa B. S.\*\*

### ***Abstract***

#### ***Importance and relevance of the subject in the field of law and economics***

Water is the basic need in every living being's life. Without water, no living being can survive. Water has always had the greatest utility. Sadly, its value has been underestimated, because of its previously perceived abundance. But as society started growing economically, socially, politically, technologically and populously, the resources started depleting. It has caused strain on the existing water resources.

Thorough examinations of the laws and judicial decisions reveal that they are not based on consistent and sound policies. Ground water and surface water has been treated differently. These bring in more conflicts. Particularly in the present times when India has seen grave violations of peace and security on account of unfair distribution of water and the demand for clean potable water. Interestingly a price tag on water is viewed as an aberration of human rights. No government worth its name can put a price tag on water. Hence the importance of research in the above mentioned subject.

Economic theories offer help in the form of a more realistic analysis, offering practical reasonableness in the way water management is done. The diamond paradox, the value theory and even the subjective theory can help lawyers and policy makers analyze and understand the present day problems with respect to water and find an efficient way of carving out a meaningful right to water. Hence this paper explores into the following research questions.

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\* Associate Professor @ School of Law, Christ University, Bangalore

\*\* Student-BALLB @ School of Law, Christ University, Bangalore

## RESEARCH QUESTIONS

1. What economic theories govern the existing right to water?
2. How can economic theories help in determining the value of water and thereby help in carving out and ensuring a meaningful right to water?
3. What basic characteristics of water make it a distinctive commodity to handle?
4. What are the arguments raised in favour and against treating water as an economic good? What complexities may arise out of treating water as an economic good?
5. Can treating water as an economic good help in better water management? Are there any other plausible viable options to ensure meaningful water rights?

## METHODOLOGICAL APPROACH

This paper is a purely library research that seeks to analyze the value theory, subjective theory and the diamond paradox and its implications on the existing normative system on the right to water. It uses the method of systematic analysis of primary data that is the Indian laws pertaining to the right to water and the judicial decisions relating to the same. These would be analyzed from the perspective of the economic theories to find whether a more efficient way of water management and distribution can be ensured.

Applying the value theory to a scarce resource that is water, we may be able to discern the existing problems regarding water management and throw light on the feasibility of constructing a right to water.

The father of our economic science wrote that water has a great utility and a small value. Today our views differ. Water has the greatest utility and the greatest value. In the present, we do not have enough water and there are different states fighting for water. Water is a basic need unlike diamonds. Water is essential to the sustenance of life unlike diamonds. The diamond-water paradox does not seem to be correct.

The awareness that water is a scarce resource that needs to be judiciously handled has made the value of water goes higher. But the biggest hurdle that is typical only to 'water' is that, it's a life-sustaining commodity that raises an expectation that the State is responsible to make it available at an affordable price to the masses. Moreover, till this date water drawn from the well has been available for free, and water supplied at homes has invited a minimal tax.

People are willing to pay a higher price for goods with greater marginal utility. Diamonds are scarce. Because they are harder to find and attain, marginal utility (additional satisfaction), for adding a diamond to a collection is much higher. This cannot be likened to marginal utility of

water. A person may not have much value for an immediate additional unit of water but may have a dire need of water after a lapse of time. If one is dying of thirst, then this paradox might not make sense, and the marginal utility from another unit of water would be much higher than the additional satisfaction of owning a diamond. This explains the subjective theory of value developed in the late 19th century. It introduced the idea that an object's value is not inherent, and is instead based on how much the object is desired. The subjective theory of value places importance on how scarce and useful an item is rather than basing the value of the object on how many resources and man-hours went into creating it. This explains the current day situation of water.

There seems to be a general agreement that water has to have a price. That entails a discussion of what price can be attributed to a unit of water? The determination of price will require a determination on entitlements. Certainly all the water cannot be exhausted by the present generation leaving nothing for the future generations. A determination of the demand depends not only on the population but also on the quantum of the entitlement. The determination of the supply would depend on the ascertainment of the stock and the capacity of replenishment.

Additionally problems arise out of conflicting entitlements under the law. Surface water is handled by the State whereas ground water is treated as individual's property. A discussion on the feasibility of carving a fundamental right to water cannot be apart from finding solutions to the above-mentioned problems.

While the resource is getting scarce with each passing day, a determination of the value and putting a charge on the consumer would go a long way in changing consumption patterns, preserving and efficient management of the resource. It will help in the optimal utilization of the resource and the realization of a meaningful right to water.

## INTRODUCTION

The urban water supply and pricing policies are incompatible with the rational economic thinking. When a resource is genuinely scarce, rising prices do not serve to ration demand. The widespread effects of an imminent water crisis are a clear evidence for the failure of our present water-related policies and also the instruments and foundations through which they are implemented. It is presently time to look for more resistant, however politically harder and in technically challenging, alternatives like the institutions of water rights system. Also, the economic conception of water and how economists think about water is important. This makes us review the concept of value of water, how it is measured, and how it has been applied to water in various ways. The next question would be whether or not water can, or should, be treated as an economic commodity. While there are some distinctive features of water, there are also some distinctive economic features that make the demand and supply of water unique and more complex than that of most other commodities.

*The diamond-water paradox*

Why does an economy put a much lower value on something vital to sustaining life compared to something that simply looks shiny and sparkles? Economists sometimes slip into older ways of thinking and characterize economic value in terms that are inadequate or misleading. Rarely do we think about the disparity of price among the myriad products that surround us. Understanding why the paradox exists can be helped by understanding the economic terms known as marginal utility and scarcity. Scarcity can be simply defined as how readily available a good, skill, or service is. Marginal utility is the additional satisfaction or gain someone gets from using or purchasing an additional unit of a particular good or service. People are willing to pay a higher price for goods with greater marginal utility. There is plenty of water in most parts of the world (not scarce), which means that as consumers, we usually have a low marginal utility for water. In a typical situation, we aren't willing to pay a lot of money for one more drink of water. Diamonds, however, are scarce. Because they are harder to find and attain, our marginal utility (additional satisfaction), for adding a diamond to our collection is much higher than someone offering us one more drink of water.

Adam Smith in one of his lectures said, 'It is only on account of the plenty of water that it is so cheap as to be got for the lifting, and on account of the scarcity of diamonds...that they are so dear.'<sup>1</sup>

The next question that is to be answered is the value of water. The word value can be categorized into two namely 'value in use' and 'value in exchange'. Value in use is the utility or the usefulness of a particular product and value in exchange is the power of purchasing other goods which the possession of that object conveys. Nothing is more useful than water; but it will purchase scarce anything; scarce anything can be had in exchange for it. A diamond, on the contrary, has scarce any value in use; but a very great quantity of other goods may frequently be had in exchange for it.<sup>2</sup>

If water does have a scarcity value, then the price of that scarcity should be determined by competitive markets and all users should pay the same scarcity price as a resource rent (with any adjustments for transmission wastage). The "law of one price" should prevail. Here we assume that water demand exceeds supply. This means that in a river basin, urban users in the same basin as rural irrigators should be charged the same scarcity rent per kilolitre and vice versa. Further, if 30% of water is lost in transmission downstream then a rural irrigator downstream should pay 30% more than an urban or rural user water upstream. In other words, there is a natural comparative advantage to using water where it falls ex caelis, which should not be eroded by cross subsidization through prescribing identical water abstraction charges.<sup>3</sup>

### *Water as an economic commodity*

<sup>1</sup> <<http://www.economictheories.org/2008/08/adam-smith-theory-of-value.html>>

<sup>2</sup> The paradox of value: Water rates and the law of diminishing marginal utility, Melanie K. Goetz, Journal (American Water Works Association), Vol. 105, No. 9 (September 2013), pp.57-59

<sup>3</sup> <[http://www.iirc.act.gov.au/wp-content/uploads/2013/02/Terry\\_Dwyer\\_Submission.pdf](http://www.iirc.act.gov.au/wp-content/uploads/2013/02/Terry_Dwyer_Submission.pdf)>

The question that comes in all our mind is, is water an economic commodity, and can it be analyzed using the conceptual framework of economics in the same way as any other commodity.

One of the four Dublin Principles, adopted at the 1992 International Conference on Water and the Environment in Dublin, holds that “water has an economic value in all its competing uses and should be recognized as an economic good.” Similarly, Baumann~ Boland (1998) write: “water is no different from any other economic good. It is no more a necessity than food, clothing, or housing, all of which obey the normal laws of economics.” Per contra, Barlow & Clarke (2002) proclaim it as a “universal and indivisible” truth that “the Earth’s freshwater belongs to the Earth and all species, and therefore must not be treated as a private commodity to be bought, sold, and traded for profit...the global freshwater supply is a shared legacy, a public trust, and a fundamental human right, and therefore, a collective responsibility.” Vandana Shiva (2002) writes in a similar vein about a clash between two cultures: “a culture that sees water as sacred and treats its provision as a duty for the preservation of life and another that sees water as a commodity, and its ownership and trade as fundamental corporate rights. The culture of commodification is at war with diverse cultures of sharing, or receiving, and giving water as a free gift.”<sup>4</sup>

The fact that water, unlike other household commodities, arouses such passion speaks for itself: for better or worse, water is perceived as having a special significance that most other commodities do not possess.<sup>5</sup> Water has some economic features, and is both a public good and a private good. The variability of supply is yet one more point of divergence between water and land, and it explains why the property rights regimes are different: it would surely be difficult to apply the ownership rights in land to so variable a resource as water. Besides the variability in supply, the demand for water may be intermittent.

Prices of commodities produced from quickly exhaustible natural resources, even where controlled by a monopoly, have always been too low rather than too high. This means, the government’s efforts to keep down such prices are against the public interest. The government should be trying to keep up the price rather than down. The question that comes up is how high should the price be fixed and what level of price would be socially justifiable. The answer to this question depends on the substitutes available for the same commodity. In this case, water does not have an equal substitute. When there are no substitutes available, at what level must the price be fixed will be our next question. This question will depend upon how fast we wish to use up these resources, or, what amounts to the same thing, how important future wants should be rated in comparison with present wants. The rate of consumption, and, therefore, the amount left for the satisfaction of future wants, will depend absolutely upon the prices fixed. To put it in another way, present prices will determine the rate of consumption and the amount of the resource left for the future, and therefore

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<sup>4</sup> The economic conception of water, W. M. Hanemann University of California, Berkeley, USA

<sup>5</sup> This is true in rich as well as poor countries -in the USA, for example, it is notoriously difficult for publicly owned urban water utilities to obtain political approval for even trivial rate increases while other household utilities such as cable television raise their rates with impunity; Glennon (2004) makes a similar observation.

will determine future prices.

The next question that has to be answered is how much difference is we justified in making between present wants and future wants. The human mind might rate the present wants and the far future wants equally<sup>6</sup>. This would mean extremely high prices, and almost infinitesimally small consumption. On the other side, we might rate future wants of no importance whatever, and consume with absolute disregard for anything but the present. Both these extremes are logically untenable.

For various reasons it is more feasible that quickly exhaustible resources should be sold at prices approximating the cost of producing substitutes, if substitutes are assumed to be possible. Prices fixed according to this principle would immediately stimulate efforts to find a variety of substitutes. When there are no available substitutes, it would be necessary to regulate the use of such resources and fix the price accordingly. Thus where substitutes could not be found, we should gain immeasurably by learning the truth before the re source is exhausted.

Thus, as far as substitutes are assumed not to be possible, prices of quickly exhaustible resources should be fixed high enough so that they would rise not more than two per cent each year; and as far as substitutes are assumed to be forthcoming, prices should approximate the cost of producing those substitutes.

Prices of quickly exhaustible natural resources should be much higher than they have ever been in the past. Higher prices would not only stimulate the development of substitutes, as already indicated, but, on the side of demand, would have the desirable effect of reducing the amount consumed, of conserving for higher uses. Higher prices would bring consumers face to face with the situation which is coming soon anyhow.

Somewhat the same reasoning applies to all exhaustible and irreplaceable natural resources, even to those of long probable duration, as for instance ground water, the supply of which will perhaps last for a few decades. The supply of ground water is so great that its present resource value is practically nil, yet it must be recognized as absolutely essential to civilized life; and a society which is willing to look forward to a life of more than a few decades must somehow prolong the life of its water. Its cheapness- not in the market, but as a resource encourages every form of waste, and nothing would encourage economy more surely than an increase in its value. The life of our ground water supply could be doubled with very little sacrifice on the part of the present generation, but neither a monopoly nor competing owners would ever fix the price of fresh water high enough to encourage the economies necessary to accomplish such a result.

Thus it is certain that competitive owners of quickly exhaustible resources will establish prices far too low; and it is almost certain that a monopoly also would find it profitable to sell too cheaply.

<sup>6</sup> The Theory of Value as Applied to Natural Resources, John Ise, The American Economic Review, Vol. 15, No. 2 (Jun., 1925), pp. 284-291

### ***Ground water regulation***

Water located beneath the ground surface. Groundwater is water that is found underground in the cracks and spaces in soil, sand and rock. Groundwater is stored in and moves slowly through layers of soil, sand and rocks called aquifers. Aquifers typically consist of gravel, sand, sandstone, or fractured rock, like limestone. These materials are permeable because they have large connected spaces that allow water to flow through. The speed at which groundwater flows depends on the size of the spaces in the soil or rock and how well the spaces are connected. The area where water fills the aquifer is called the saturated zone (or saturation zone). The top of this zone is called the water table. The water table may be located only a foot below the ground's surface or it can sit hundreds of feet down<sup>7</sup>.

Groundwater is a necessary part of the environment, and subsequently can't be looked upon in isolation. There has been a lack of adequate attention regarding water conservation, efficiency in water use, water re-use, groundwater recharge, and ecosystem sustainability. An uncontrolled use of the borewell technology has prompted the extraction of groundwater at such a high rate, to the point that frequently recharge isn't adequate. The causes of low water accessibility in numerous regions are likewise directly connected to the reducing forest cover and soil degradation.

The measures proposed in the draft bill were in keeping with the policy paradigm of the early 1970s when a model Bill was first introduced. It focused on adding some State-level control over new, additional uses of groundwater but did not address the iniquitous regime giving land owner's unlimited control over groundwater.

The Union Ministry of Water Resources had put up a Model Bill for Conservation, Protection and Regulation of Groundwater in its official website in 2016. The bill seeks to move groundwater away from the hands of the people under the Easements Act as a private property resource to a Common Pool Resource. The State will hold groundwater as a resource in public trust. The objectives of the Bill include<sup>8</sup>:

1. Ensure the realisation of the fundamental right to life through the provision of water.
2. Meet food security, livelihoods, basic human needs, livestock and aquatic life.
3. Protect ecosystems and their biological diversity.
4. Reduce and prevent pollution and degradation of groundwater.

One of the greatest difficulties for feasible administration of groundwater originates from overexploitation and overuse, past the annual revive. Alternate originates from pollution, from

<sup>7</sup> An Insight On Legal Aspect Of Ground Water Use By Industries And Water Tax / Rate / Fee

<sup>8</sup> Draft National Water Framework Bill, 2016

characteristic mineral events, for example, with fluoride and arsenic and with man-made sources, for example, industrial effluents, manures and sewage. To battle this, the Bill proposes the division of ‘groundwater assurance zones depends on the most recent dynamic asset appraisal of the Central Groundwater Board and State offices and the mapping of aquifers and sub-aquifers, a procedure which is progressing. This at that point will prompt the advancement of a groundwater security arrange for which through a procedure of energize and request administration will bring about fulfilment of adequate amount of safe water forever and reasonable employment and guaranteeing water security even during dry spell and surges. For the institutional system, the Act sees the setting up of a groundwater sub-advisory group under the town water and sanitation board of trustees by the Gram Panchayat. This will be directed by a Block Panchayat, which will merge the groundwater security designs of all Gram Panchayats in its ambit.

In urban territories, the Model Bill visualizes the setting up of ward groundwater advisory groups which will design, affirm and encourage the usage of Ward Groundwater Security Plan. This will be administered by a Municipal Water Management Committee. Over these layers will be a District Groundwater Council and State Groundwater Advisory Council to fittingly incorporate and take choices at their scale.

The Model Bill looks to put certain responsibilities on the groundwater client: for instance, its efficient utilizes, its prevention from pollution, replenishing and recharging groundwater. For industrial clients there are a few checks and incorporates the suggestion to charge for groundwater utilize, the monies so generated being contributed for the sustainability of the asset.

While the bill has been drafted with mind and is exhaustive, yet it is at a draft organize and will require a few sources of information, particularly from industrial clients of groundwater and those in the peri-urban regions. It is far-fetched that the bill will work in urban territories, being to a great degree hopeful in its suspicion of the presence and abilities of local governments. This remains constant for gram panchayats as well. In the end the bill should be embraced by States and will be altered in view of their local conditions, institutional, legal and governance related and in addition aquifer related contrasts.

## **CONCLUSION**

The dilemma with which this paper started was that if water is an economic commodity and if groundwater needed a regulation. The rising depletion of natural resources, especially resources such as water which does not have an equivalent substitute needs to be regulated and channelized for its sustainable use. Also, keeping in mind the doctrine of intergenerational equity, it is necessary to save the resources for the future generation. Considering water to be an economic commodity with a value, it is important to give it a monopoly price as there is a high demand rate and very low supply rate with no readily available substitute. Treating water as an economic good will helps in better water management and thus helps in achieving the goals of sustainable development. This will make sure water is saved for the next generations without any shortage.

## **TOWARDS A SHARED FUTURE: RAISING AWARENESS AND PRACTICING ENVIRONMENT JUSTICE**

Teena\*

### **INTRODUCTION**

Environment provides all necessities of life thus there is a close relationship between human beings and environment. Human existence is not possible on the planet without a natural and safe environment. Environment and society are inseparable and dependent on each other. The time has witnessed that the natural environment has helped many civilization in their development. Since time immemorial the main aim of social life in India has been to live in harmony with nature. Now time has changed, in order to make life more comfortable the man has always exploited the nature. Due to ever increasing rate of population and advancement in the field of science and technology, some tremendous changes has been introduced in the domain of environment. These changes not only upset the eco system of nature but also shake the balance of human lives. India is the largest population center in southern Asia, the region which is among the most vulnerable to the future effects of Environment pollution. According to the fifth Assessment Report 2014 of the Intergovernmental Panel on Climate Change, this region is likely to experience a temperature increase upto five degree centigrade by the year 2080.

### **NEED OF STUDY**

- 1) To examine Indian legal system that underlies the environment justice,
- 2) To study various measures taken to abate degradation of environment at national and international level,
- 3) To trace the development of environment justice in India and to examine the present trends this leads to environment justice in India and
- 4) To study the impact of public participation in environmental decision making

### **HYPOTHESIS**

Keeping in view, the aims and objectives of the Study the following hypothesis have been formulated.

- 1) Offences relating to environment pollution are on increase whereas the moral as well as ethical concern of the public towards environmental protection is on the decrease.
- 2) The environment legislation passed by the legislature of India was proved ineffective and insufficient.

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\* Associate Professor @ School of Law, Christ University, Bangalore

- 3) The judicial verdict are often neglected and not properly complied with by the respective agencies in the country.
- 4) The international environmental treaties were proved insufficient.

## **METHODOLOGY**

The methodology adopted or used in this research paper is doctrinaire and analytical.

## **LITERATURE REVIEW**

The book *Text Book of Environmental Law* 2002 by I.A.Khan widely elaborates the problems of environmental law, causes of environmental pollution in India, and the legislative measures adopted by India.

The book *Environmental Law in India* (2016) by P. Leelakrishnna, provides the critical analysis of judgments passed by honorable Supreme Court and vividly discusses the International Conventions and Treaties relevant to the subject. This book also emphasizes upon the public participation in environmental decision making.

The book *Environmental Law* (2015) by S. C. Shastri, deals with different facet of judicial activism. This book is also concern with various fundamental principles which deals with environment issues.

The book *Environmental Law* (2001) by H. N. Tiwari tries to elaborate the complexity of environment. It addresses the important aspects which are related to environment protection such as effect of pollution, national and international legal provision to protect the environment.

## **LEGISLATIVE PROVISIONS OF ENVIRONMENTAL LAW IN INDIA**

In India since the Vedic period the main aim of social life was to live in harmony with the nature. Our main saints, sages and great philosopher lived in forest and respected the nature as god. The Hindu religion enshrined a respect for nature and it was regarded a sacred duty of every person to respect and protect the environment.

And we follow the same ethics in present scenario. But due to increasing growth of population, advancement of technologies and rapid growth in deforestation India is also facing the problem of environmental pollution. India has so many legislative provisions to redress this problem and for securing the environment justice. Environment justice is a process by which various stakeholders in environment protection understand their responsibility for safer environment to the generations. It seeks the involvement of every person in environment development.

Initially the preamble of constitution of India had not placed environment justice along with the other justice as economic, social and political. But after the Stockholm Declaration in 1972 which emphasized that man bears a solemn responsibility to protect and improve the

environment not only for the present generation but also for future generation, and thus consequently the Indian government introduced the 42<sup>nd</sup> amendment in the constitution of India. The 42<sup>nd</sup> amendment inserted the two environmental related Articles 48-A and 51(A)g , in the form of Directive Principles of State Policy and Fundamental Duties respectively. It is the fundamental duty of every citizen to protect and improve the natural environment. The main drawback is that Directive principles are not enforceable by any court. So if these directives are not followed by the state, its implementation cannot be secured by any judicial proceedings. But these principles are fundamental in governance of country and it is an obligation of the state to apply this principle in law making.

The right to live in a healthy environment considered as an integral part of right to life under Article 21 of Constitution. The Supreme Court explaining the concept of right to life in healthy environment in *K. M. Chinnappa v. Union of India*<sup>1</sup> enjoyment of life and its attainment including the right to life with human dignity encompasses with lots ambit, the protection and preservation of the environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed.

In *Hinch Lal Tiwari v. Kamala Devi*<sup>2</sup> the supreme court held that preservation of material resources of the community such as air, forest, pond etc. is needed to maintain ecological balance so that people would enjoy a quality of life, which is essence of the right guaranteed under Article 21.

The Environment Protection Act, 1986 is work as an umbrella legislation that generated a collection of rules, regulations, notifications and orders and facilitated delegation of powers of the Central Government to various other agencies of the central and state. Environment Impact Assessment and public hearing are the example of delegated legislation.

There are many other provisions like Indian Penal Code, Criminal Procedure Code, Law of Tort, Indian Forest Act, 1927, the Water (Prevention and Control of Pollution Act, 1974, the Forest Conservation Act, 1980, and other enactments include the Public Liability Insurance Act 1991, the National Appellate Authority Act, 1997, Green Tribunal Act 2010, the Energy Conservation Act 2001, which deal with environmental justice and provides the remedies in case of environment injustice.

## **CONTRIBUTION OF JUDICIARY IN ENVIRONMENT JUSTICE**

Supreme Court plays a significant role in the field of environmental awareness as well as in imparting the environment justice. The first initiative taken by the apex court was the relaxation in the traditional rule of locus standi and paved the way for the Public interest litigation (PIL). The seeds of concept of PIL were firstly sown by Krishna Iyer.j in the year 1976 by the case of *Mumbai Kamgar Sabha v. Abdulhai*<sup>3</sup>, but it was not known as public interest litigation. India had to wait for 10 years and Justice Bhagwati gave a new dimension

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<sup>1</sup> AIR 2003 SC 724

<sup>2</sup> (2001) 6 SCC 496

<sup>3</sup> AIR 1976 SC 1455

to this concept and introduced it to the Indian judicial system as public interest litigation.

The PIL has proved itself as an important tool in the hands of judiciary and environmentalist for protection the environment from pollution and providing the environmental justice to everyone. In *In M.C.Mehta v. Union of India*<sup>4</sup>(*Oilum Gas Leak Case*) the apex court accepted the petition by a lawyer and extended the scope of Article 32. The court held that the power of the court under article 32 to grant remedial relief may also include the power of award compensation to victims in appropriate way. The Supreme Court also rejected the old principle of strict liability and introduced the absolute liability, where person absolutely liable to pay compensation in case of any harm. Such liability is not subjected to any exception like strict liability.

In *M.C.Mehta v. Union of India*<sup>5</sup>, A PIL was filed by a social activist for stopping the tanneries near Kanpur. As these tanneries were polluting the Ganga River by discharging trade effluents into it. The Supreme Court had taken a very strict initiative against these tanneries and passed various directions to the tanneries including Kanpur Nagar Palika to ensure that the trade waste should not be discharge in the rivers without proper treatment.

In *Narmada Bachao Andolan v. Union of India*<sup>6</sup>, the Supreme Court of India upheld that “water is the basic need for the survival of human beings and is part of the right to life and human rights as enshrined in Article 21 of the Constitution of India and the right to healthy environment and to sustainable development are fundamental human rights implicit in the right to life.

In *Vellore Citizens Welfare Forum v. Union of India*<sup>7</sup>, the apex court of India made request to the Madras High Court to constitute a green bench or a special bench to handle the cases of environment. And similar directions were passed to the Calcutta, Madhya Pradesh and some Other High Courts.

In *M.C.Mehta v. Union of India*<sup>8</sup> Supreme Court held that in order for human conduct to be in accordance with the prescription of law it is necessary that there should be appropriate awareness about what the law requires. This should be possible only when steps are taken in the adequate measures to make people aware of the indispensable necessity of their conduct being oriented in accordance with requirement of law. Supreme Court not only checking the menace of the environment pollution but also plays an important role in promoting the environment awareness. Consequently, Environmental Studies was introduced as a compulsory subject at every level of education. Even bar council introduced ‘Environmental law’ as a compulsory paper for legal education at graduation level.

## **ENVIRONMENT IMPACT ASSESSMENT**

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<sup>4</sup> AIR 1987 SC 1086

<sup>5</sup> AIR 1988 SC 1115

<sup>6</sup> Vrinda Narain, Water as a Fundamental Right: A Perspective from India, Vol. 34. Available at: <[www.vjel.org/docs/narain\\_water\\_draft](http://www.vjel.org/docs/narain_water_draft)>

<sup>7</sup> AIR 1996 SC 2715

<sup>8</sup> AIR 1992 SC 362

Environment impact assessment is also a new field in the environment justice. It's not only identifying the environmental problem which creates by new development project but also finds the solution to reduce the impact of any new project on environment. The Ministry of Environment and Forest (MoEF) in India uses EIA as a major and main tool for minimizing adverse effect of industrialization and modernization on environment and for reserving those impacts which may cause environment degradation in future or in long run. The EIA notification which was issued in 2006 categorized the new development projects into two category 'A' and 'B'. Category 'A' requires the prior clearance from MoEF on the recommendation of an Expert Appraisal Committee constituted by the central government. Category which belongs to 'B' needs prior approval of State Environment Impact Assessment Authority on the recommendation of State Expert Appraisal Committee. And division of category 'A' and 'B' depends upon the capacity of pollution potential.

UNEP also defines the Environment Impact Assessment as tool used to identify the environmental, social and economic impacts of a project prior to decision making. It aims to predict environment impact at an early stage in project planning and design, find ways and means to reduce adverse impact, shape project to suit the local environment and present the predictions and options to decision makers.<sup>9</sup>

## **ENVIRONMENT JUSTICE: AN INTERNATIONAL PERSPECTIVE**

Environment justice basically emerged in United States in the early 1980s, then its spread all over the world. Environment justice usually defines the fair treatment and meaningful involvement of all people regardless their race, religion, community, nationality etc. So it is not possible to confine the environment justice to particular one country or one nation but it's a matter of international importance. So in order to secure the environmental issues there are number of treaties which deals with the environment protection. Most of these treaties have binding force for that country that ratified treaty. Like Kyoto protocol, Vienna Convention , Aarhus Convention on Access to information, Public Participation in Decision-making and Access to Justice in Environment Matters, Aarhus 1998, Boon Agreement, Espoo Convention on Environment Impact Assessment in a Transboundary context, Espoo,1991 etc.

For ensuring the environment justice some principles were drafted in First National People of Color Environment Leadership Summit held on October 24 to 27 in Washington DC. These principles are the cornerstone in the growth of environment justice. These 17 principles are as followed.<sup>10</sup>

- i. Environment justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
- ii. Environment justice demands that public policy be based on mutual respect and justice for all peoples, free from any discrimination or bias.

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<sup>9</sup> Available at: <<https://www.cbd.int>>

<sup>10</sup> Available at: <[www.ejnet.org/principles.html](http://www.ejnet.org/principles.html)>

- iii. Environment justice mandates the right to ethical, balanced and responsible uses of land and renewable recourses in the interest of a sustainable planet for humans and other living things.
- iv. Environment justice call for nuclear testing and extraction that threaten the fundamental right to clean air, land, water and food.
- v. Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all people.
- vi. Environment justice demands the cessation of the production of all the toxins, hazardous waste and radioactive materials.
- vii. Environment justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evolution.
- viii. Environment justice affirms right of all workers to a safe and healthy environment without being forced to choose between an unsafe livelihood and unemployment.
- ix. Environment justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.
- x. Environmental justice considers governmental injustice a violation of international law, the Universal Declaration of Human Rights and the United Nation Convention on Genocide.
- xi. Environment justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compact, and covenants affirming sovereignty and self-determination.
- xii. Environment justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities.
- xiii. Environment justice calls for the strict enforcement of principles of informed consent and halt to the testing of experimental reproductive and medical procedures and vaccination on people of color.
- xiv. Environment justice opposes the destructive operations of multinational corporations.
- xv. Environment justice opposes military occupation, repression and exploitation of lands, peoples and cultures and other life forms.
- xvi. Environment justice call for the of presents and future generations which emphasizes social and environmental issues.
- xvii. Environment justice requires that we as individual make personal and consumers choices to consume as little of Mother Earth's resources and to produce as little waste as possible.

## **CONCLUSION**

In view of the foregoing discussions, it can be safely concluded that Environment Justice has grown as a social movement. All stakeholders have understood their role towards preservation of the environment and importance of environment for human lives. Many nongovernmental organizations have been leading the front, for securing the safe and clean environment. Judiciary particularly has taken stringent steps to protect environment and force

the executive to take concrete steps in this direction. However, the efforts are falling short in the era of rising population, rapid industrialization, increase in vehicles and other similar issues. Environmental Justice is not a new genre of the Justice Delivery system. The role of the judiciary has always been to secure natural environment for the generations.

## **SUGGESTIONS**

The environment protection through environmental justice is crucial forum to improve the deteriorating environment. There is a need of constant awareness among the masses for the protection of environment. At time people get oblivion of the fact that they would be survived by their offspring. And they fail to imagine the danger of loss of environment to their children. Thus, there is a need of awareness among people to use the environment with preservative mindset. If we are able to foresee the degrading situation of environment, we could readily save the nature. The citizen is duty bound to protect the environment, as such, he must make efforts for safe and clean environment. Now comes the role of legislative, executive and judiciary. The legislative wing of the government vests with ample powers to introduce measures through appropriate legislation as felt by the environmentalists and the judiciary. India is signatory to all major international agreements on environment. In order to conform to the international standards, the legislation should bring in all necessary laws in India for safer environment. The executive is the main operational wing of the government; it needs to enforce the law precisely and meticulously. If executive is able to enforce the law in its true spirit, there would be no scope at all for people to violate the environmental laws. Ignorance deliberate or spontaneous is deeply permeated in Indian culture. People are tending to violate the laws, in the garb of ignorance. If any beneficial legislation is introduced, people violate it and moreover, the executive helplessly ignores those violations. Therefore, there is a need for stringent enforcement of laws. Now, the most important role comes of the judiciary. It is felt that the most intellectual people with good conscience sit to pass the judgment. Therefore, a careful deliberation is required on all environmental issues come up before the judiciary to decide. The environmental issue has wider impact on the society in comparison to other social crimes. The judiciary needs to suo moto initiate the issue and seek government's initiatives in an area which is overlooked. Judiciary has a bounden duty to secure justice to the nation, to its people. Though, the people, environmentalists may fail to assess the future calamity to the nature, but judiciary need to understand the issue. Last but not least, the role of human being is most important in environmental justice. He first of all, need to follow all settled laws in the country and if he feels that any aspect of environment protection is ignored or overlooked by the government, he needs to knock the door of the judiciary for redressal of the issue.

## **WILDLIFE CONSERVATION AND MANAGEMENT: THE LEGAL FRAMEWORK**

Pritam Mirdha \* & Yash Taleja \*\*

### **INTRODUCTION**

Wildlife means the animals, birds, plants species and other insects which are living in the forest peacefully. But there are many illegal businessmen in the world who thinks that if they do illegal business with the wildlife then there are no rules which can catch them. But there are several strict laws which deal with the wildlife conservation and management. There are National as well as State boards to protect the wildlife animals and birds in India. Even there is an act named as (WALPA) Wildlife Protection Act (1972) which specially looks after the protection of the wild animals especially those animals and birds which are going to be extinct within few years. In this Act there are provisions for prohibition of hunting by that is Minimum of 3yrs or 7 yrs of imprisonment or imprisonment with Rs.10000. Along with the National Parks, Wildlife Sanctuaries and Tiger Reserves WALPA has included Conservation Reserves and Community Reserves to protect the wildlife. WALPA deals with the illustrated legal rights which are proposed to protect the wildlife. A wildlife Crime Control Bureau (WCCB) was constituted on 2006 to control the illegal businesses running with the help of wildlife products.

There are lots of rights and acts and laws to protect the wildlife. There is a plan known as National wildlife protection plan (2002-2016) which took the place of the earlier plan which was enacted in 1983. The plan especially focuses on escalation and further improving the quality of the protection of the protected area network and also conserving these places of endangered wildlife and habitats, for controlling trade practices of wildlife products for research, education, and training. The State Laws present were outdated and provided punishments which were not in proportion to the offence, so many of the Acts and Laws were changed to protect the wild animals and birds which are in the danger of being extinct. The central Government had no power to make laws which look at steadily in a particular way to the subject related to the entry-20(protection of wild animals and birds) of the state list in the seventh schedule. The legislation of the State of Andhra Pradesh, Bihar, Gujarat ,Haryana ,Himachal Pradesh, Madhya Pradesh ,Manipur ,Punjab ,Rajasthan and West Bengal have passed decisions for giving powers to the parliament to pass necessary Acts and Statutes for the protection of the wildlife.<sup>1</sup>

Wildlife management is balance between the natural changes of the population and the wildlife from day to day. Wildlife management is done to increase or to decrease the population of wild animals, tree, plant species, insects and other things which comes under

\* Student @ Amity Law School, Raipur

\*\* Student @ Amity Law School, Raipur

<sup>1</sup> Available at: <<http://www.conservationindia.org/resources/the-legal-framework-for-wildlife-conservation-in-india-2>> Accessed on: 11 October, 2017

the term ‘Wildlife’. Sometimes the managers of the wildlife try to change the habitats of the wild animals so that it not only gives benefit to the wild animals but also the population residing aside. In the wildlife management the wildlife manager should do changes in a particular species so that the wildlife population will increase and that will affect the wildlife habitats. Habitats may be large or small but these habitats are affected by the natural change and the disturbances created by human beings. Some benefits which are not seen are also important and that which we get from the wildlife. The new vision for wildlife has begun from 1960s for the conservation and management of wildlife. There is a act to save the endangered species that is Endangered Species Act (ESA) which was made in 1973 to save the backbone of the wildlife habitat.

For the management of wildlife there are some essential things which should be present in a habitat that are mentioned below:<sup>2</sup>

1. In the area there must be food.
2. For their shelter there must be covered area for their protection and for nesting etc.
3. There must be an open field for the herbivorous animals to graze and large area so that there must not be shortage of food in a common area.

There must be some effective laws to be made to stop the harms which are done to the wildlife.

### **NATIONAL WILDLIFE ACTION PLAN (NWAP)**

The first National Wildlife Action Plan (NWAP) was adopted in 1983 based on the meeting of Indian Board for wildlife held in 1982. These plan has summarizes methods of protecting the habitats of Flora and Fauna which are still in existence. Government is working constantly for increasing the ratio of these almost extinct habitats which help in maintaining the ecological system. Many social awareness programs are in process to save these wildlife sanctuaries. Habitat is harmed by the developmental of dams, mines, etc made problems in conservation of wildlife habitat.

#### **Plans of National Wildlife Action Plan (NWAP)**

1. Escalating and Improving the Protected Area Network such as National Parks, Tiger Reserves, Wildlife Sanctuaries, Conservation reserves etc.
2. Refurbishment of Ruined habitats Outside the Protected Areas.
3. Controlling of the illegal hunting usually associated with the use of wildlife rights, and illegal trade of the wild animals and the direct products which are made from the trees and plants species.
4. Every group of people should have participation in the conservation of the wildlife.

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<sup>2</sup>Available at:  
[https://nndfw.org/Summit%20Presentations%202015/Intro%20to%20wildlife%20management\\_CSmith.pdf](https://nndfw.org/Summit%20Presentations%202015/Intro%20to%20wildlife%20management_CSmith.pdf)  
Accessed on: 7 October, 2017

5. Every person in the society should be given education upon the topic of conservation of wildlife and about the importance of wildlife.
6. This plan conveys to increase wildlife tourism.
7. Improve the economical position of the protected areas such as the wildlife sanctuaries, Tiger Resource, National Parks etc.

Some case laws for National Wildlife Action Plan (NWAP)

1. *Tribunal at its own motion v. Ministry Of Environment & Others*<sup>3</sup> on 4 April, 2014
2. *Centre For Environment Law, WWF-I v. Union of India & Others*<sup>4</sup> on 15 April, 2013
3. *Suo Moto(Court on its own motion) v. State Of Karnataka* on 8 October, 2013

## **THE WILDLIFE (PROTECTION) ACT 1972**

The Wildlife (Protection) Act was passed on 1972 by the parliament under article 252 of the constitution on the request of eleven States. It was planned to complete National Legal Framework for wild life protection. The Act adopts two pronged conservation strategy-

- (i) Specified endangered species are to be protected,
- (ii) All the species should be protected in a specified area.

The Wildlife Protection Amendment Act which was made on 1991 extended the Wildlife Protection Act 1972, to the whole of India except the State of Jammu and Kashmir. The major Act on wildlife protection for spreading the protected areas such as Wildlife sanctuaries, Tiger reserves, National Parks etc. and to regulate the illegal practices which are with the involvement of the wildlife and the products derived from the wildlife<sup>5</sup>. The National Board for Wildlife (NBFW) headed by the prime minister of India frames the policy of wildlife conservation. The National Wildlife Action Plan (2002-2016) was adopted in 2002, possess on support and participation of people on wildlife conservation. India's conservation planning is based on the philosophy of determining and preserving representative wild habitats across all the ecosystems. There are five categories of the Protected Areas as Wildlife Sanctuaries, National Parks, Tiger Reserves, Conservation Reserves and Community Reserves.<sup>6</sup> These protected area networks are there to protect the wild animals and different species of trees and birds and the things that comes under wildlife.

- a) Wildlife Sanctuaries<sup>7</sup>- Wildlife Sanctuaries are made so that the animals are kept under a surveillance to protect them from the illegal traders and other factors harming

<sup>3</sup> (1998) 9 SCC 623

<sup>4</sup> (2013) 8 SCC 234

<sup>5</sup> Available at: <[http://shodhganga.inflibnet.ac.in/bitstream/10603/63693/9/09\\_chapter%202.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/63693/9/09_chapter%202.pdf)> Accessed on: 7 October, 2017

<sup>6</sup> Available at:<<http://www.envfor.nic.in/sites/default/files/protected-area-network.pdf>> Accessed on: 7 October, 2017

<sup>7</sup> The Wildlife (Protection) Act 1972, Chapter III Available at: <[http://lawmin.nic.in/law/P-ACT/1972/The%20Wild%20Life%20\(Protection\)%20Act,%201972.pdf](http://lawmin.nic.in/law/P-ACT/1972/The%20Wild%20Life%20(Protection)%20Act,%201972.pdf)> Accessed on: 8 October, 2017

As per Chapter IV Section 18(1) Of Wildlife Protection Act, 1972- "The State Government may, by notification, declare its intention to constitute any area other than an area comprised within any reserve forest or the

them. This area is made and maintained by the State Government. These types of areas are made after taking many types of things in mind, such as territorial factors, geographical factors etc. which directly affects the wildlife.

- b) National Parks<sup>8</sup> - This protected area as if appears to the State government as an area within or outside a sanctuary and its richness in flora & fauna needs to be constituted as a National Park for the reason of protecting and promoting the wildlife.
- c) Tiger Reserve<sup>9</sup> - The areas of National parks and sanctuaries established for observations and systematical research as used for educational purpose and constituted for the protection of tiger without disturbing the livelihood and rights of the tribal peoples living in the forest. These areas are established by the certain authorities that are assigned the responsibility for the formation of tiger reserve.
- d) Conservation Reserve<sup>10</sup> - This protected area were setup after consulting from a group of people residing near the national park or a sanctuary for protection of wildlife i.e. flora & fauna and for preservation of forest land and natural resources. This protected area are established and owned by the central government.
- e) Community Reserve<sup>11</sup> - The state government may provide some part of land as assigning responsibility to the local communities for providing protection to wildlife and cultural values which is not comprised of national park or sanctuary.

The provisions of the statute may be more effective once the following measures are implemented which may be enumerated as:

1. We should plant more and more trees and also we should not cut trees so that the birds could make their nest and could live peacefully, and many herbivorous animals also get their food properly.

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territorial waters as a sanctuary if it considers that such area are of adequate ecological, faunal, floral, geomorphologic, natural or zoological significance, for the purpose of protecting, propagating or developing wild life or its environment.

<sup>8</sup> Ibid at 5; As per Chapter IV Section 35(1) Of Wildlife Protection Act, 1972- A National Park can be defined as “Whenever it appears to the State Government that an area, whether within a sanctuary or not, is, by reason of its ecological, faunal, floral, geomorphologic or zoological association or importance, needed to be constituted as a National Park for the purpose of protecting, propagating or developing wild life therein or its environment, it may, by notification, declare its intention to constitute such area as a National Park.”

<sup>9</sup> Ibid; As per Chapter IV Section 38V (4) (i) Of Wildlife Protection Act, 1972- A Tiger Reserve can be defined as “core or critical tiger habitat areas of National Parks and sanctuaries, where it has been established, on the basis of scientific and objective criteria, that such areas are required to be kept as inviolate for the purposes of tiger conservation, without affecting the rights of the Scheduled Tribes or such other forest dwellers, and notified as such by the State Government in consultation with an Expert Committee constituted for the purpose.”

<sup>10</sup> Ibid; As per Chapter IV Section 36A (1) Of Wildlife Protection Act, 1972- A Conservation Reserve can be defined as “The State Government may, after having consultations with the local communities, declare any area owned by the Government, particularly the areas adjacent to National Parks and sanctuaries and those areas which link one protected area with another, as a conservation reserve for protecting landscapes, seascapes, flora and fauna and their habitat: Provided that where the conservation reserve includes any land owned by the Central Government, its prior concurrence shall be obtained before making such declaration.”

<sup>11</sup> Ibid; As per Chapter IV Section 36C (1) Of Wildlife Protection Act, 1972- A Conservation Reserve can be defined as “The State Government may, where the community or an individual has volunteered to conserve wild life and its habitat, declare any private or community land not comprised within a National Park, sanctuary or a conservation reserve, as a community reserve, for protecting fauna, flora and traditional or cultural conservation values and practices.”

2. We should stop cutting down forest. As we are cutting down forests many animals such as Elephants, Tigers and other animals that are not getting their food properly are coming to the nearby villages and attacking the villagers and damaging their crops.
3. We should stop the killing of animals. Many animals are being endangered from being extinct. So there should be some powerful acts against the illegal businessmen.
4. We should fight against the illegal businessmen like a group to stop the killing of wild animals and the trees.
5. There should be some powerful punishments to punish the illegal traders, so that no other person should think of doing it.
6. The wildlife department should impose some effective rules and regulations to stop the harming of wildlife.

The biological diversity of the world is badly affected due to excessive harming of the wildlife. Global warming is increasing day by day because the plants and trees are being cut too much.

So to conserve the wildlife we are having protected area networks.

Therefore, the following measures may be implemented for better wildlife management:

- 1) There are many protected area networks in India, but some of them are not maintained properly. This should be rectified.
- 2) To manage the wildlife, the protected areas should have so much of place that the animals, birds and other species those come under wildlife could live freely.
- 3) The wildlife managers should take care of the things that the animals could live peacefully and freely in the area where they are being kept.
- 4) The wildlife managers should take care that the cutting of trees should not be allowed in protected areas.
- 5) Wildlife management should include human activities because human activities affect the wildlife directly.
- 6) Wildlife management should be like that every species of animals should be affected. It should not be for one species of animals.
- 7) Wildlife management should observe that not too much of animals or not less animals effect the environment directly.

## **EXCEPTIONS OF WILDLIFE CONSERVATION AND MANAGEMENT**

There are certain exceptions of wildlife conservation and management as –

- 1) Hunting of wild animals to be permitted in certain cases<sup>12</sup> – If any wild animal has become dangerous to human life and if any wild animal has lost its control over own self then the hunting of that wild animal is permissible under law i.e. wildlife protection act,1972.

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<sup>12</sup> The Wildlife (Protection) Act 1972, Chapter III Available at: <[http://lawmin.nic.in/law/P-ACT/1972/The%20Wild%20Life%20\(Protection\)%20Act,%201972.pdf](http://lawmin.nic.in/law/P-ACT/1972/The%20Wild%20Life%20(Protection)%20Act,%201972.pdf)> Accessed on: 8 October, 2017

- 2) Grant of permit for special purposes<sup>13</sup> - It is lawful for the chief wildlife warden to grant permit for hunting for some special purposes that deals with education, scientific research and scientific management.
- 3) Grants of permit for special purposes<sup>14</sup> - It gives the power to chief wildlife warden with previous permission from State Government to grant permit for picking, uprooting, acquiring or collecting from a forest land for some special purposes that deals with education, scientific research, collection and protection in systematic arrangement of dried plants of any scientific institution, promotion of wildlife by any individual or an institution approved by the central Government.
- 4) Purchase of captive animal, etc. by a person other than a licence<sup>15</sup> - It is the exception for any recognised or public museum for purchasing, acquiring or receiving any captive animal or wild animal.

## CONCLUSION

The wildlife conservation and management is certainly a device through which we can protect those animals which are most likely to get extinct. We should conserve the wildlife as it is very much useful to us. The food chain of the wild animals helps the ecological system of the world. The analytical study of the provisions of the laws relating to the protection of Wild life and the conservation of forests management establish that they are sufficient and well placed to protect and conserve the wildlife but the only hindrance remains from the awareness part and the willingness of the people. Though the forests are required for many of the requirements of the people but in the same time the onus is upon the people to minimize the harm and to proactively work for creating newer forests by planting more plants and with more planned and professional manner.

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<sup>13</sup> Ibid at10; As defined in Chapter III Section 12 of Wildlife (Protection) Act, 1972- it gives the power to chief wildlife warden to grant permit for hunting for special purposes “Notwithstanding anything contained elsewhere in this Act, it shall be lawful for the Chief Wild Life Warden, to grant a permit, by an order in writing stating the reasons therefore, to any person, on payment of such fee as may be prescribed, which shall entitle the holder of such permit to hunt subject to such conditions as may be specified therein, any wild animal specified in such permit, for the purpose of, (a) Education; (b) Scientific research; (c) Scientific management”

<sup>14</sup> Ibid; As defined in Chapter IIIA Section 17B of Wildlife (Protection) Act, 1972-it gives the power to chief wildlife warden to grant permit for picking, uprooting, acquiring or collecting from a forest land f or special purposes, “The Chief Wild Life Warden may, with the previous permission of the State Government, grant to any person a permit to pick, uproot, acquire or collect from a forest land or the area specified under section 17A or transport, subject to such conditions as may be specified therein, any specified plant for the purpose of- (a) Education; (b) Scientific research; (c) Collection, preservation and display in a herbarium of any scientific institution; or (d) Propagation by a person or an institution approved by the Central Government in this regard.

<sup>15</sup> Ibid; As defined in the Chapter V Section 49 of Wildlife (Protection) Act, 1972-it is the exception for any recognized zoo or public museum that they can purchase any captive animal, “No person shall purchase, receive or acquire any captive animal, wild animal, other than vermin, or any animal article, trophy, uncured trophy or meat derived there from otherwise than from a dealer or from a person authorized to sell or otherwise transfer the same under this Act.

Provided that nothing in this section shall apply to a recognized zoo subject to the provisions of Section 38 - 1 or to a public museum”

## **‘SOVEREIGNTY’ IN RESPECT TO TRANS-BOUNDARY ENVIRONMENTAL ISSUES: AN ANALYSIS OF UNDERLYING CONCEPTS**

Swati Singh Parmar\*

### ***Abstract***

*With no international uniformity and ambiguity in matters of jurisdiction in cases of cross-boundary environmental issues, the concerns for the same have taken a centre-stage. The need for having a clear perspective and a legal framework on environment related issues specifically in relation to jurisdictional aspect in trans-boundary claims has to be dealt with. But any debate of such nature will touch upon the concept of State Sovereignty. The debate for having a universal jurisdiction is quite new and that of extending it to the cases of environment is even more new and thought provoking. The environmental degrading activities of one State may affect the neighbouring State(s) too, which would thus involve various legal and political consequences. And one such consequence will be in relation to the territorial sovereignty. International law concerns have tried to strike a correct balance between the international responsibility towards environment and the principle of State Sovereignty. This article is an attempt to evaluate the evolving international environmental law jurisprudence in the abovementioned backdrop. In this the responsibility to protect and preserve the environment of the States is to be studied while taking into account the issues relating to sovereignty. It is to be analysed as regards how far obligations can be placed upon a State so as not to undermine the absoluteness of its Sovereignty.*

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\* Asst. Professor @ Amity Law School, Lucknow (U.P.); Email: [ssp.swati@gmail.com](mailto:ssp.swati@gmail.com)

## INTRODUCTION

The international law relating to the trans-border environmental harm is mainly customary. There are instances where States have entered into treaties or other international arrangements relating to trans-boundary environmental issues but these are less in number and the major part of law on this issue is still customary. The customary international law recognises the rights and exclusivity of a state to exploit its natural resources but is silent or does not lay any limits on such rights, when the exploitation by the state results in some environmental harm to the neighbouring states. The limits, if any, or if in restricted sense, are ambiguous and unclear.

In this regard, a customary international law principle comes into picture- *sic utere tuo ut alienum non laedas*, i.e., the property should be used in a way so as not to harm the property of others. And this principle has laid the foundation of ‘no-harm rule’ or ‘prohibition of transboundary environmental harm’ which creates an obligation upon the states not to harm the global environment by the activities within their territories. This no harm rule has been crystallised by the International Court of Justice and International Law Commission. There also have been variations of this rule that has been adopted in different treaties relating to the protection of the environment. This obligation upon the states to not to harm the environment of the other states cannot be understood separately from the notion of the sovereignty. The origin of the international environmental law jurisprudence can be understood when one studies it with its conceptual origins that lie in the concept of territorial sovereignty.

Concerns of this nature present an interesting case of striking an optimal balance between the international environmental law jurisdiction and the concept of traditional sovereignty.

## TRACING THE ORIGINS OF RESPONSIBILITY TOWARDS ENVIRONMENT

Under the traditional conception of sovereignty, every state is regarded as internally and externally sovereign in their sphere. The State authority is seen as absolute, supreme, indivisible and independent. As Glanville remarks “..... sovereignty was established sometime around the 17th century and, since that time, states have enjoyed ‘unfettered’ rights to self-government, non-intervention and freedom from interference in internal affairs.”<sup>1</sup> But this traditional construct of territorial sovereignty, which even was once considered to be “grundnorm of international society”<sup>2</sup>, is no more recognised in this sense.<sup>3</sup> The absolute construct of territorial sovereignty no more finds place in international law. Rather, this narrow approach of the states towards sovereignty was carefully modified by the United Nations.

## UNDERSTANDNG THE PRINCIPLE OF ‘SOVEREIGN EQUALITY’

<sup>1</sup> Glanville L., *The Antecedents of ‘Sovereignty as Responsibility’*, European Journal of International Relations, Vol 17:2, 2011, p. 234

<sup>2</sup> Reus-Smit, C., *Human Rights and the Social Construction of Sovereignty*, Review of International Studies, Vol 27, 2001, pp 519-538

<sup>3</sup> See Chopra, J., & Weiss, T., *Sovereignty Is No Longer Sacrosanct: Codifying Humanitarian Intervention*, Ethics & International Affairs, 6, 1992, 95-117. doi:10.1111/j.1747-7093.1992.tb00545.x

The principle of equality has been amalgamated with concept of sovereignty and has been then introduced in the sphere of international law so as to achieve international co-operation and co-ordination among states. The principle of equality as in ‘sovereign equality’ is an improvised version of the tenet of ‘all men are equal’ which we find in the philosophical ideas of Hugo Grotius, Thomas Hobbes and John Locke. This is the principle of ‘sovereign equality’ which is one of the founding principles of the United Nations, whereby every State , regardless of its political structure, socio-economic background, political bargain power, military strength, is equal to all other states of the world. Article 2(1) of the Charter of the United Nations states that-

“Article 2- The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles. The Organization is based on the principle of the sovereign equality of all its Members.”<sup>4</sup>

Now, since the traditional sovereignty does no longer have a wide scope, so has the scope of the exclusivity of the state over its resources. The absoluteness and exclusivity of a State to exploit the natural resources within its territory- a principal corollary of sovereignty- is restricted by the obligation of not harming the environment of the other neighbouring states as well as the rule of *sic utere tuo ut alienum non laedas*. Krasner states that westphalian sovereignty entails “the exclusion of external actors from domestic authority configurations”<sup>5</sup>. Had there been this conception of traditional sovereignty, the no-harm rule and other protectionist rule for the global environment could not have developed, as traditional sovereignty entailed the exclusive right and autonomy to the state within its territories.

## **TERRITORIAL SOVEREIGNTY AND THE PRINCIPLE OF PERMANENT SOVEREIGNTY OVER NATURAL RESOURCES**

Absolute and sole authority and jurisdiction over a state’s territory is understood as territorial sovereignty. A state’s sovereignty, in that sense, extends to the geographical limits of a state and includes, Land, Internal waters<sup>6</sup>, Territorial waters<sup>7</sup>, Air and space over territorial waters and Sea-bed and Subsoil.

As per the traditional view in international law, States were regarded to have an exclusive right to exploit the natural resources within their territories and also to make laws relating to their environment. This view is well reflected in the principle of ‘permanent sovereignty over natural resources’. The United Nations General Assembly adopted resolution 1803 on ‘Permanent Sovereignty over Natural Resources’ in 1962<sup>8</sup>. It provided that the international

<sup>4</sup> Article 2, Charter Of United Nations, 1945

<sup>5</sup> Krasner S. D., *Sovereignty: Organized Hypocrisy*, Princeton: Princeton University Press, 1999, pg 9.

<sup>6</sup> Article 2, Internal waters are the waters between the land territories and out to baseline of the territorial sea including rivers, lakes etc., United Nations Convention on the Law of Sea, 1982.

<sup>7</sup> Article 2, The territorial waters are limited up to 12 nautical miles from the baseline, United Nations Convention on the Law of Sea, 1982.

<sup>8</sup> General Assembly resolution 1803 (XVII) of 14 December 1962, “Permanent sovereignty over natural resolution”, 1962

community must respect the rights of peoples and states over their natural wealth and resources. The origin of this principle can be traced back to the times decolonisation in 1950s and 1960s, where it was urged that for the purpose of liberation of the colonies, full and absolute rights must be given to them over their natural resources.<sup>9</sup>

This principle is often used as a trump card by the states while over-exploiting their natural resources - which, no matter within one's territorial limits, is unsustainable to the world community as a whole - and also disturbing the natural environment of the neighbouring states. This principle of permanent sovereignty has been claimed to have the status of customary international law. This would mean that the states can, under the international law provision, could over exploit their natural resources and can use the resources even in a way that could be detrimental to the environment of other states. In this context, Nicolai Nyland remarks.

"States can also interpret their international environmental obligations narrowed, or completely disregard them. The legal basis for this is the sovereignty principle, which means that states are not subject to the will of other states."<sup>10</sup>

This situation can have serious ramifications. Where, at one hand, on the account of territorial sovereignty, a State cannot be directed not to do such activities within its territories so as to cause any lateral damage to the global environment or the environment of the other states, and on the other, other states' sovereignty could have to be said to be seriously damaged by the detriments to their natural environment by the State causing so. And it is the activities in each state, that the states tend to overlook, that has a cumulative effect on the global environment.

"That global environmental degradation is a sum of often each of small state-owned environmental interventions is not caught by current law. Public law has also not taken into account that environmental degradation in the long run could threaten humanity's existence."<sup>11</sup>

## **A STEP TOWARDS PROTECTION OF GLOBAL ENVIRONMENT: SOVEREIGNTY AS A RESPONSIBILITY**

The concept of sovereignty has been interpreted differently across time and space. Of late, it has been shaped as a 'responsibility' of the state towards the international community as a whole- this has now made sovereignty conditional. It essentially means that the states that fulfil their responsibilities in the international arena have the right to enjoy their sovereignty. This philosophy of 'sovereignty as responsibility' has its roots in the doctrine of 'Responsibility to Protect'.

'Sovereignty' that was earlier viewed as a 'control' is now regarded as a 'responsibility'. The

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<sup>9</sup> Sands, Philippe and Jacqueline Peel, *Principles of International Environmental Law*, 3rd edition, Cambridge 2012, p. 11

<sup>10</sup> Nyland, N., *Are states internationally committed to protecting the environment*, Doctoral dissertation, University of Oslo, Unipub publisher: ISSN 1890-2375, 2009

<sup>11</sup> Ibid

interpretation of ‘sovereignty’ in terms of responsibility is constantly gaining strength due to the ever increasing limits of international human rights as well as the expanding dimensions of the concept of human security and global environment. It is the new backdrop for the change in our understanding of the concept of sovereignty.

‘Responsibility to Protect’ is a global political commitment to check the war crimes, genocides, ethnic cleansing and other cruelties against humanity. The member states of the United Nations have committed to this responsibility. This doctrine has placed limits on the traditional approach to the national sovereignty and has refined its meaning. This doctrine has effectively given a solution to the issue of the competing claims of ‘intervention’ and ‘state sovereignty’ that was debated during the 1990s.

In the last decade, the importance of national security faded away and the security of individuals gained its ground. This shift was evident in the thinking of the international community as well. International human rights norms and national accountability towards its citizens was scrutinised internationally. As a result, ‘territorial sovereignty’ was reconceptualised in the background of the responsibility of a state that it has towards its individuals. And so, sovereignty in the form of a responsibility has gained the status of an international legal norm.

This doctrine has altered the traditional conception of sovereignty in a way so as to make it conditional. The members of the world community are reposed with some responsibilities and it is only after the fulfilment of these responsibilities that they can enjoy their sovereignty. It is a new international security and human rights norm which has indirectly altered the existing concept of sovereignty and it is still yet to influence it even more in the coming decades.

In regard to the environmental law jurisprudence, this philosophy has a larger role to play. From the times where a State had unconditional, absolute and unfettered rights to exploit their natural resources, howsoever detrimental to the global environment it may be, could be advocated to be excused on the grounds of territorial jurisdiction and territorial sovereignty to the times where the state is under a duty or responsibility towards the international community as a whole- there has been a major shift in the philosophy of the role of a state sovereignty in the global environment law regime.

“New understandings of the sovereignty principle and the severity of the environmental degradation issue may also give states less room for narrow interpretations of international environmental rights.”<sup>12</sup>

The absoluteness of a state authority over its natural resources is now met with certain restrictions, or we may say, certain responsibilities. These restrictions have been recognised in various cases as well starting from the Trail Smelter Arbitration case<sup>13</sup>, where the Court recognised that no state shall use its territory in a way that it causes harm to the territory or

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<sup>12</sup> Ibid

<sup>13</sup> *United States v. Canada*, Arbitral Trib, 3 U.N. Rep. Int'l Arb. Awards 1905, 1941

property of another state. It was one of the earliest cases in the field of international environment law and it, for the first time, talked about the ‘duty’ of the states to ‘prevent any transboundary environmental harm’ by its acts. For the first time, a duty was imposed upon the states towards the international community.

Further, in the celebrated Corfu Channel case, the principle laid down in the Trail Smelter case or the principle of *sic utere tuo* was even more authoritatively upheld by the International Court of Justice. This case brought the concept of limited territorial sovereignty whereby states are under an obligation not to allow their territory for such use that may harm other states.

Many other cases of International Court of Justice, various tribunals, such as Lac Lanoux case<sup>14</sup>, and decisions of municipal courts have introduced different interpretations in the concept of sovereignty as to accommodate the claims for protection of the global environment.

## **CONCLUSION**

Sovereignty is one of the basic tenets of international law and politics. It has been the fundamental organising principle in the international law. In classical international law era, absolutist conception of sovereignty dominated the world politics. As the nations were newly born, or newly independent, they wanted to be doubly sure and secure about their independence and this is one of the reasons as to why emphasis was laid on territorial sovereignty. Now, this territorial sovereignty played an important role in the states interpreting their obligations under international treaties relating to the environment protection in a narrow sense.

Territorial sovereignty has long been used by the states to ace up their sleeves and to evade any obligations in the respect of global environment protection. This traditional construct of sovereignty has been, of late, improvised and reinterpreted as a responsibility whereby each sovereign state has certain responsibilities towards the world community. Initially, this philosophy of sovereignty as responsibility was recognised for the areas of international security and human rights’ protection, but it can very well be interpreted for the protection of global environment- where every state would have certain obligations to protect the global environment, or at least not to degrade it by the activities within its territorial limits.

The environment law treaties should no longer lose their significance and purpose- for this; the existing concepts of sovereignty are to be reinterpreted in a better and holistic manner. Sovereignty principle can be reinterpreted to meet the ends of the protection of the global environment. Sovereignty can be interpreted in a way that the exclusive use of natural resources within a state shall not be detrimental to the environment of the other states. The concept of sovereignty can be reinterpreted in the backdrop of the principle of sustainable development and the philosophy of sovereignty as responsibility. In the modern international

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<sup>14</sup> *Affaire du Lac Lanoux* (Spain v. Fr.), 12 R.I.A.A. (1957), digested in 53 American Journal of International Law. P.156, 1959

law era, the traditional international law should be progressively interpreted to protect the global environment.

## **ROLE OF NGO's AND COMMUNITY PARTICIPATION IN SOCIAL WORK WITH REGARDS TO THE PROTECTION OF ENVIRONMENT: A BRIEF OVERVIEW**

Manika Baliyan\*

### **INTRODUCTION**

The term “environment” includes air, water and land and the interrelationships which exist among and between these basic elements and human beings and other living organisms. Environment is a polycentric and multifaceted problem affecting the human existence.<sup>1</sup>

According to Section 2(a) of the Environment Act, 1986 “Environment” includes 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-organisms and property.

It is clearly evident from the Section that the definition is an inclusive one and not exhaustive. Besides the physical and biological aspects, the “environment” embraces the social, economic, political, cultural, and religious and several other aspects as well.

For the greatest environmentalists, humans are of lesser importance than the abundant and diverse flora and fauna of the planet. Humans are defined as a recent addition to the livestock and are considered to have been a wholly disruptive influence on a world which was a paradise before their arrival.<sup>2</sup>

### **ENVIRONMENTAL POLLUTION**

Pollution refers to unfavourable alteration of our surroundings, wholly or largely as a by-product of man’s action through direct and indirect effects on changes in energy pattern, chemical and physical constitution and abundance of organisms.

According to Section 2(c) of The Environment (Protection) Act, 1986, “Environmental Pollution” means the presence in the environment of any environmental pollutant. Whereas the term pollutant has been defines in Section 2(b) of The Environmental Pollution Act, 1986

“Environmental Pollutant” means any solid, liquid or gaseous substance present in such concentration as may be, or tend to be, injurious to environment.

*Indian Council for Enviro-Legal Action v. Union of India<sup>3</sup>*

Chemical industries in village Bicchieri district, Udaipur, Rajasthan were releasing toxic effluents damaging the earth and water. They were closed but no action was taken to undo the

\* Student-BALLB @ Delhi Metropolitan Education; Email: [manika.baliyan@gmail.com](mailto:manika.baliyan@gmail.com)

<sup>1</sup> T.N. Godavarman Rao v. UOI AIR 2003 SC 724

<sup>2</sup> Rosalind Malcolm, A Guidebook to Environmental Law

<sup>3</sup> AIR 1996 SC 1446

damage done by them. This case was filed for remedial action. The Supreme Court accepted the principle of polluter pays which means that the financial cost of preventing or remedying damage lies with the undertaking causing the pollution. It cannot be saddled with the government, as it would shift to the taxpayers.

Indian faiths also cause a lot of environmental pollution, as in Ganesh idols, Durga idols, worship ingredients in a poly bag are all dumped and immersed in water bodies, which in turn contaminate them. Even cracker burning on Diwali festival also increases the level of pollution in the air whose sale has also been banned recently in the Delhi NCR.

The Union Minister for Road Transport, Highways and Shipping Mr. Nitin Gadkari in order to reduce pollution at sea, has asked the engine manufacturers like Wartsila and Cummins to use pollution-free methanol as fuel, like Sweden, which is switching itself from diesel. It is even cheap and is available at nearly ₹22 a litre.<sup>4</sup>

## **CAUSES OF ENVIRONMENTAL POLLUTION**

Pollution is caused mainly by two ways,

-  Natural Causes which include factors like drought, flood, cyclone, earthquake; etc.
-  Man-made causes includes factors like
  - *Population Growth:* The earth has finite resources that can be used by the individuals with every increase in an individual natural resources shrink. India alone has 16% of the total pollution of the world which indicates an ever increasing demand for fuel, food, water, pollution-free air, space to live in and healthy conditions for life. Increasing population is adversely affecting the quality of life as it has created the problem of land pollution, air pollution, water pollution, insanitary conditions, etc.
  - *Poverty:* It has been defined as the inability of an individual or household to attain the minimal standard of living.<sup>5</sup> The poor due to not much awareness and incompetency consume higher level of resources in the form of food, fodder and fuel. Such people usually live in unhygienic and insanitary conditions which have a direct impact on their health. *Olga Tellis v. Bombay Municipal Corporation*<sup>6</sup>, The Supreme Court observed that before pavement dwellers and slum dwellers are evicted they must be provided alternative sites with basic amenities like water, community latrines, paved streets and lighting as to guarantee wholesome environment under Right to Life.
  - *Urbanisation:* The migration of the poor from small towns and villages to urban

<sup>4</sup> Available at: <[www.moneycontrol.com/news/environment/inspired-from-sweden-india-must-go-for-pollution-free-methanol-as-fuel-nitin-gadkari-2412901.html](http://www.moneycontrol.com/news/environment/inspired-from-sweden-india-must-go-for-pollution-free-methanol-as-fuel-nitin-gadkari-2412901.html)>

<sup>5</sup> Our Planet, Our Health, Report of the World Commission on Health and Environment (1992) 38,

<sup>6</sup> AIR 1986 SC 180

cities for search of work has also to some extent has caused degradation in the environment. More than one-fifth of the population lives in urban cities nowadays. Slums prove to be one of the major issue creating centres in the urban cities as they contribute significantly in the environmental degradation.

- *Industrialisation:* One of the major sources for environmental degradation and pollution. Therefore, the concept of “SUSTAINABLE DEVELOPMENT” has become the most essential requirement of present scenario. *Yamuna v. Central Pollution Control Board*<sup>7</sup>, the apex court has ordered the industrialists to shut down their industries or to shift them away from the State of Delhi as their untreated effluent and sludge was polluting the holy river Yamuna.

## PROBLEMS CAUSED BY ENVIRONMENTAL POLLUTION

- *Impact on Human Health:* Toxic materials present in the air can cause respiratory and skin disorders and those present in water may affect the internal organs of the body and can cause severe diseases. Recently, there has been ban on the protests at Jantar Mantar because of the environmental conditions in relation to noise pollution, cleanliness, management of waste, and public health has been grossly deteriorated due to the dharnas, which impacts the life of the people living around the site. Some of the landmark protests that have taken place on the site were against journalist GauriLankesh, Anna Hazare's movement against corruption, One Rank One Pension and many others.
- *Loss of Biodiversity:* It is important for maintaining balance in the ecosystem in the form of combating pollution, restoring nutrients, protecting water sources and stabilizing climate. Deforestation, global warming, overpopulation and pollution are few major causes for loss of biodiversity. *In T.N. GodavarmanThirumulpad v. Union of India*, The Supreme Court held that Forest Conservation Act, 1980 was enacted to check deforestation. It applies to all forests irrespective of nature of their ownership or classification. Deforestation causes ecological balance, therefore forests, trees and biodiversity needs to be protected.
- *Ozone layer Depletion:* The layer prevents earth from the harmful UV rays which causes skin disorders and affect health too if reach on the surface of the earth. The presence of chlorofluorocarbons, hydro chlorofluorocarbons in the atmosphere causes the layer to deplete. On September 16 is observed as World Ozone Day because it was on this day that the Montreal Protocol, an international treaty which is designed to protect the ozone layer by phasing out the production of numerous substances that are responsible for Ozone depletion. This day in the year 2017 was celebrated on a large scale in Manipur where according to Prof. N Rajmuon Singh of Manipur University Chemistry Department the day is observed to awareness on the ozone layer, its depletion and ways to preserve it,

<sup>7</sup> AIR 2000 SC 3510

he also suggested that the children should be made aware of the environmental issues by including the topics in their syllabus.<sup>8</sup>

- *Loss to Tourism Industry:* Loss to green cover, huge landfills, loss to biodiversity, increase air and water pollution can set back the tourists and prevent them from visiting such places which would indirectly affect many poor people who have their earnings from tourist only. Since, the TajMahal has continuously been ignored by the U.P Government the Supreme Court on 14<sup>th</sup> October, 2017 thundered on the present Government, asking it whether it wishes to destroy the monument and if it intends to do so they must file an application or an affidavit. The matte was that the Government nodded its head to have cut down 400 trees near the vicinity of Taj so as to construct an additional railway line between Mathura and Delhi. This act would cause harm to the monument which affect the tourist scale of the Taj.
- *Economic Impact:* The country have to borne a huge cost due to environmental degradation in terms of restoration of green cover, cleaning up of landfills and taking initiatives for the protection of endangered species. With the rapid growth in urban population coupled with economic growth and rise in community living standards, the generation of municipal solid wastes in Imphal and its neighbouring towns has been increased manifold both in quantity and in quality. This, will lead on to expenditure of the Government as it has to manage such waste from open places to waste treatment plants, as leaving the dumped garbage in open would be unhygienic and create nuisance.

## REMEDIES TO CURE ENVIRONMENTAL POLLUTION

- The usage of water should be minimised for all domestic and industrial purpose and should be treated well before it being discharged into lakes, rivers, ponds etc. The innovative techniques of primary, secondary and tertiary treatment should be adopted so as to treat the polluted water. The initiatives are being taken by the Central Government to utilise the waste water nowadays and in this context The Union Water Resource ministry headed by Mr. Nitin Gadkari is planning to monetise sewage water, polluting Ganga river by selling the treated water to power plants, industries and railways by setting up treatment plants in Kanpur and Varanasi.
- The method of rainwater harvesting should be promoted as it reduces the ground water pollution and prevents from water scarcity. The rainwater harvesting technique has gained plenty of importance in the present era and now the National Green Tribunal and many other authorities keeps a check upon its usage and if any industry or site lacks the infrastructure it is even penalised. Recently, the National Green Tribunal has slapped fines on four real estate developers after

<sup>8</sup> Available at: <[www.easternmirrornagaland.com/manipur-observes-world-ozone-day/](http://www.easternmirrornagaland.com/manipur-observes-world-ozone-day/)>

being found that the rainwater harvesting system installed in their premises was not functional and a compensation of ₹3 lakh each has been imposed.<sup>9</sup>

- Air pollution should be reduced by not burning the garbage in open rather disposing off the organic waste, proper fuel should be used so that minimum harm is caused to the environment, smoke evolving from the factories that is hazardous in nature should be well treated before it enters into the atmosphere with the use of electrostatic precipitators, fabric filters, scrubbers and inertial separators. There also have been constant complaints regarding air pollution caused by the factories in the Chadiwli an area located in Mumbai. About 250 residents took out a protest rally and alleged that the factories operational in the area are illegal, besides this the residents also started a signature campaign to shut down the polluting industrial units and a Public Interest Litigation is proposed to be filed same in this regard.<sup>10</sup>
- Noise pollution should also be reduced by not honking the horns of the vehicles unnecessarily and making of such machines that causes negligible or low noise while functioning. Such devices should be placed that helps in absorbing high noises. In *Church of God (Full Gospel) in India v. K.K.R.M.C Welfare Association*,<sup>11</sup> Hon'ble Supreme Court declared that undisputedly no religion prescribes that prayers should be performed by disturbing the peace of others, nor does it preach that they should be through voice-amplifiers or beating of drums, in a civilised society like ours in the name of religion, activities which disturb old or infirm person, students, or children having their sleep in early hours or during daytime cannot be permitted.

## ENVIRONMENT PROTECTION

### *Necessity of Protecting Environment*

The necessity of the protection of environment has grown all over the world since the sixties. Due to increasing pollution, loss of vegetal cover and biological diversity, excess of harmful chemical compositions in the atmosphere and in food chains, and threats to life and support systems. The power to protect and improve the quality of environment, a constitutional commitment, is stated to be one coupled with a corresponding duty.<sup>12</sup>

*Rural Litigation and Entitlement Kendra, Dehradun v. State of U.P.*<sup>13</sup> is a very significant case in the history of the environment protection movement in India firstly as it was the first case involving the environment and ecological imbalance issues and secondly it recognised

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<sup>9</sup> Available at: <[www.moneycontrol.com/news/business/real-estate/ngt-slaps-fine-on-four-builders-over-rainwater-harvesting-2400429.html](http://www.moneycontrol.com/news/business/real-estate/ngt-slaps-fine-on-four-builders-over-rainwater-harvesting-2400429.html)>

<sup>10</sup> Available at: <[www.hindustantimes.com/Mumbai-news/polluted-air-from-factories-is-choking-us-say-mumbai-residents/story-dc3Cl9h0h3S19CxjFYQ44.html](http://www.hindustantimes.com/Mumbai-news/polluted-air-from-factories-is-choking-us-say-mumbai-residents/story-dc3Cl9h0h3S19CxjFYQ44.html)>

<sup>11</sup> (2007) 7 SCC 282

<sup>12</sup> Indian Law Institute, 'Environment Protection Act: An Agenda for Implementation', 1987, p 13

<sup>13</sup> AIR 1985 SC 652

the epistolary jurisdiction of the court involving issues of public importance and thirdly it required a balance to be maintained between development and conservation of natural resources.<sup>14</sup>

## STEPS THAT CAN BE TAKEN FOR PROTECTION OF ENVIRONMENT

- *Reduce:* Reduce means using fewer resources. Reducing the amount of waste that is being produced is the best way to help the environment. By reducing the usage of unwanted products and reusing the needed products ample time will save our natural resources, energy, save production cost and safeguard our environment from pollution.
- *Reuse:* Before any material could be thrown or recycled we should always take care whether the good has some life remaining in it, if so then one should use the good to its fullest. The Municipal Corporation of Greater Mumbai has recently awarded consultancy Black & Veatch a contract to prepare India's largest recycled water master plan. Anand Pattani, Managing Director, Black & Veatch India said, "Treating wastewater to a tertiary standard provides significant health and environmental benefits. Reusing that treated wastewater could relieve the pressure on the city's potable water supply."<sup>15</sup>
- *Recycle:* Recycling is the process of converting waste materials into reusable objects to prevent waste of potentially useful materials, it also reduce the consumption of fresh raw materials, energy usage, water pollution and air pollution. Recycling also reduces financial expenditure in the economy as fresh products costs much more than recycled products. The Government on October 14, 2017 announced a proposal to set-up scrap-based steel plants in the northern and western part of the country. The Government expects that in the coming years, 44% of the total scrap available in India would be generated in different locations which would be used to produce steel. Steel Minister Chaudhary Birender Singh said that the initiative is to recycle waste products for productive purposes.<sup>16</sup>
- *Composting:* It is the method used for recycling of food wastes into fertilizers for plants. It is of great benefit as it reduces the use of chemical fertilizers and pesticides. Hence, use of composting not only saves money that one would have brought chemical fertilizers from but also prevents pollution.
- *Conserving Energy:* Energy can never be destroyed, it can only be transformed from one form to another. But it is upon the humans to use the energy in an efficient manner. Though, the energy is being depleted by humans.

<sup>14</sup> S.C. Shastri, Environmental Law, 497

<sup>15</sup> Available at: <[www.waterworld.com/articles/wwi/2017/05/india-s-largest-water-reuse-plan-moves-ahead.html](http://www.waterworld.com/articles/wwi/2017/05/india-s-largest-water-reuse-plan-moves-ahead.html)>

<sup>16</sup> Available at: <<https://m.timesofindia.com/business/india-business/steel-ministry-proposes-scrap-based-steel-plants/articleshow/61082566.cms>>

- *Sustainability:* The concept was raised by UN World Commission on Development and Environment (1987), which means “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”<sup>17</sup> Development without destruction and sustainable development are the crying needs of the day. *Vellore Citizens Welfare Forum v. Union of India*<sup>18</sup>, this case was filed against the pollution caused by discharge of untreated effluents by the tanneries and other industries in Tamil Nadu. The court explained that sustainable development as a concept came to be known in the Stockholm Declaration of 1972. The salient features of sustainable development are; inter-generational equity, use and conservation of natural resources, environmental protection, precautionary principle, polluter pays principle, obligation to assist and cooperate, eradication of poverty, and financial assistance to the developing countries.

The court accepted the precautionary principle and elaborated it as follows:

- i. Environmental measures must anticipate, prevent and attack the cause of environmental degradation.
- ii. Where 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.
- iii. The onus of proof is on the actor or the developer/industrialist to show that his action is environmentally benign.

## NON-GOVERNMENTAL ORGANIZATIONS

The NGO's create a network by interacting with the Central and State Governments to frame such policies that are beneficial for the environment. NGO's play a significant role as they help to create awareness amongst the public on any current environmental issue and to cater towards its solution. They also facilitate the participation of number of stakeholders so as to discuss the environmental concerns and what steps could be initiated by them. NGO's also encourages people to use the resources in an equitable manner so that they become suffice for all. Seminars, newsletters, brochures, article, audio-visuals, lectures and group discussions all are organised so as for promotion of environmental awareness.

- *Bombay Natural History Society:* It is the largest NGO in the Indian sub-continent that is engaged in nature conservation research since 1883. It spreads awareness about the need to protect the environment and management plans to conserve wildlife and its habitat by organising lectures, field trips, literature and expeditions.

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<sup>17</sup> Our Common Future (1987) 27

<sup>18</sup> AIR 1996 SC 2715

- *Centre for Science and Environment:* It is an environmental NGO specialising in the field of pollution, forest, wildlife, land and water use. It is based in New Delhi, and believes in ‘knowledge based activism’ to cope with India’s environmental threats like ecological poverty, land degradation, toxic degradation etc.
- *Greenpeace India:* It is an Indian wing of the international non-profit organization whose activities discourages genetic engineering, and promotes peace, saving of the environment from pollution, promoting sustainable agriculture, etc.
- *Kalpvriksh:* Non- profit organization working on environmental and social issues, it is a citizens action group engaged in environmental awareness, campaigns, advocacy, litigation, research, lobbying for wildlife conservation and wildlife conservation and animal rights etc... which lays its focus mainly on the youth of the nation. It imparts environmental education in schools and colleges by forming a network of nature club, conducting bird watching expeditions and nature trails.<sup>19</sup>
- *Conservation Action Trust:* Non- profit organization formed to protect the environment, particularly forests and wildlife, educates decision makers and the public about the importance of forests for water security, provides technical and legal aid, equipment, etc. It is based in Mumbai.

## **WORLDWIDE**

- *Sierra Club:* It is one of the oldest conservation organisations that are in existence till now. Its foundation was laid down in the year 1892. It is one of the most effective and powerful organisation in government and corporate America, it has almost 1.3 million members. It is a well-known and respected club which aims at protection of land and forest, clean air and water and certain other issues related to environment.
- *National Audobon Society:* The declared mission of this society is “to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth’s biological diversity.” The societies from its date of establishment in 1800’s have been working really hard to fulfill its objectives.
- *World Wildlife Fund (WWF):* The WWF works to preserve nature and its creatures. It has around 5 million members internationally. We are committed to reserving the degradation of our planet’s natural environment and to building a future in which human needs are met in harmony with nature. We recognise the critical relevance of human members, poverty and consumption patterns to

<sup>19</sup> Available at: <[www.llegalservices.com](http://www.llegalservices.com)>

meeting these goals.”

- *National Wildlife Federation*: The organization came to national prominence in the 1936 by a cartoonist named Jay Darling at the behest of President Franklin D. Roosevelt. It is dedicated to preserving animals in the United States and works with local agencies in the 48 contiguous states. It is one of the largest environmental organizations with over 4 million members having concerns regarding wildlife issues.
- *Greenpeace*: Its foundation was laid in 1971 when a group of activists put themselves directly in harm in order to protest nuclear testing off the coast of Alaska. The organization has helped in stopping whaling, nuclear testing as well as efforts to protect Antarctica from various harms. It has over 2.5 million members around the world.

## **COMMUNITY PARTICIPATION**

Before understanding as to what is community participation it is important to know what is community. Therefore community can be said to be a social entity that have characteristics like: living in the same geographical area, sharing common goals and problems, sharing similar development aspirations, having similar interests or social network or relationship at local level, having a common leadership and tradition, sharing of some resources, etc.<sup>20</sup>

Community participation can be defined as a process by which a community organizes its resources and encourages other members of the society to take responsibility for the development activities carried on by them. It also enables people to only choose such development programmes that are healthy for environment. For example, setting up of pollution control in industries, setting up of sewage management plants, concept of reuse and recycling, rain-water harvesting, etc.

Thus, so as to make the citizens aware of harmful effects of the degradation of environment and sometimes even for its protection, community participation becomes an essential tool. The participation involves awakening of the conscious of the present generation which aspires to shape the environment in such a manner that is both beneficial for them as well as the future generations. When any aim that needs to be fulfilled gains mass momentum, there arises no chance for the will of the people to fall down.

Sometimes, it is the community itself that exerts pressure on the government to formulate special policies for the protection of environment and sometimes it's the government which makes policies that bounds the community, and people abide by such policies so as to make the nearby areas a healthy place to dwell in.

## **BENEFITS**

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<sup>20</sup> Available at: <[www.slideshare.net](http://www.slideshare.net)>

The potential benefits of promoting community participation are:

- a) *Improves Quality Of Rules And Laws:* It enhances the quality of the rule or law that is formulated for the purpose of protection environment, because until and unless the rules are recognised by the society they would be of an ineffective nature. For example prohibition on the use of poly bags is a rule laid down by the government but until and unless this movement is not backed by community, it would prove to be a proper failure.
- b) *Helps Solve Complex Problems:* It helps to resolve environmental related problems by an easier mode as the government agencies appointed for this purpose and the community representatives have a fair debate and tends to resolve disputes that would make a healthy ambience. Suggestions, steps to improvise the conditions, arguments in favour or against of any policy that has been made or should be made can all be carried about by such debates.
- c) *Measure Progress More Effectively:*<sup>21</sup> Collaboration with NGO'S can improve monitoring and evaluation of community delivered programs. Active relationship of individuals also enables constructive feedback on the agency's performance which would yield to its recognition by the Government authorities.
- d) *Develops Critical Awareness:* Most effective mechanism of creating awareness could be by the community members themselves. However effectively any government body tends to create awareness, it would not prove to be a success as compared to the members of the community promoting a cause. This is so because the impact of members on each other is more than that created by the authorities.
- e) *Pressure Yields Governance Amendments:* When the government faces pressure from community, it is probable that the government policies may be amended. Such pressure from the community necessarily need not be at the national level, sometimes regional mass momentum also gains a high level of effectiveness. The pressure apart from fundamental changes in policy due to the pressure can also make the government to complement the efforts of the society by budgetary resources that would provide for the revenue in order to carry out operations on a specific environment issue.

## **INSTANCES**

Few instances where the community has participated in protection of environment are:

- a) *Chipko Movement:* It was primarily a non-violent forest conservation movement which began in the year 1973 in the state of Uttar Pradesh. It was led by Sunderlal Bahuguna. The Gandhian perspective was followed in this movement whereby people tied themselves to the trees so as to prevent them from felling down.

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<sup>21</sup> Available at: <[www.communitymatters.govt.nz](http://www.communitymatters.govt.nz)>

The Government recognised this mass movement and heard there plea with respect to the felling of trees and hence, a policy was made giving due consideration to the suggestions of the people.

- b) *Narmada Bachao Andolan*: A social movement against the number of large dams being built across the river of Narmada by the local communities which resulted in a massive legal battle. The court had ruled for andolan and effected n immediate stoppage of all the constructions at dam and had directed the concerned states to rehabilitate and replace the processes.
- c) *Appiko Movement*: It was a revolutionary movement inspired by the Chipko Movement of Uttrakhand, carried out in the state of Karnatka, to save the forests from felling down. The people of Salkani hugged the trees in Kalase forest. The word Appiko is derived from the common language term used for hugging. The Appiko Movement has created awareness amongst villagers throughout the Western Ghats about the ecological destruction of forest wealth, thus people now closely monitor the exploitation of forests by the forest department.<sup>22</sup>
- d) *Jungle Bachao Andolan*: The Andolan began nearly in 1980's in Bihar and later spread to the States of Jharkhand and Orissa against the felling of trees for the purpose of coal mining and for construction of Sardar Sarovar dam, and was even against the replacement of natural sal forests with high priced teaks.
- e) *Serving the Western Ghats*: Home to sanctuaries like Bandipur and Nagarhole, Western Ghats, a biological treasure trove, was struck by an epidemic i.e deforestation in the 1980's. "The Union Government's Forest Department estimates that within the last three decades, 4.5 million hectares of forests or an area the size of Tamil Nadu has vanished," said India Today in March 1982. The Kailash Malhotra led Save the Western Ghats march, a 100 day padyatra across the hills, succeeded in imparting the message of environmental degradation and human rights.

## SUGGESTIONS

- Such products should be brought that comes in reusable packaging, for example such containers that can be reused and recycled.
- Non-usage of poly bags as they are of non-degradable in nature.
- Saving paper by not misusing them as they are made by the pulp of the trees and even sending the used paper for recycling.
- Consuming less automobile fuels like petroleum and diesel so that air pollution can be reduced.

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<sup>22</sup> Available at: <[www.yourarticlelibrary.com/essay/appiko-movement-useful-notes](http://www.yourarticlelibrary.com/essay/appiko-movement-useful-notes)>

- Car-pooling should be encouraged in offices, colleges and even amongst neighbours.
- The trees and forests should not be felled for unreasonable reasons.
- More factories for recycled goods needs to be established and the use of recycled goods should be promoted.
- Such products should be taken into usages that are environmental friendly. “Ecolabelling” is a voluntary method of environmental performance certification and labelling of environment friendly products.<sup>23</sup>

## **CONCLUSION**

It is an accepted view that the NGO's and the participation of community members play an effective role in the protection of environment. The number of NGO's that are exclusively formed for the purpose of protection and maintenance of resources of the nature, since last five decades are doing great in the respective fields. The basic objective of all the NGO's is to act as a catalyst by bringing initiatives at local, national and international levels and to facilitate community participation so as to overall improvise the quality of life.

Thus, it can be concluded that all the legislations and the orders passed by the court should be strictly complied with as they are made for the benefit of entire nation, and is not only in the interest of any particular community or sect. The punishment and fines imposed howsoever grave are to be observed seriously. Mere feeling of sorry would not prevent the offender from the harm caused to the Mother Nature.

In this regard the Hon'ble Supreme Court has held in the case of *L.D. Jaikwal v. State of U.P.*<sup>24</sup> “We are sorry to say we cannot subscribe to the ‘slap-say sorry-and forget’ school of thought in administration of contempt of jurisprudence. Apology should not be paper apology and expression of sorrow should come from heart and not from the pen. For it is one thing to ‘say’ sorry - it is another to ‘feel’ sorry.”

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<sup>23</sup> S.C. Shastri, Environmental Law, 575

<sup>24</sup> (1984) 3 SCC 405

## **TECHNOLOGICAL ADVANCEMENTS & LEGAL REGIME MAKING MINING SUSTAINABLE: A BRIEF COMMENT**

Safia Tarannum Quraishi\*

### **INTRODUCTION**

Minerals are the substances occurring naturally having a specific composition usually crystalline and abiogenic in origin (not obtained from life processes). Minerals constitute the backbone for economic growth and India has been eminently and enormously endowed with this gift of nature. Indian mining industry has contributed to Asia and globally as a major mineral producing state. Currently, it is a global producer of chromites, coal, iron ore and bauxite. Mining in India is over 6000 years old. The first recorded history of mining in India dates back to 1774, coal mining at Raniganj.

The GDP contribution of the mining industry varies from 2.2% to 2.5% only but going by the GDP of total industrial sector, it contributes around 10-11%. Mining industry provides job opportunities to around 0.7 million individuals.

The former Norwegian Prime Minister defined Sustainable Development as the development which meets the needs of the present without compromising the ability of the future generation to meet their demands.<sup>1</sup>

The first proposal for regulation of mining in India came in 1890, which was introduced by Lord Cross, who at that time was the Secretary of State of India, later in 1894 for the first time Inspector of Mines was appointed for the purpose of management and supervision.<sup>2</sup> The initiation of National Mineral Policy in 1993 gave a boost to foreign investments in mining sector with appreciable incentives; the policy was revised in 1994 which resulted in private investments both foreign and domestic. Since then, the mining industry in India along with its technological support and advancements, it is achieving major highs globally.

In the year 1952, The Mines Act was introduced in India. Since then the Act has been guiding and regulating the mining activity in India, though the Act is open to necessary amendment and it has been amended from time to time. It has also been witnessed that every State is guided by different State mining laws, as every state differs from one another.

Present scenario of mining industry in India: Mineral production was reported from different States/Union Territories of which the major contribution of mineral production of about 90.03% was confined to 11 States (including offshore areas) only. Offshore areas continued to be in leading position, in terms of value of mineral production in the country and had the share of 25.64% in the national output. Next in the queue stands Odisha with a share of 10.62% followed by Rajasthan (8.58%), Andhra Pradesh (7.81%), Jharkhand (7.72%),

\* Student @ Amity Law School, Raipur

<sup>1</sup> Available at: <<http://www.legalserviceindia.com/articles/jud.html>> Accessed on: 15 October, 2017

<sup>2</sup> Available at: <<https://blog.ipleaders.in/mining-laws-in-india/>> Accessed on: 14 October, 2017

Chhattisgarh (6.65%), Gujarat (6.33%), Madhya Pradesh (5.28%), Assam (4.64%), Goa (3.49%) and Karnataka (3.27%) and in the total value of mineral production. Remaining 21 States/Union Territories having individual share of 3% or less than 3% all together accounted for 9.97% of total value as a whole.<sup>3</sup>

Mineral and mines industry adds to the national income of a country and at the same time results in employment generation on one hand and on the other hand it acts as catalyst for the depletion , over utilization and exploitation of non-renewable resources, which add up to the ultimate exploitation of this earth.

**Role of technological advancements:** Emphasis should be given on exploration to continuously augment the resource / reserve base of the country and harness the existing resources through scientific and sustainable mining including the continually upgrading and advanced technologies and focusing on zero waste mining in order to maximise the pleasure we enjoy through our mineral resources and hand in hand sustainably developing. This is possible only through a properly monitoring regulatory regime that encourages investment in exploration and critical infrastructure for development of the mineral and mining industry.

We have some ongoing projects in India which are successfully trying to achieve the aim of sustainable development in mining sector. Some such techniques are as follows-

**Use of surface miners:** Our technologies have recently introduced environmentally sound production technology to minimise pollution generation at site to minimise the dust generation as well as zero discharge from the washeries. India being a major producer of coal, its extraction from the surface miners is nowadays major technologies used in mining operations to minimise dust generation. Some of the advantages of using surface miners are:

- a) Less coal loss and dilution
- b) Improved coal recovery
- c) No use of blasting the mineral seam
- d) Less noise pollution
- e) No danger to human life
- f) Selection of alternative or less biodiversity mining area as much as possible.
- g) Increased back filling in open cast voids.
- h) Improved transportation system includes conveyor belts covering maximum distance.

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<sup>3</sup> Available at: <[http://www.mines.nic.in/writereaddata/UploadFile/Statewise\\_Mineral\\_Scenario.pdf](http://www.mines.nic.in/writereaddata/UploadFile/Statewise_Mineral_Scenario.pdf)> Accessed on: 15 October, 2017

One such advancement comes from IIT Madras the Ecofriendly cement which is being tested for use in industry. The material and process of manufacturing contribute to reduced carbon dioxide emissions. This was witnessed through the research collaboration between India and Switzerland on a new cement material that can reduce carbon dioxide emissions in the manufacturing process. The construction sector has one of the major contribution to global carbon dioxide emissions even after acknowledging this we are unable to reduce the scale of such environment harming emissions from the construction sites. All these examples witness a major change in the country in the direction of getting developed with the approach of maintaining our natural environment. Sustainable development is of major concern and attracts stringent actions if violations are found. The mining activities also involve digging of land which again is something which harms the land but it becomes inevitable as to obtain various precious minerals or metals. These activities not only harm the land but also are detrimental to the interests of humans, wildlife and the environment. Excessive mining lead to erosions, which requires immediate attention and therefore methods for conservation of the environment, becomes the need of hour.

Even it affects the pattern of rainfall, sedimentations, local climates, depleting forests and hence adding up in the destruction of the environment. Since the effects of the erosions are adverse and the flora and fauna of the concerned place is affects the environment by this since it fades away the natural ecological balance which very much necessary for a sustainable living. When the natural ecological balance is disturbed, it displaces the niche of the beings affected by the cause. Thus, a single mining activity which is done to obtain minerals and gain benefits from it, results in such destructions adversely one by one to each and every individual strata of the biome. An example of this kind of damaged suffered is from the mining company in India at the Western Ghats mountain range in the Karnataka. The operations of the concerned company caused a large scale destruction of the hills, pollution of the ground water nearby .But these mining activities even after the acknowledgment of its treats and detrimental effects, we herein are unable to shift ourselves to a living where minerals are not a part of life. The thing which can be done to at least suffer from fewer damages is having certain checks and balances and safety measures for adequate monitoring purpose of the mining industry. This aim is ensured by having certain provisions in our Indian laws. The governments make policies regarding the concerned issue for the uprising threats and its implementation is seen by the legal department. Here in India, we have well framed policies and laws for the purpose of this which as a result ensures the implication of penalties on the wrong doer. One such legal regime is the '*Sustainable Development Framework*' for the mining sector. The SDF committee constitutes to implement principles and framing a good guideline for the development. The SDF accounts for issued which the mining sector is facing due to the existing laws and principles and demarcates a set of principle that collectively heads towards sustainable development. It incorporates not only regulatory provisions but also goes beyond that and recommends practices and best possible solutions to address the problems being faced in the sustainable development of the country. It provides guidance steps, measurable outcomes and assurance of which continual improvement is the key.

In the Constitution of India, Article 21<sup>4</sup> it is about prevention of encroachment of personal liberty and deprivation of life except according to the procedure established by law. It means that if any act of a person amounts to encroachment of the personal liberty of the other person may it be anyone or deprivation of life of the other person. Such act of any person having done intentionally or unintentionally will not fall under the parameters set for article 21. The article 21 of the Indian constitution assures the right to live with human dignity and which is free from exploitation. Now, exploitation under this article also involves the exploitation of environment which serves as the major basic necessity for living. As in this paper it describes the various aspects of mining which is nowadays causing a major threat to the environment, it is relatable to this article 21 of protection of life and personal liberty. Other than this there are even the environmental laws of India which provides for the checks and balances for the concerned cause. Conservation and protection of the environment have been an inseparable part of Indian heritage and culture. Realizing its importance, the Indian State has also enshrined it in the Constitution which requires both the state and the citizen to "protect and improve the environment".<sup>5</sup>

## **CONCLUSION**

The Protection of Environment and Mining are two such inseparable elements in the contemporary times that it can never be thought of complete doing away with mining and on the same time any negligence on the part of the protection of environment will definitely have drastic results not for any economic enterprise but for the human existence itself. The various provisions of the Indian constitution as well as the legal regimes regulating mining and related to the protection of environment should be construed in tandem and with a view of harmonisation among them if any such issue comes forth. The conservation of environment is something which is a doable task and the only constraint remains is of political and social willingness. The concept of sustainable development may only be realised when there is no competitive interests of the stakeholders but an approach of reconciliation with the nature and surely an effort to minimise the harming of natural resources. Further, if the understanding is premised over two distinctive approaches the losses may surely be minimised, one being that the machineries used for mining should be causing least pollution and secondly the legal regimes should be so drafted as to take care of a holistic view of the functions of not only providing employment but also restricting losses with an approach of identifying the renewable resources.

Thus, ensuring proper monitoring of every sphere of mining activity may it be technical or geological, we can achieve the goal of 'SUSTAINABLE DEVELOPMENT' with a better and more effective legal regime.

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<sup>4</sup> Available at: <<http://www.legalserviceindia.com/articles/art222.html>> Accessed on: 15 October, 2017

<sup>5</sup> Available at: <<http://www.environmentallawsofindia.com/>> Accessed on: 15 October, 2017

## EUTHANASIA: A BRIEF COMMENT

Sonali Khanna\* & Diksha Dwivedi\*\*

### ***Abstract***

*Euthanasia is one of the debatable phenomena today in relation to the rights of man. Euthanasia is the process which comprises of two people i.e. the person whose life will be ended and will be given relief from unbearable pain and the other is the one who ends the former life. Human Life is the God's gift, everyone is told to lead a happy, comfortable and wise life and people who commit suicide or talk about ending their life is not seen with a respectable eye, one term is designated to them i.e. "Coward" it is easy to give a title to a person but no one understand or genuinely concerned why one has a suicidal tendencies, maybe the one was in a lot of unbearable pain, every single day of his life is burden on other as well as on himself so do we need to live such life? Do we need to bother someone else because of our illness? Declaring the right to die with dignity as a fundamental right, the Supreme Court in a landmark judgment passed an order allowing passive euthanasia in the country. The Supreme Court has given a historical verdict that allows passive euthanasia legal in India. The Court said that 'living will' be permitted but with the permission from family members of the person who sought passive Euthanasia and also a team of expert doctors who say that the person's revival is practically impossible. The court stated the rights of a patient would not fall out of the purview of Article 21 (right to life and liberty) of the Indian Constitution.*

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\* Student @ Amity Law School, Noida (U.P.)

\*\* Student @ Amity Law School, Noida (U.P.)

## INTRODUCTION

Human Life is the God's gift, everyone is told to lead a happy, comfortable and wise life and people who commit suicide or talk about ending their life is not seen with a respectable eye, one term is designated to them i.e. "Coward" it is easy to give a title to a person but no one understand or genuinely concerned why one has a suicidal tendencies, maybe the one was in a lot of unbearable pain, every single day of his life is burden on other as well as on himself so do we need to live such life? Do we need to bother someone else because of our illness?

### *Concept of Euthanasia*

Euthanasia is one of the debatable phenomena today in relation to the rights of man. Euthanasia is the process which comprises of two people i.e. the person whose life will be ended and will be given relief from unbearable pain and the other is the one who ends the former life. Though Euthanasia is an act of a kindness opponents argue that it is unethical as death lies in the hand of God, human are no one to end the life of a person which is a gift from a God. Opponents of Euthanasia can be bifurcated in those who profess any faith and others who do not profess any faith. The former argue that only one who may be entitled to end the life of a person is God, and therefore it is not possible for human being to end the life of another, and later argue that Euthanasia is simply a crime because in one way or other regardless the reasons one person is killing the person.

In layman term, Euthanasia is defined as "the termination of a very sick person's life in order to relieve them of their suffering". A person who undergoes euthanasia usually has an incurable condition. But there are other instances where some people want their life to be ended. In many cases, it is carried out at the person's request but there are times when they may be too ill and the decision is made by relatives, medics or, in some instances, the courts. Euthanasia is against the law in the UK where it is illegal to help anyone kill themselves. Voluntary euthanasia or assisted suicide can lead to imprisonment of up to 14 years.<sup>1</sup>

## HISTORICAL BACKGROUND

"I will give no deadly medicine to anyone if asked, nor suggest any such counsel."<sup>2</sup> Euthanasia comes from the Greek words, Eu (good) and Thanatos (death) and it means "Good Death", "Gentle and Easy Death". This word has come to be used for "mercy killing". In this sense, Euthanasia means the active death of the patient or inactive death in the case of dehydration and starvation.

The first recorded use of the word euthanasia was by Suetonius, a Roman historian, in his *De Vita Caesarum-- Divus Augustus* (*The lives of the Caesars -- The Deified Augustus*) to describe the death of Augustus Caesar:

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<sup>1</sup> Ethics of Euthanasia, Available at: <<http://www.bbc.co.uk>> Accessed on 25 July 2018

<sup>2</sup> About 400 B.C. – The Hippocratic Oath (By the "Father of Medicine" Greek physician Hippocrates)

“....while he was asking some newcomers from the city about the daughter of Drusus, who was ill, he suddenly passed away as he was kissing Livia, uttering these last words: “Live mindful of our wedlock, Livia, and farewell,” thus blessed with an easy death and such a one as he had always longed for . For almost always, on hearing that anyone had died swiftly and painlessly, he prayed that he and his might have a like euthanasia, for that was the term he was wont to use.”<sup>3</sup>

Augustus’ death while termed euthanasia” was not hastened by the actions of any other person.

Throughout the history, Euthanasia has been practised, accepted, hated and rejected. It is not a cultural discovery afforded by recent technology and advances. Although this practice has been survived from ages it has changed with cultural values and technology.

## **MERITS OF EUTHANASIA AND SUICIDE**

In suicide, a man voluntarily kills himself by stabbing, poisoning, or by any other way. One’s intention is to kill oneself. There could be various reasons for a suicide such as depression, breakup, frustration in love, failure in examination, rejection for jobs etc. On the other hand, Euthanasia is the process of ending one’s life so that the person is free from pain and suffering, this act is done by the third person, he is either actively or passively involved i.e. he aids or abets the killing of another person. Suicide is voluntary, meaning it is the person’s will to end his life while euthanasia can also be involuntary or non-voluntary.

Involuntary euthanasia is ending a person’s life against his will. Non voluntary euthanasia is ending a person’s life when he is unable to give his consent as in the case of child euthanasia.<sup>4</sup>

*Note: Assisted Suicide and Euthanasia are different from each other though in both third parties is involved be it a physician or a doctor. Assisted suicide is an act which intentionally helps another to commit suicide, for example by providing him means to do so. When it is a doctor who helps a patient to kill himself (by providing a prescription for lethal medication) it is physician-assisted suicide. Thus in assisted suicide, the patient is in complete control of the process that leads to death because he/she is the person who performs the act of suicide. The other person simply helps (for example, providing the means for carrying out the action). On the other hand, euthanasia may be active such as when a doctor gives a lethal injection to a patient or passive such as when a doctor removes life support system of the patient.*

## **CATALOGUING OF EUTHANASIA**

Euthanasia is a compounded matter, there are many different types of euthanasia .Euthanasia may be classified according to the consent into three types:

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<sup>3</sup> Anne Kornhauser, the Modern Art of Dying : A History of Euthanasia in the United States, 30 POLITICAL AND LEGAL ANTHROPOLOGY REVIEW (2007)(Book Review)

<sup>4</sup> Difference between Suicide and Euthanasia, Available at: <<http://www.differencebetween.net>> Accessed on: 30 July 2018

- 1) *Voluntary Euthanasia* – Voluntary Euthanasia is practiced with an expressed desire and consent of the patient. In simple words a person who is killed has requested to be killed. Voluntary Euthanasia is primarily concerned with right to choice of terminally ill patient to kill patient who decides to end his or her life, choices which serve his/her best interest and also that of everyone else.
- 2) *Non-Voluntary Euthanasia* – Non Voluntary Euthanasia is practiced without the consent of the patient; no request was made by the person who is killed. The decision is made by another person because the patient is unable to make a decision. This type of Euthanasia is done when the person is unable to communicate his wishes and needs. In Non-Voluntary Euthanasia the patient has left no such living will or given any advance directives, as he may not have had an opportunity to do so, or may not have anticipated any such accident or eventuality. Person who is not mentally competent such as comatose patient to make an informed request to die comes under the category of non-voluntary euthanasia. In cases non voluntary euthanasia, it is often the family members, who make the decision.<sup>5</sup>
- 3) *Involuntary Euthanasia*- When the person who is killed made an expressed wish not to have euthanasia? In other words, it is involuntary when the person killed gives his consent not to die. When the patient is killed without the expressed wish to the effect, it is a form of involuntary euthanasia. It refers to cases wherein a competent patient's life is brought to an end against the wishes of that patient that oppose euthanasia; and would clearly amount to murder.<sup>6</sup>

According to means of death euthanasia is bifurcated into:

- Active Euthanasia
- Passive Euthanasia

*Active Euthanasia* – Active Euthanasia refers to causing intentional death of a human being by direct intervention. It is also known as positive euthanasia or aggressive euthanasia. It is a direct act of ending one's futile life and meaningless existence Active euthanasia is said when someone uses lethal substances or forces to end a patient's life. Active euthanasia is the quicker means of causing death and all form of active euthanasia is illegal. Active euthanasia involves painlessly putting individual to death for merciful reasons, as when a doctor administer lethal dose of medication to a patient.

*Passive Euthanasia* – Passive euthanasia is intentionally causing death by not providing the life sustaining things i.e. care food or water. It is also known as Negative Euthanasia or Non-Aggressive Euthanasia .In other words discontinuing, withdrawing or removing life supporting system. Passive Euthanasia is usually slower more uncomfortable than active. Euthanasia is passive when death is caused because a treatment that is sustaining the life of

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<sup>5</sup> Airdale NHS Trust V Blend 1993(1) A11 ER821 (HL)

<sup>6</sup> Osborn's Legal dictionary

the patient is held off and the patient dies as a result thereof. In “passive euthanasia” the doctors are not actively killing anyone; they are simply not saving him.<sup>7</sup>

## **SYSTEMS OF EUTHANASIA<sup>8</sup>**

Competent adult patients have the right to refuse medical treatment. Such refusals of treatments are morally and ethically different from euthanasia, and should remain legally different.

Dr Tricia Briscoe said at the 2004 Medical Law Conference

*“The right to refuse treatment flows from a right to inviolability - a right not to be touched, including by continuing treatment, without one’s consent - not from a right to die. Withdrawal of treatment will mean death, but it will result from the patient’s underlying illness.”<sup>9</sup>*

When, however, an action or medication is withheld from a patient for the *primary* purpose of causing or hastening death, this is passive, or indirect, euthanasia. These measures may include the with-holding or withdrawal of ordinary measures such as food, water (hydration) and oxygen.

Examples of passive euthanasia are:

- when food and water is withheld from sick or disabled newborn babies who might otherwise have lived
- with-holding or withdrawing food and water from someone who is diagnosed as being in a ‘persistent vegetative state’, has dementia, or who is not improving fast enough (e.g. from a stroke)
- ‘do not resuscitate’ orders written on patients’ charts

### ***Drugs***

In Oregon, a doctor can write a prescription for drugs that are intended to kill the patient. When the prescription is filled, directions centre on making certain that the patient understands about taking all the pills in a single dose, dies after taking the prescription. The lethal drugs are covered by some Oregon health insurance plans. They are paid for by the state Medicaid program under a funding category called “comfort care.” Research into euthanasia in the Netherlands claimed people awake from comas after taking supposedly fatal drug doses and suffer side effects such as vomiting and gasping. To reduce the chances of the euthanasia drugs being vomited up, an anti-emetic must be given. The study showed that when patients tried to kill themselves using drugs prescribed by a doctor, the medication did not work as expected in 16% of cases. In a further 7% of cases

<sup>7</sup> Aruna Ramchandra Shanbaug v. Union of India ,2011 (3) SCALE 298

<sup>8</sup> Available at: <<http://www.life.org.nz>> Accessed on: 7 August 2018

<sup>9</sup> Available at: <[www.nzma.org.nz/news/issues/medical-ethics](http://www.nzma.org.nz/news/issues/medical-ethics)> Accessed on: 7 August 2018

there were technical problems or unexpected side effects. Problems surface so often that doctors felt compelled to intervene in 18% of cases, according to a report in the New England Journal of Medicine. Even when the doctor directly performed euthanasia, complications developed in 3% of the attempts. Patients either took longer to die than expected or woke from a drug-induced coma that was supposed to be fatal in 6% of cases.

### ***Injections***

In the Netherlands, the practice is an injection to render the patient comatose, followed by a second injection to stop the heart. First a coma is induced by intravenous administration of barbiturates, followed by a muscle relaxant. The patient usually dies as the result of anaemia caused by the muscle relaxant. When death is delayed, intravenous potassium chloride is also given to hasten cardiac arrest.

### ***Starvation and Dehydration***

Right-to-die activists often advocate the withdrawal of food and water in order to hasten death. This means of death is frequently approved when application is made to the courts. Proponents of euthanasia recommend the use of what is known as Terminal Sedation in combination with the withdrawal of food and water. Terminal sedation allows for the measured use of sedatives and analgesics for the necessary control of symptoms such as intolerable pain, agitation, and anxiety, in order to relieve the distress of the patient and of family members. If all food and fluids (nutrition and hydration) are removed from a person -- whether that person is a healthy Olympic athlete who takes food and fluids by mouth or a frail, disabled person who receives them by a feeding tube -- death is inevitable. That death will occur because of dehydration.

Dr. Helga Kuhse, a leading campaigner for euthanasia, said in 1984: "If we can get people to accept the removal of all treatment and care - especially the removal of food and fluids - they will see what a painful way this is to die and then, in the patient's best interest, they will accept the lethal injection."

**Gases, plastic bags and the 'peaceful pill'**, this method, referred to as 'self-deliverance,' are most commonly advocated by right-to-die activists such as Derek Humphry and Dr Philip Nitschke. In Humphry's book *Final Exit* describes the method and has been found in the possession of people who have used the method to commit suicide. Dr Nitschke developed what he calls the 'CO Genie' - an apparatus that turns out lethal carbon monoxide that can be made at home. Nitschke has held workshops in Australia and New Zealand teaching people how to manufacture such devices for themselves.

Dr Nitschke's latest initiative is a barbiturate-based 'peaceful pill.' Nitschke's Peanut Project (named for an old street term for "Barbiturate") intends holding workshops for small groups of elderly and seriously ill Exit members from different countries to make their own Peaceful Pill.

## **NATIONS WHERE EUTHANASIA ARE LEGAL**

### ***Netherlands***

In April 2002, the Netherlands became the first country to legalize euthanasia and assisted suicide. But it imposed a strict set of condition “the patient must be suffering unbearable pain, their illness must be incurable, and demand must be made in “**full consciousness**” by the patient

### ***Belgium***

Belgium became the second country in the world to pass a law in 2002 to legalize euthanasia. The law mentions doctors can help patients to end their lives when they freely express a wish to die after suffering unbearable pain. Patients can also receive euthanasia if they have clearly stated it before entering a coma or similar vegetative state. Interestingly, Belgium became the first country to legalize euthanasia for children in 2014. There is no age limit for minors seeking a lethal injection but there are strict norms for it.

### ***United States***

Doctors are allowed to prescribe lethal doses of medicine to terminally ill patients in five US states. Euthanasia, however, is illegal. In recent years, the “aid in dying” movement has made incremental gains, but the issue remains controversial. Oregon was the first US state to legalise assisted suicide. The law took effect in 1997, and allows for terminally ill, mentally competent patients with less than six months to live to request a prescription for life-ending medication. More than a decade later, Washington State approved a measure that was modelled on Oregon’s law. And last year, the Vermont legislature passed a similar law. Court decisions rendered the practice legal in Montana and, most recently, in New Mexico.

### ***Germany & Switzerland***

In German-speaking countries, the term “euthanasia” is generally avoided because of its association with the eugenist policies of the Nazi era. The law therefore tends to distinguish between assisted suicides. In Germany and Switzerland, active assisted suicide – i.e. a doctor prescribing and handing over a lethal drug is illegal. But German and Swiss law does allow assisted suicide within certain circumstances.

In Germany, assisted suicide is legal as long as the lethal drug is taken without any help, such as someone guiding or supporting the patient’s hand. In Switzerland, the law is more relaxed: it allows assisted suicide as long as there are no “self-seeking motives” involved. Switzerland has tolerated the creation of organisations such as Dignitas and Exit, which provide assisted dying services for a fee.

### ***India***

Declaring the right to die with dignity as a fundamental right, the Supreme Court in a landmark judgment passed an order allowing passive euthanasia in the country. The Supreme Court has given a historical verdict that allows passive euthanasia legal in India.

The Court said that ‘living will’ be permitted but with the permission from family members of the person who sought passive Euthanasia and also a team of expert doctors who say that the person’s revival is practically impossible.<sup>10</sup> The court stated the rights of a patient would not fall out of the purview of Article 21 (right to life and liberty) of the Indian Constitution.<sup>11</sup>

Right to life’ including the right to live with human dignity would mean the existence of such right up to the end of natural life. This may include the right of a dying man to die with dignity. But the ‘right to die with dignity’ is not to be confused with the ‘right to die’ an unnatural death curtailing the natural span of life. Thus the concept of right to life is central to the debate on the issue of Euthanasia. One of the controversial issues in the recent past has been the question of legalizing the right to die or Euthanasia. Euthanasia is controversial since it involves the deliberate termination of human life. Patient suffering from terminal diseases are often faced with great deal of pain as the diseases gradually worsens until it kills them and this may be so frightening for them that they would rather end their life than suffering it. So the question is whether people should be given assistance in killing themselves, or whether they should be left to suffer the pain cause by terminal illness.<sup>12</sup>

## **CONCLUSION**

The concept of right to life is central to the debate on the issue of Euthanasia. One of the controversial issues in the recent past has been the question of legalizing the right to die or Euthanasia. Euthanasia is controversial since it involves the deliberate termination of human life. The question is whether people should be given assistance in killing themselves, or whether they should be left to suffer the pain cause by terminal illness.

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<sup>10</sup> Available at: <<http://english.samajalive.in>> Accessed on: 7 August 2018

<sup>11</sup> Available at: <<https://indianexpress.com>> Accessed on: 7 August 7 2018

<sup>12</sup> Available at: <<http://www.lsgalservicesindia.com>> Accessed on: 7 August 2018