

PROTECTION AND CONSERVATION OF LOKTAK LAKE WITH
REFERENCE TO THE RAMSAR CONVENTION



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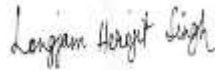
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DECLARATION

I, Longjam Herojit Singh, pursuing Master of Laws (LL.M) from National Law University and Judicial Academy, Assam, do hereby declare that the present dissertation titled “**Protection and Conservation of Loktak Lake with reference to Ramsar Convention**” is a bonafide work and has not been submitted, either in part or full anywhere else for any purpose, academic or otherwise.



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PREFACE

Loktak Lake is the mirror of Manipur which is greatly associated with the socio-economic and culture of Manipur since time immemorial. It is only the place and habitat of the rarest deer called Sangai. Being the inundated water, the local people fully depend on the lake for their livelihood through fishing which is the prime way for their food, shelter and water. Water is taken from this lake for the production of electricity through hydro electric plant. This lake is considered the home of many flora and fauna, of the biodiversity hot spot. Having the peculiar biodiversity and socioeconomic importance the lake has been designated as "Wetland of International Importance" under the Ramsar Convention, in 1990 and included under the Montreux Record in 1992 and is one among the 19 wetlands selected for conservation and management under the National Wetland Development Programme.

This paper talks about the regulations and policies in international level, National level and State level. Further, it discusses the efficiency and adequacy of the existing laws in India and state laws. The area of discussion primarily revolves around the adequacy of existing laws in Manipur. The improvement in the conservation laws are suggested in collaboration with the local communities.

Further, it analyses the challenges and problems in the protection of Loktak Lake with reference to the Ramsar Convention. In addition to that, it discusses the role of judicial system in the administration and conservation of wetlands. At last but not the least, the wise use of resources given by the Loktak Lake is being analyzed with the environmental principles. This paper relies on the method of both the doctrinaire and empirical approaches.

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6. M.C Mehta v. Kamal Nath
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8. M.I Builders v. Radhey Shyam Sahu
9. People United for Better Living in Calcutta v State of West Bengal
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12. Rural Litigation and Entitlement Kendra v. State of U.P
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14. Subhas Kumar v. State of Bihar
15. TN Godavaram Thirumulpad v. Union of India
16. Th. Majra Singh v. Indian Oil Corporation and Ors

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1927-Indian Forest Act

1948-Universal Declaration of Human Rights

1966-International Covenant on Economic, Social and Cultural Rights

1966-International Covenant on Civil and Political Rights

1971-The Manipur Forest Rules

1971- Ramsar Convention

1972-UNESCO World Heritage Convention

1972-Wildlife Protection Act

1974-Water (Prevention and Control of Pollution) Act

1974-The Manipur Wildlife Protection Rules

1980-Forest (Conservation) Act

1986-The Environmental (Protection) Act

1992-United Nations Framework Convention on Climate Change

1992-The National Conservation Strategy

1992-The Convention on the Biological Diversity

1993-Australia Nature Conservation Agency

1994-The Manipur Panchayati Raj Act

1994-United Nations Convention to Combat Desertification

1997-The Convention on Conservation of Migratory Species of Wild Animals 1997

2006-National Water Policy

2006-The Manipur Loktak Lake (Protection) Act

2007-Wetlands Conservation Guidelines

2008-National Bio-diversity action Plan

2010-The Wetlands (Conservation and Management) Rules

2011-Manipur Tourism Policy

2014-The Manipur Conservation of Paddy land and Wetland Act

Commission

1990-Murray-Darling Basin Commission

2006-National Forest Commission

Table of Abbreviations

1	AIR.	All India Reporter
2	A.D.	Anno Domini
3	Art.	Article
4	CBD	Conservation on Biological Diversity
5	CMS	Convention on Migratory Species
6	COP	Contracting of Parties
7	DDT	Dichloro-diphenyl Trichloroethane
8	Dr.	Doctor
9	EIA	Environmental Impact Assessment
10	GHG	Green House Gas
11	ICESCR	International Covenant on Economic, Social and Cultural Rights
12	ICCPR	International Covenant of Civil and Political Rights
13	KLNP	Keibul Lamjao National Park
14	Km	Kilometre
15	KP	Kyoto Protocol
16	LDA	Loktak Development Authority
17	MoEF	Ministry of Environment and Forest
18	MoEFCC	Ministry of Environment, Forest and Climate Change
19	NGT	National Green Tribunal
20	NGOs	Non-Governmental Organisation
21	NWP	National Water Policy
22	PCB	Printed Circuit Board
23	Rs	Rupees
24	SCC	Supreme Court Cases
25	SC	Schedule Caste
26	SC	Supreme Court
28	UNCCD	United Nations Convention to Combat Desertification

29	UIO	Union of India
30	UDHR	Universal Declaration of Human Rights
31	UNESCO	United Nations Educational, Scientific and Cultural Organisation
32	UNFCCC	United Nations Framework Convention on Climate Change
33	V.	Versus
34	WPCPA	Water Prevention and Control Pollution Act
35	WISA	Wetlands International South-Asia

ABSTRACT

This paper talks about the regulations and policies in international level, National level and State level. Further, it discusses the efficiency and adequacy of the existing laws in India and state laws. The area of discussion primarily revolves around the adequacy of existing laws in Manipur. The improvement in the conservation laws are suggested in collaboration with the local communities. Further, it analyses the challenges and problems in the protection of Loktak Lake with reference to the Ramsar Convention¹. In addition to that, it discusses the role of judicial system in the administration and conservation of wetlands. At last but not the least, the wise use of resources given by the Loktak Lake is being analyzed with the environmental principles. This paper relies on the method of both the doctrinaire and empirical approaches.

Keywords: Protection and conservation of Loktak Lake, Judicial system and Ramsar Convention

¹ www.ramsar.org, last seen on 23/05/2020.

Chapter 1

Introduction

1.1 Introduction

Loktak Lake is the mirror of Manipur which is greatly associated with the socio-economic and culture of Manipur since time immemorial. It is only the place and habitat of the rarest deer called Sangai. Being the inundated water, the local people fully depend on the lake for their livelihood through fishing which is the prime way for their food, shelter and water. Water is taken from this lake for the production of electricity through hydro electric plant. This lake is considered the home of many flora and fauna, of the biodiversity hot spot. Having the peculiar biodiversity and socioeconomic importance the lake has been designated as "Wetland of International Importance" under the Ramsar Convention, in 1990 and included under the Montreux Record in 1992 and is one among the 19 wetlands selected for conservation and management under the National Wetland Development Programme.² It is high time that the altered ecosystem of Loktak Lake needs to be preserved and protected from the adverse activities of the environment due to the climate change. The lake has 14 hillocks arising out of the water, the prominent of them being Sendra, Ithing, Thanga and Karang, supporting habitation by a large number of people, mostly those of fishers.³ It is located at "an altitude of 768.5 m above msl., between latitudes 24'25 and 24'42 N and longitudes 93'46 and 93'55 E, the lake occupies an area of 300 sq' km. Maximum depth of the lake reaches up to 2.7 m". The direct catchment area of the lake basin covers 980 sq km., of which 400 sq km. are under forests, 430 sq km. are under paddy cultivation and 150 sq km. under human habitation.⁴ It provides the wide and comprehensive varieties of flora and fauna.

This is the best time the Loktak Lake to be considered as the hour of the need to be protected and preserved from the different types of anthropogenic activities done in the Loktak Lake directly or indirectly. It is the epicentre for all the biodiversity and being controlled the ecosystem of the Loktak Lake; it provides the life to all the life forms living around the Loktak Lake.

² V.R. Suresh, *Status of Loktak lake Fisheries and Approach for their Sustainable Development*, 23 Fishing Chimes 40, 40-44(2003).

³ Id.

⁴ Id.

The Indian constitution regards the conservation of protection and right to have the healthy environment to every citizen. Article 21 talks about the provisions of the protection and conservation of the natural resources implicitly to all the citizens of the country. Taking this provision as the instrument of understanding the conscience of preserving natural resources, the provision drives the major role in the administration of the environment law in the country. In the various landmark cases of the apex court, the SC held that the right to live includes the pollution free water and air under Article 21 of the Indian Constitution⁵. In another case, Rural Litigation and Entitlement Kendra v. State of U.P.⁶, the court ordered the closure of the limestone quarries in the area of the Missouri roads that lacks the safety and affects the ecological system of the area. By doing so, the judiciary plays a very prominent role in delivering the justice to the environmental equilibrium. Therefore, Article 21 of the Indian Constitution covers the conservation of wetland which includes many aspects like flora and fauna conservation, prevention of air and water pollution, and the environment impliedly. Hence, Loktak lake of Manipur needs the proper attention from the conserving authority for the future purposes.

With the pace of time, the population rapidly increases in India and Manipur per se. The land for construction and building is highly demanded from the local communities. It affects the nature and physical structure of the Loktak Lake. Water pollution is also one of the adverse factors met by the nature of Loktak Lake. Floating parks are altered by the local people for their fisheries, irrigation and agriculture. Due to this siltation, the lake becomes shallow day by day. The major challenges we come across in front of our hands are the construction of Ithai barrage affected the Loktak Lake in terms of water level. Due to this, the area becomes flooded. It facilitates the change of biodiversity. The Loktak Lake poses the threat from the various like habitat loss, encroachment, grazing, fishing, agriculture and poaching of animals though the wildlife protection strives to protect and preserve the animals. It has been the abode for the migratory birds but it gets reduced extensively in the recent days. For the maintenance of the sustainable development, the national laws related to wetland and international convention struggle to find the solutions of the problems of wetland. These several laws need to be addressed carefully for

⁵ Subhas Kumar v. State of Bihar, AIR 1991 SC 420.

⁶ (1985) 2 SCC 431.

the protection and conservation of wetland. The judicial fraternity must have to consider the present issues.

As per the initial phase, the research paper focuses on both the doctrinaire and empirical method. However, due to pandemic in the country, the empirical method would not reach out in this paper. Therefore, the researcher now emphasises only on the doctrinaire method.

1.2 Statement of the problem

1. Though the International Convention of Ramsar relating to conservation and protection of wetland has been made, the Loktak Lake is yet to relook for the effective implementation.
2. Though the Central rules and State law relating to conservation and protection of wetland have been enacted, the Loktak Lake is yet to have its effective implementation.

1.3 Aims

1. To understand and assess the problems and laws relating to the Ramsar Convention and its derivative application towards the domestic law of India.
2. To evaluate critically the existing laws relating to Wetland Conservation and Management Rules and Loktak Lake Act.

1.4 Objectives

1. To understand and critically evaluate the existing laws relating to the Ramsar Convention and India.
2. To explore the case laws relating to the Wetland Conservation and Management in India.
3. To identify the loopholes and challenges in the present mechanism of Ramsar Convention and Wetland Conservation and Management and Loktak Lake Act in India.

1.5 Scope and Limitation

1. The Researcher has focused only on the Ramsar Convention and Wetland Conservation and Management Rules.
2. It has been limited to the study of Loktak Lake Act 2006 with regards to the Conservation and Protection of Loktak Lake.

1.6 Chapterisation

Chapter 1- would deal about the basis of introduction of the topic which includes the statement of the problems, aims and objectives, research questions and hypotheses, content specific chapterisation, scope and limitations, literature review and research methodology.

Chapter 2- would deal with the genesis of the Ramsar Convention which includes the background of Ramsar Convention, Ancient History of Manipur and its relation with thr Loktak Lake, Pre-Independence-British Regimes, Post Independence and evolution of Loktak Lake Conservation and Protections.

Chapter 3- would enunciate the legal analyses of wetland conservation and protection of Loktak Lake under Indian perspectives which includes Indian laws, international Conventions, Comparative Studies of different Countries case laws in the light of Indian perspective and The Environment Impact Assessment.

Chapter 4- would deal with the challenges and problems meted out in the protection, Impact of Loktak Hydro Electric Project and conservation of Loktak Lake and Rights of the Indigenous People etc.

Chapter 5 would deal with the conclusion and Suggestions.

1.7 Literature Review

As the title of the above report suggests, V.R. Suresh⁷ has shown the status of Loktak Lake fisheries and its approach in order to ensure the sustainable development. Loktak Lake is the lifeline of the people associated with the communities in their socio-cultural, economics and livelihood etc. Due to the construction of hydropower plant, the ecosystem is severely affected. At the same time, it causes the serious threat to the living support made by the Loktak Lake. C. R. Singh , J. R. Thompson , D. G. Kingston & J. R. French⁸ have highlighted that the high water levels of the Loktak lake due to hydropower has affected the ecological state of the floating park.

⁷ Supra 1.

⁸ C. R. Singh et al, Modelling water-level options for ecosystem services and assessment of climate change: Loktak Lake, North East India, 56 Hydrological Sciences Journal 1518, 1518-1542(2011).

The maintenance of the ecology without damaging its structure offers the current hydropower abstractions. The water management would be appreciated to maintain the ecology. R.D. Kangubam, Muthu Selvaraj, Muniswamy Govindaraju⁹, the authors aim to understand the transition in land use pattern in using detection using multi-temporal satellite data followed by remote sensing techniques were used to assess the land cover changes. This comes in the mind of the authors on account of the degradation of the wetlands called Loktak Lake engendered by the human anthropogenic activities being done in the area. It affects the fragile ecosystem of the Loktak lake and faced a serious threat to the aquatic ecosystem. The study identified the need for proper land use planning and implementation of Manipur Loktak Lake Act 2006 for sustainable management of the lake. Kiranbala Takhelmayum and Susmita Gupta¹⁰, the authors identified the temporal fluctuations of distribution of aquatic insects around Phumdi live, phumdi Mixed and Phumdi dry areas of Loktak Lake. Temporal fluctuation reveals that the Shannon-Weiner's diversity Index values were highest in June for Phumdi Live and Phumdi Mixed. C. R. Singh, J. R. Thompson, J. R. French, D. G. Kingston and A. W. Mackay¹¹, the authors detail about the impact of climate change due to the modification of hydrology in the local catchment area. The deterioration of the rivers is accountable due to the change of wetland area within the Loktak Lake. In order to ensure the maintenance of water level, the authors intend to investigate the malaise of the physical structure of Loktak Lake. The increase and decrease of water level due to climate change can be identified under this research. L. Sanjit, D Bhatt and R. K. Sharma¹², the lake is also the only means of sustenance for the wildlife and people who live on the phumdi. Thus, the Loktak lake has varied habitat patches (habitat heterogeneity) supporting a rich biodiversity. L. Haraoba et al¹³, the authors convinced to exhibit the geographic, ethnic and

⁹ R.D. Kangaba et al, Assessment of land use land cover changes in Loktak Lake In Indo-Burma Biodiversity Hotspot using geospatial technique, 22 the Egyptian Journal of Remote Sensing and Space Sciences 137, 137-143(2019).

¹⁰ Kiranbala Takhelmayum & Susmita Gupta, Distribution of aquatic insects in phumdias (floating island) of Loktak Lake, Manipur, Northeastern India, 3 Journal of Threatened Taxa 1856, 1856-1861(2011).

¹¹ Supra 7.

¹² L. Sanjit, D Bhatt & R. K. Sharma, Habitat heterogeneity of the Loktak Lake, 88 Current Science 1027, 1027-1028 (2005).

¹³ L. Haraoba et al, Introduction to Manipur: Geographic, Ethnic, Wildlife and Culture, 1-28(2016).

wildlife of Manipur. Among the peculiar features of Maipur, Lai Haraoba is the unique re-enactment of the creature which believes to be the pleasing of the God's survival. It is regarded the pre-Hindu ritual festival which includes dance, rituals, customs, games and worship of the ancestors of the Meeteis, the pre-dominant community of Manipur. Mentioning other ethnics of Manipur, there are 33 recognised tribes. Among these tribes, the Nagas and the Kukis are the major tribes in Manipur. Manipur is endowed with a rich cultural diversity. The geographical features of the state find reflection in the diversity of life and living habits. It is quite typical of the regions in the Eastern Himalayan range. Manipur's cultural background, therefore, is highly interesting for study. From the period before Christ up to the advent of Hinduism around 18th century A.D. , The Meiteis followed ancestor worship and animism, with the central focus of worshipped on Umang Lai – local governing deities worshipped in sacred groves. Manipur is a term given to this land after the declaration of Hinduism as a state religion during the time of the great ruler of Manipur, Pamheiba or Garibaniwaza, in the beginning of the eighteenth century. In early times, she had different indigenous names such as “Tillikoktong Ahanba in Hayi Chak, Mira Pongthoklam in Haya Chak, Hanna Semba konna Loiba in Khunnung Chak and Muwapalli Mayai Sumtongpan in Early Konna (Langba) Chak. In the later ages of Konna (Langba) Chak, it was popularly known as Kanglei Pungmayol, Kangleipak and Meitrabak”. Her other names were Chakpa Langba, then Muwapali, and then Wangam Tenthong Mayung Kuiba Lemthong Maphei Pakpa and later on she was called Poire Meitei after the advent of Poireiton. She was also known by a variety of names in the neighbouring areas. The Burmese called her Kathe, the Shans and other tribes east of the river Chindwin knew her by the name of Kase, the Ahoms called her Makeli and the cacharis Magli while the old Assamese termed her Moglai. The state of Manipur forms the core zone of the Indo-Burma Biodiversity Hot-Spots of the world, which is considered to be one of the hottest Hot-Spot ranking 6th position among 25 Biodiversity Hot-Spot of the world. This indicates a high concentration of endemic species in Manipur experiencing rapid rate of extinction and habitat loss needing special measures for conservation. This region falls in the bio-geographic tri junction of three distinctive bio geographical regions: Oriental region of India, extension of the Himalayan region and Malayan archipelago region. Consequently this region forms an active centre for transfer of gene pools between India and other south-east Asian Countries, which may lead to speciation and evolution of new and novel gene pools moreover

the varied climatic and diverse topography of the region, creates a wide array of habitats that support unique set of organisms: animals, plants and microbes. The diverse species of plants in Manipur include varieties of medicinal, aromatic, ornamental and agro-horticultural plants, especially rice, legumes, citrus, orchids, gingers, bamboos, canes, etc. which could be immense economic and commercial value. The rich and distinctive fauna of Manipur also include a number of rare endangered and endemic species of Invertebrate, Fishes, Amphibians, Reptiles, Birds and Mammals. There are 17 Mammalian species from the state. Tigers and Leopards are still reported to be surviving in the state although considered to be of negligible population. Moreover, Keibul Lamjao National Park, a unique floating National Park in Loktak Lake of Manipur, is the only natural habitat of most seriously endangered deer species, Sangai-state animal (*Cervus eldi eldi*) browentlered deer, being represented by about 160 individuals only in the state, and no-where else in the whole world. Other rare mammalian fauna of the state include: Hoolock gibbon, slow loris, Capped langur, Golden cat, Marble cat, Clouded leopard, Black bear, Malayan Sun-beer etc. Among the birds, 7 species of pheasants, 5 species of hornbills, and a number of wetland birds have been recorded from the state. Out of 118 species of birds in the Loktak Lake alone, 23 species have been found to be migrated from different countries of the northern hemisphere.

D. Kalitha¹⁴, the author says that It is a step taken up by the authority concerning the environmental repercussion before projecting any plan. It is subjected to the review for the approval. There are different phases to exhibit the environmental impact assessment. In the first stage, screening is the first step towards establishing the process of environmental impact assessment. In this stage, the list of the projects is sent for the review of the environmental impact assessment. In the second phase, the scoping is concerned for the extensive consultations, discussions and experts' opinion for the plan project. Aftermath, the selection of alternative are considered at the stage of the scoping. This reveals the adverse hazardous environmental impact of the project. In India, EIAs of development projects were first started in 1977-78 when the Department of Science and Technology took up environmental appraisal of river valley projects. Subsequently, various other projects were brought under the purview of EIA. It was, however, in

¹⁴ D. Kalitha, Environmental Impact Assessment in India: An appraisal, 3 Dimorian Review 50, 50-54(2016).

1994 when EIA was made mandatory in India under the Environmental Protection Act of 1986. The Ministry of Environment and Forests (MoEF), Government of India, has prepared environmental guidelines, to help the project proponents to work out an EIA. Guidelines have been prepared to bring out specific information on the environment required for environmental clearance. The agencies, which are primarily responsible for the respective sectors are closely involved in preparing the guidelines. River valley projects, thermal power projects, mining projects and industries, ports and harbours, development of beaches, highway/railway projects are the sectors for which guidelines have already been prepared. These guidelines basically consist of aspects regarding planning and implementation of development projects. Projects where EIA is mandatory and requires clearance from central government as of now, EIA clearance is required for 30 categories of industries. S.C. Gairola¹⁵, the author talks about the adequacy of existing wetlands conservation laws in India is analysed and suggestions for improvement in conservation initiatives are made. India has a robust framework of laws and policies governing wetlands conservation. High quality research has been done at various governmental and non-governmental institutions. However, considering the magnitude of the efforts needed to conserve wetlands due to ever increasing pressures and treats, the paper argues that existing legal and institutional framework is not adequate to conserve the vital wetlands resources in the country. A large extent of wetlands has been excluded from the existing regulation net exposing them to over- exploitation and consequential degradation. Community participation in conservation initiatives at local and regional level need to be strengthened by developing a long term stake. Issues of fair and equitable sharing of resources through sustainable utilization hold the key for wetlands conservation in India.

J. Thakur¹⁶, the author entails that the Ithai Barrage impounds the Manipur River just below the confluence of the Imphal River and the Tuitha River south of Loktak Lake, and is part of the Loktak Hydroelectric project that supplies hydropower to the seven Northeast states. Over time, the dam has affected the hydrology of the lake and caused harm to the ecology and economy of

¹⁵ Suresh Chandra Gairola, Conservation of wetlands in India: critical review of the adequacy of Law, 140 Indian Forester 113, 113-128(2014).

¹⁶ Jaya Thakur, Exploring the Hydropower Potential in India's Northeast , ORF , March 2020).

the region. The Manipur government is now urging the Centre to consider decommissioning the barrage. This brief assesses the present condition of the Loktak lake and the hydroelectricity project to arrive at a policy recommendation on whether or not the Ithai Barrage should be shut down. This brief makes an assessment of the current condition of the lake and the hydroelectricity project to evaluate if the demand for decommissioning the Ithai Barrage is justified. The brief first studies the Loktak Lake and the links between ecology and livelihood in the area. It then assesses the impacts of the project on the lake, as well as concerns related to the removal of the dam.

Devlin Leishangthem et al¹⁷, the authors stated that the assessment can be done about the economic linkages between the Loktak Lake and the local people living around it, through socioeconomic surveys. The major objective of the study was to examine the educational and socioeconomic status of local people residing around the Lake and to determine their perceptions towards the benefits derived from it. The people in the region have high dependence on Loktak Lake; fishing is the most important direct benefit they are getting from the Lake and people favor intensive conservation measures for restoration of the lake ecosystem. In the northern zone, 100% of the respondents gave historical value as indirect benefit followed closely by pollution removal and religious value with 98.2% and 85.6% respectively. Water sport was observed to be the least important benefit derived from the Lake with only 11.7%. In southern villages, 100% of the respondents gave ground water recharge, waste procession, pollution removal, historical, religious and recreational value as benefits. Similar result was observed in the eastern zone. The only difference was that 100% of the respondents gave provision for water as benefit in the eastern zone. In the western zone, 100% of the respondents gave pollution removal, religious, historical and recreational value as benefits followed closely by ground water recharge (82.05%), provision for water (34.6%) and aesthetic value (1.20%). The overall benefits, in all the four zones were observed to be pollution removal (99.1%). followed by religious values (93.1%) and sports (5.7%). No benefit from silt trapping was observed in all the four zones. Jess R. Phelps¹⁸, the author says about Farmland preservation has become an important pursuit for those seeking to protect the working landscape against conversion to non-agricultural use. One of the most

¹⁷ Devlin Leishangthem, Socioeconomic considerations in conserving wetlands of northeastern India: A case study of Loktak Lake, Manipur, 50 Wildlife Institute of India, Dehradun 11, 11-23(2012).

¹⁸ Jess R. Phelps, defining the role of agriculture in agricultural conservation easement, 44 ECOLOGY LQ 627, 627-680(2017).

common approaches for securing this protection is through the targeted use of agricultural conservation easements, typically perpetual land- use agreements designed to limit incompatible activities in order to preserve future agricultural viability. There is, however, a growing tension within these perpetual agreements, particularly between the need to allow farmers substantial flexibility to adjust to future business conditions and the desire to protect significant noneconomic values, including the conservation and environmental benefits that these lands also provide. It is the purpose of this Article to evaluate the role of conservation efforts within this overall framework and to evaluate the potential options for securing greater protection of these important rural amenities. To this end, Part I of this Article explores the various motivations that fuel farmland preservation nationwide. Part II discusses the evolution of farm policy towards its current degree of multifunctionality and the corresponding development and use of agricultural conservation easements as the preferred protective mechanism. Part III addresses the growing tension within these agreements as agricultural practice continues to evolve. Last, Part IV investigates the various approaches that can be used to protect the environmental attributes of protected agricultural lands. Ultimately, agricultural conservation easements will always require a balance between allowing flexibility for accommodating future needs and protecting rural amenities, but these agreements should actually result in a balance and ensure that the increasingly important conservation and environmental benefits associated with the working landscape are being adequately protected.

1.8 Research Questions

1. What are the crucial issues and challenges in the way of an effective implementation of Ramsar Convention?
2. Whether the Wetland Conservation and Management Rules and Loktak Lake Act have been effectively implemented in the State of Manipur?
3. What are the judicial decisions or case laws relating to the Wetland Conservation and Management Rules?

1.9 Research Methodology

The Researcher has applied both the doctrinaire method and empirical method (through interview format). The researcher has focused rely on the doctrinal method of research for

conducting the study on the subject. The researcher shall gather knowledge and information on the subject from various journal articles, newspaper articles, online legal databases, general web searches and statutes etc.

The researcher shall resort to a socio-legal analytical approach in order to understand the information gathered through the various sources and resources mentioned above and analyze different aspects of the data collected during the course of the study.

The empirical part is conducted through the data collection of interview and questionnaire windows to gather the information. The targeted respondents are the fishermen, Stakeholder, NGOs, Loktak Development Authority and Environmentalists etc.

CHAPTER 2

Genesis of the Ramsar Convention and Loktak Lake Regulation

2.1 Genesis of the Ramsar Convention

The convention which is “an inter-governmental treaty was adopted on 2 February, 1971, in Ramsar, Iran on the southern shore of the Caspian Sea is also known as the Ramsar Convention. The mission of this convention is the conservation and wise use of all wetlands through local, regional and national actions. It is the international cooperation which is a contribution towards achieving sustainable development throughout the world. 169 nations are the contracting parties to the convention on January, 2016.” More than 2,200 wetlands around the world which covers over 214 million hectares are recognised in “the Ramsar List of wetlands of International Importance.” The official name of the treaty, The Convention on Wetlands of International Importance especially as Waterfowl Habitat, reflects the original emphasis upon the conservation and wise use of wetlands primarily as habitat for water birds. Over the years, however, the Convention has broadened its scope of implementation to cover all aspects of wetland conservation and wise use.¹⁹

2.2 Background of the Ramsar Convention

The part of Project MAR that initiated the program in 1960, that ingrained from the MARshes, MARecages and MARisma was the first welcome for the formation of the International Convention on Wetland in 1962, thereby preserving and protecting the decline in the marshland area and waterfowl in Europe. Dr. Luc Hoffmann organized this MAR Conference in collaboration with the International Union for the Conservation of Nature and Natural Resources, the International Waterfowl and Wetlands Research Bureau, wetlands International and International Council for Bird Preservation etc. It was held in Les Saintes Maries-de-la-Mer in the French Camargue, 12-16 November 1962.²⁰

Ultimately, Mr. Eskander Firouz(Director of Iran’s Game and Fish Department) organized an International meeting that made the text of convention in an agreement followed up by the

¹⁹ An introduction to the Convention on Wetlands, Ramsar Convention Secretariat, Gland, Switzerland,2016, at 8.

²⁰ The Ramsar Convention Manual(6), at 21.

delegates of 18 nations the next day. It was held in the Caspian seaside resort of Ramsar , on February 2,1971, in Iran. On December, 1975, it was operated upon receipt by UNESCO as to place the depository. It was the 7th instrument of accession to the convention that ratified the convention later. Recently, the convention celebrated the 40th anniversary of its creation in 2011.²¹

2.2.1 The Paris Protocol²²

At an Extra ordinary COP, the Paris Protocol was adopted and held at UNESCO, headquarters in Paris, in December 1982, which came into force in 1986. Under this conference, the procedure for amending the convention was established and the official versions of the treaty in Arabic, French, English, German, Russian and Spanish were adopted.

2.2.2 The Regina Amendments²³

A series of amendments to Articles 6 and 7 accepted by the Conference of the Contracting Parties was held in Regina, Canada, in 1987 which didn't affect the basic substances principles of the convention, however it was related to its operation. It defines the powers of the contracting parties and established an inter-sessional Standing Committee which includes both a permanent secretariat and a budget for the convention. It came into force on 1st May, 1994. But the Parties, in the spirit of Resolution 3.4 from the 1987 meeting, observed the provisions of the amendments on a voluntary basis throughout the interim period. This is known as the Regina amendments.

The Ramsar Convention is a continuing partnership between the Contracting parties called the Standing Committee and the convention Secretariat, with the advice of the subsidiary expert body, the Scientific and Technical Review Panel and the support of the International Organisation partners. Over the years, this convention has been operated by means of a Strategic Plan which is presently “operating under its third Strategic Plan for the period 2009-2015.”²⁴

²¹ Id.

²² Id.

²³ Id,at 22.

²⁴ Id, at 33.

2.3 Meaning of Wetland

Wetlands is made on the basis of the biophysical characteristics that sought the conglomeration of the resources available, the utility value they possess, the processes they operate and the loss they pose. Biophysical characteristics are the physical structure of the wetlands area. Moreover, it provides the storage of water providing the home for the flora and fauna resources in the wetlands. The benefits arising from the wetland are utilised by the community or individual at their purposeful use. It occurs where the water table is very near to the surface of the land which may be shallow. Under the Ramsar Convention, the Wetland means areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide.²⁵

Moreover, ensuring the need for the protection and purpose, wetlands is to be included in the Ramsar List of internationally important wetlands: “may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands.”²⁶

Five major wetland types are generally recognized²⁷:

- Marine (coastal wetlands including coastal lagoons, rocky shores, and coral reefs);
- Estuarine (including deltas, tidal marshes, and mangrove swamps);
- Lacustrine (wetlands associated with lakes);
- Riverine (wetlands along rivers and streams); and
- palustrine (meaning “marshy” – marshes, swamps and bogs).

Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water and must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly

²⁵ Ramsar Convention, art.1.1(6).

²⁶ Ramsar Convention, art.2.1(6).

²⁷ The Ramsar Convention(6), at 7.

hydrophytes; (2) the substrate is predominantly un-drained hydrated soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.²⁸ They are the places where water is the primary factor controlling plant and animal life and the wider environment, where the water table is at or near the land surface, or where water covers the land.²⁹

2.3.1 Some of the provisions of the Ramsar Convention:

The Parties have committed themselves to arrange to be informed at the earliest possible time if the ecological character of any wetland in its territory and included in the List has changed, is changing or is likely to change as the result of technological developments, pollution or other human interference. Information on such changes shall be passed without delay to the Ramsar Secretariat.³⁰ There is a general obligation for the Contracting Parties to include wetland conservation considerations in their national land-use planning. They have committed themselves to formulate and implement this planning so as to promote, as far as possible, “the wise use of wetlands in their territory.”³¹ The words “wise use” plays a significant role in conserving and protecting the wetland having the collective participation from the local, indigenous, NGOs and the Government etc.

Contracting Parties have also undertaken to establish nature reserves in wetlands, whether or not they are considered to be internationally important and included in the Ramsar List, and they also endeavour to promote training in the fields of wetland research, management and wardening.³² Contracting Parties have also agreed to consult with other Contracting Parties about implementation of the Convention, especially in regard to transboundary wetlands, shared water systems, and shared species.³³

In the third Strategic Plan, Contracting Parties seek to deliver their commitments to wetland conservation and wise use through three pillars of action. These are³⁴:

²⁸ U.S. Fish and Wildlife Service (Cowardin et al. 1979)

²⁹ Pittock et al. (2015).

³⁰ Ramsar Convention, art.3.2

³¹ Ramsar Convention, art.3.1

³² Ramsar Convention, art.4.

³³ Ramsar Convention, art.5.

³⁴ Ramsar Convention Manual Handbook (6), at 17.

- a) working towards the wise use of their wetlands through a wide range of actions and processes contributing to human well-being through sustainable wetlands, water allocation, and river basin management, including, for example, establishing national wetland policies; harmonizing the framework of laws and financial instruments affecting wetlands; undertaking inventory and assessment; ensuring public participation in wetland management and the maintenance of cultural values by local communities and indigenous people; promoting communication, education, participation, and awareness; and increasing private sector involvement;
- b) devoting particular attention to the further identification, designation and management of a comprehensive suite of sites for the List of Wetlands of International Importance (the Ramsar List) as a contribution to the establishment of a global ecological network, and ensuring the effective monitoring and management of those sites included in the List; and
- c) cooperating internationally in the delivery of wetland conservation and wise use, through the management of trans-boundary water resources and wetlands and shared wetland species, collaboration with other conventions and international organizations, sharing of information and expertise, and increasing the flow of financial resources and relevant technologies to less-developed countries.

2.3.2 Some of the Principles need to be incorporated in the wetlands conservation

1. The obligation reflected in Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration, namely, that states have sovereignty over their natural resources and the responsibility not to cause transboundary environmental damage - this is the principle applies in the international environmental law that puts the brake on the natural resources beyond the limited amount without damaging the other countries. No doubt, every state has the sovereign over their resources. However, the state must keep the moral obligation to not damage the natural environment. The Stockholm Declaration extends two principles for the audacity of the environmental conservation. That is principle 21 of the Stockholm declaration empowers the state exploiting the natural resources within their territory. On the other hand, this principle is incorporated with the principle 2 of which restricting the damage of the natural resources. This is the pillar in the international environmental law.

2. The principle of preventive action- it is just an obligation which focuses on the three tools –to reduce, to limit or to control from the disruptive activities done in the environment. It contains the penalties and liability lies on the person committing the environmental crimes. Some of the piloted projects of these preventive principles are the loss of species of flora and fauna, river pollution, petulant effects on the migratory birds, loss of fishes, damage to the environment, degradation of environment.
3. The principle of sustainable development-it was coined by the Brundtland Report which says that the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
4. The precautionary principle- In case of scientific uncertainty, this principle is applicable to aim the reduction of the environmental damages. Principle of Rio declaration incorporates the preventive principle for addressing the environmental issues like climate change and others etc.
5. The polluter-pays principle- Control measures are undertaken to promote the environmental sustainable use of environmental resources. The polluter pays the damages to the victims. These principles are very significant for the purpose of the environmental sustainable encouragement. The legislations and the provisions, the government developmental project and scheme should be embodied.

2.4 Ancient history of Manipur and its relation with the Loktak Lake

The History of Manipur is very peculiar in nature, culture, tradition, customs and living styles etc. The recorded history of Manipur dated back to 33 A.D., but much earlier to it there have been instances of human activity. Its two thousand years of known history and civilization find much substance in the available cultural properties that form the bulk of Manipur state museum's collections. Manipur is endowed with a rich cultural diversity.³⁵ The geographical features of the state find reflection in the diversity of life and living habits. It is quite typical of the regions in the Eastern Himalayan range. In various ancient chronicles, there was a clear display of having the significance of Loktak Lake in the socio-economic, culture and traditions in their livelihood.

³⁵ L. Haraoba et al, INTRODUCTION TO MANIPUR: GEOGRAPHIC, ETHNIC, WILDLIFE AND CULTURE, 1-28(2016).

It has the different history unlike the present India. Concerning the Loktak Lake in their importance to the people, the people mainly called the 'Meetei' dwelling in the surroundings of the Loktak Lake. This community is the major ethnic group of Manipur. This community has the close historical link with the Loktak Lake culturally, economically and politically embedding in the folk songs and folk tales of Manipur. There are many ancient meetei chronicles written in Meetei Mayek(script) such as kangbarol, Leisemlon, pungkanbalol, Karallon, Umanglon, Leihou Naopham and Moirang Kangleirol Lambuba, in which the cultural and historical significance of Loktak Lake and Keibul Lamjao National Park.³⁶ The meeteis have the peculiar culture and tradition out of which the floating huts exemplify uniqueness in their architecture. There are three hillocks island in the area of Loktak Lake such Thanga, Karang and Ithing which they have the tradition to build the floating huts erected on the Phumdis. Phumdis is a heterogenous mass of soil, vegetation and organic matter at various stages of decomposition. They occur in all sizes and thickness, occupying almost half of the lake area and three-fourth of the Keibul Lamjao Area. The *Umang-lai* (sacred groves/ forest deity) is worshiped in almost all the villages surrounding the Loktak Lake and KLNP. The folk songs, dance and other cultural rituals performed during umang-lai haraoba festivals (pleasing the sacred groves) in these villages are quite different from other such festivals performed in other villages of Manipur state. Indigenous boat race, water transport systems, indigenous aquatic foods, etc are some of the significant features of that area. The Loktak Lake and Keibul Lamjao is also associated with the Epic love story of seven incarnations of '*Khamba Thoibi*'. There are many sacred places associated with *Khamba* and *Thoibi* epic which are still worshipped by the villagers.³⁷

On the other hand, many legendary stories are associated with *Sangai*. One of such legend is: a prince of Luwang clan (one among the nine clans of *Meitei* tribe) of Manipur had transformed himself into a majestic deer to be known as *Sangai*. Second, the ancient royal boat (*Hiyang Hirel*) had the decoration of *Sangai* head on its head part. Third, according to Moirang Kangleirol (Folklore of Moirang), a legendary hero called Kadeng Thanjahanba, once brought a gravid female *Sangai* as a loving gift for his beloved Tonu Laijingrembi and released the deer free in the wild of Keibul Lamjao; thence-forth the place became the only abode of the *Sangai*. According to Meitei mythology, Ebuthou Thangjing, the divine ruler of the Moirang kingdom is

³⁶ <https://whc.unesco.org/en/tentativelists/6086>.

³⁷ Id.

worshipped as deity and deemed one among the creators of the universe. This kingdom was located near Loktak Lake, 45 kms from Imphal, was rich in culture and tradition. Apart from these symbolic cultural places, there are many other sacred places in and around Loktak Lake.³⁸ Therefore, Loktak Lake plays a very important role in the ethnic people called meetei community in their culture, tradition, customs and their socio-economic lives.

Manipur's cultural background, therefore, is highly interesting for study. From the period before Christ up to the advent of Hinduism around 18th century A.D. , The Meiteis followed ancestor worship and animism, with the central focus of worshipped on Umang Lai – local governing deities worshipped in sacred groves. The early geographical or political boundary of Manipur had fluctuated from time to time – her boundary either expanded or confined to large or small areas depending upon the fortunes and ability of her rulers. The kingdom of Manipur experienced the greatest expansion of her boundary during the time of king Garibaniwaza whose authority was felt even beyond Ningthi or Chindwin river in the east and beyond Brahmaputra in the south and west and beyond Naga hills in the north.³⁹ The discharge of the water from the Chindwin River meets into the Loktak Lake which is the prime wetland for the entire kingdom.

2.5 Pre-Independence-British Regimes

Since 1891, the British paramount started after Manipur was conquered by the Britishers. Aftermath of this war, the colonial intention was projected to entrust responsibility of internal affairs to the native rule but taking the ultimate authority in the colonial hands. Due to this, the rule of British paramount in the native state was final and supreme. Subsequently, the Britishers changed the entire law of socio-economic and customs etc. Through the political agent, the native state of Manipur was controlled under him. He has changed the administrative reforms in the state. The administrative reforms changed the socio-economic of the state. Before the British ruling came, Manipur was self reliant over their economy. Mostly the Britishers ruling did not have the concept of conserving and protecting the natural resources. The main aim of their manifestation is to extract the natural resources as much as they want for their economy.

³⁸ Id.

³⁹ Id.

The fishing and hunting taxations were against the century old traditions. Public auction were held to lease out fishing rights to the individual pattadars who were, as per the contract, to pay Rs 100 for ten years to the government. Rules permitted rod as the only prescribed instrument to fish in the fish reserves. Aged long indigenous practice of fishing by net was even taxed. A subscription fee called sentek was levied from those who desired to angle. On hunting rules, restrictions were enforced on shooting egret or egret feathers trade and netting of wild geese and ducks. Killing of not more than two local stags in a season under a tax of Rs 10 was permitted. Violators of the rules were fined of Rs 100 for the first instance, Rs 200 or six month imprisonment or both depending on the typology of the offence committed. In the name of augmenting the state revenue, a very interesting tax called Jal Sambandhi was levied.

A series of regulatory enactments restricted the poor peasants their rights to free access to the natural bounties like plucking thamchet (edible lotus seeds), thamna (lotus leaf) and thambou(edible lotus root). Tera (Simul cotton tree) grown within the precinct of patta lands were declared to be the state's property restraining the pattadars from cutting down the trunk or prune branches of the tree. Even the ground surrounded by the tera plant made a no tress-pass area. The regulations were so extreme to the extent that the peasants were not allowed to cut weeds from the paddy fields, collect dry twigs from the hills. They were debarred from carrying the freshly cut bamboos in the open space and using of big trees grown even in the patta lands for making boats. All these brought miseries to the village peasants.⁴⁰ In addition to all of these, the king also levied various taxes from the people. By this tax reforms in the state, indirectly the Britishers conserved and protected the wetland from the village exploitation. However, the restriction made upon the wetlands and others for extracting the resources for their living. They were severely affected in their income and living because the only living dependence lies on fishing and hunting and collecting the edible plants and herbs from the wetland called Loktak Lake.

⁴⁰ Allen, B.C.(2002),op. cit, p. 103

2.6 Post Independence after merging into India

After the war, the Manipur Constitution Act, 1947, established a democratic form of government with the Maharaja as the Executive Head and an elected legislature. In 1949, Maharaja Budhachandra was summoned to Shillong, capital of the Indian province of Meghalaya where he signed a Treaty of Accession merging the kingdom into India. Thereafter the legislative assembly was dissolved and Manipur became part of the Republic of India in October, 1949.⁴¹ It was made a union territory in 1956⁴² and a full-fledged state in 1972. Since 1949, the Indian constitution is applicable to Manipur. Therefore, the wetland conservation and environmental protection can be looked closely under the Indian Constitution.

Manipur the jewel land is situated in the north-eastern corner of India is a small state consisting of an oval shaped lush green valley and folds of majestic blue mountain ranges surrounding the valley. Imphal is the capital among the 16 districts of the State Manipur where 7 newly districts were added with the recognition on 9th December 2016. Ninety percent of the State is hilly area, inhabited by more than 30 ethnic tribes. The rest ten percent, which is composed of the central Manipur valley, is predominantly inhabited by the Meiteis. They have their different form of worship dress and costume, beliefs and tradition. The North Eastern region of India comprising of the 8 states: Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim constitute about 7.5% of the total geographical area of India have 25% of the forest cover of the country, is considered to be one of the richest reservoir of India's biodiversity of plants, animals and microbes. Apart from the extensive forest cover with varied wild life biodiversities, Manipur has a vast extension of wetlands including Loktak Lake which is considered to be the biggest fresh water lake of eastern India. The wetlands cover nearly one lakh hectare with numerous lakes, rivers, streams, ponds and various low lying areas with stagnant water during the rainy season. These wetlands cover nearly 1/3 of the total area of Manipur valley. These wetlands of Manipur have been reported to be highly productive with a very rich aquatic flora and fauna. In recent years, there is a threat for increasing destruction of forest in Manipur due to uncontrolled felling of trees, shifting cultivation, clearing of forest for human

⁴¹ Manipur Merger Agreement, 1949". *Satp.org*. Retrieved 1 May 2014.

⁴² The Constitution (Amendment)". *Indiacode.nic.in*. Archived from the original on 1 May 2017. Retrieved 1 May 2014.

settlement, social development, etc. which alarm the extinction of various species. If the present trend of forest destruction and human activities continued, it is estimated that about 25% of the bio species in the state will disappear within a few decades. India's biodiversity is considered to be very significant comprising or 45,000 species of plants and 77,000 species of animals recorded so far representing about 6.5% of the wild life population of the world. It is one of the 12 Mega Centres of rich biodiversity of the world.⁴³

The Constitution of India enshrines the implied and express provisions to conserve and protect the environment and wetlands. Some of the provisions which enhance the protection and conservation of wetlands and environment are:

No person shall be deprived of his life or personal liberty except according to procedure established by law.⁴⁴ This says that right to have the healthy environment is the right to life. It is the Fundamental Rights of the citizens which is mentioned under Part III of the Indian Constitution.

The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed. The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part. Without prejudice to the powers conferred on the Supreme Court by clauses (1) and (2), Parliament may by law empower any other court to exercise within the local limits of its jurisdiction all or any of the powers exercisable by the Supreme Court under clause (2). The right guaranteed by this article shall not be suspended except as otherwise provided for by this Constitution.⁴⁵ This is the right to constitutional remedies. Anyone can go to the Supreme Court for his rights regarding the Right to have the healthy environment. In the case of *M.C. Mehta v. Union of India*, the Supreme Court ordered the closure of tanneries at Jajmau near Kanpur, polluting the Ganga. The matter was brought to the notice by the petitioner, a social worker, through a public interest litigation. The court said that notwithstanding the comprehensive provisions contained in the water (prevention and

⁴³ Supra 32.

⁴⁴ The Constitution of India, art.21.

⁴⁵ The Constitution of India, art.32.

Control of Pollution) Act and the Environmental (Protection) Act, no effective steps have been taken by Government to stop the grave public nuisance caused by the tanneries at Jajmau, Kanpur. In the circumstances, it was held that the court was entitled to order the closure of tanneries unless they took steps to set up treatment plants.

The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.⁴⁶ It shall be the obligation of the State to protect every monument or place or object of artistic or historic interest, to be of national importance, from spoliation, disfigurement, destruction, removal, disposal or export, as the case may be.⁴⁷ In *M.C Mehta(II) v. Union of India*⁴⁸, the Supreme Court, relying on Article 48A gave directions to the central and the state Governments and various local bodies and Boards under the various statutes to take appropriate steps for the prevention and control of pollution of water. In *TN Godavaram Thirumulpad v. Union of India*⁴⁹, in a writ petition seeking protection for directing to prepare rescue plan to save wild buffalo from extinction, the plea of the state Government that there was lack of funds to undertake various programmes for protection of wild buffalo, was held to be not tenable. The State government was directed to give full effect to centrally sponsored scheme for saving wild buffalo.

In *Association for Environmental Protection v. State of Kerala*⁵⁰, Justice G.S Singhvi of the Supreme Court in a two judges Bench case referred to a legal theory of “Doctrine of Public Trust” developed by the ancient Roman Empire that certain common properties such as air, sea, water and forests are of immense importance to the people in general and they must be held by the Government as a trustee for the free and unimpeded use by the general public and it would be wholly unjustified to make them a subject of private ownership. The doctrine enjoins the Government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial exploitation to satisfy the greed of the new.

⁴⁶ The Constitution of India, art.48A.

⁴⁷ The Constitution of India, art. 49.

⁴⁸ (1988) 1 SCC 471.

⁴⁹ AIR 2012 SC 1254.

⁵⁰ AIR 2013 SC 2500.

The Directive Principles of State Policy brings the attitude of the environmental protection. The Fundamental Duties of Article 51A(g) talks about the protection and improvement of the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creature.

M.C Mehta v Kamal Nath,⁵¹ The doctrine is first mentioned in this case where the Indian Supreme Court applied Public Trust Doctrine with regard to the protection and preservation of natural resources. In this case, the State Government granted lease of riparian forestland to a private company for commercial purpose. The purpose of the lease was to build a motel at the bank of the River Beas. A report published in a national newspaper alleged that the motel management interfered with the natural flow of the river in order to divert its course and to save the motel from future floods. The Supreme Court initiated suo motu action based on the newspaper item because the facts disclosed, if true, would be a serious act of environmental degradation. The Supreme Court in this case stated that the Public Trust Doctrine primarily rests on the principle that certain resources like air, sea, waters and forests have such great importance to the people as a whole that it would be unjustified to make them a subject of private ownership. The Court observed that: as rivers, forests, minerals and such other resources constitute a nation's natural wealth. These resources are not to be frittered away and exhausted by any one generation. Every generation owes a duty to all succeeding generations to develop and conserve the natural resources of the nation in the best possible way. It is in the interest of mankind. It is in the interest of the nation. Thus, the Public Trust doctrine is a part of the law of the land. The court also ruled that there is no any justifiable reason to rule out the application of the Public Trust Doctrine in all ecosystems in India. In their view, applying the polluter pays principle, the Court directed the developer to pay compensation by way of cost for the restitution of the environment and ecology of the area. It had no difficulty in holding that the Himachal Pradesh government committed a patent breach of public trust by leasing out the ecologically fragile land to be developed. In M.I Builders v. Radhey Shyam Sahu⁵², The Supreme Court has applied the Public Trust Doctrine. Here, the Lucknow Nagar Mahapalika (i.e. Lucknow City Corporation) granted permission to a private builder to construct an underground shopping complex which was against the municipal Act and Master plan of the city of Lucknow. The High Court ordered Mahapalika

⁵¹ (1997) 1 SCC 388.

⁵² AIR 1999 SC 2468.

to restore the park to its original position within a period of three months from the date of the judgment and until that was done, to take adequate measures and to provide necessary safeguards and protections to the users of the park. The reason advanced by Mahapalika for the construction of the underground commercial complex was to ease the congestion in the area. The High Court took judicial notice of the conditions prevailing at the site and found that the construction of an underground market would further congest the area. It added that the public purpose, which is alleged to be served by construction of the underground commercial complex, seemed total illusory. On appeal by the builders, the Supreme Court held that the terms of agreement showed that the clauses of the agreement are unreasonable, unfair and atrocious. The Mahapalika, as a trustee for the proper management of the park, has to be more cautious in dealing with its properties. The Court added that the land of immense value had been handed over to it to construct an underground shopping complex in violation of the public trust doctrine. The maintenance of the park, because of its historical importance and environmental necessity, was in itself a public purpose. Therefore, the construction of an underground market in the grab of decongesting the area was wholly contrary and prejudicial to the public purpose. By allowing the construction, Mahapalika has deprived its residents, and also others, of the quality of life to which they were entitled to under the Constitution and under the Municipal Act. In addition, the Mahapalika violated the Public Trust Doctrine and the Court ordered the demolition of the unauthorized shopping complex. The Supreme Court, in M.I. Builders reconfirmed that the public trust doctrine is established in the Indian legal system and asserted that the public authorities should act as trustees of natural resources. However, it is clear from all these cases that the court did not confer any property right on the public under the trust. While applying the Public Trust Doctrine, the Court in all these cases, took account of either the polluter pays the principle or the precautionary principle or both.

In the Kamal Nath case, the Supreme Court and in the Th. Majra Singh case⁵³, the High court applied the public trust doctrine along with other principles such as the precautionary principle and polluter pays principle. Moreover, in Kamal Nath case, the Supreme Court directed, inter alia, that the lease be quashed and the full cost of restoration of the land to its original natural condition be paid by the Motel. It is interesting to note that in the Kamal Nath case, the Supreme

⁵³ AIR 1999 J & K 81.

Court held that even if there is a separate and a specific law to deal with the issue before the Court, it may still apply public trust doctrine. If there is no suitable legislation to preserve the natural resources, the public authorities should take advantage of this doctrine in addition to the fact that there was a branch of municipal law.

Secondly, the Supreme Court in M.I.builders case, however, stated that public trust doctrine has grown from Article 21 of the constitution. By attaching this doctrine to the fundamental right to life, the Supreme Court appears to be willing to diversify the application of this doctrine. It seems likely that the court would give precedence to right to life when the public trust doctrine, as a part of right to a safe and healthy environment, is challenged by any other fundamental rights.

Thirdly, by ordering the Mahapalika to restore the park to its original beauty, the Supreme Court redefined the duties of a trustee to its beneficiaries the users of the park. In effect, it aligned the local authority's duty as a trustee with the concept of intra-generational and inter-generational equity. inst the decision of the government from a beneficiary. As this doctrine acts as a check upon administrative action by providing a mechanism for judicial or resource allocation decisions.

Therefore, Public Trust Doctrine could serve as an additional tool for environmental protection particularly where administrative discretion has been abused. These are the beginning to formulate the wetland regulation Act which comes under the environmental Protection Act 1972. The wetland of the state can be administered the central regulation Act and the State regulation Act.

2.6.1 Evolution of Loktak Lake Act

All the wetlands possess the great value in utility in various dimensions. Functions of an ecosystem are ecological attributes resulting from the interaction between its physical, chemical and biological components. These interactions result in the creation of a variety of niches, which are occupied by various organisms thus providing a habitat to plants, animals and microorganism, is an ecosystem function. It is linked with the cultural value. Besides the foregoing quantifiable and consumptive values, wetlands also have an important non-consumptive value. It lies in their providing aesthetic setting for cultural and recreational

activities such as swimming, fishing, canoeing or bird watching or just relaxing and marvelling at nature's beauty. Poets and artists all over the world have been inspired by wetlands in many of their works. Wetlands are also natural laboratories for teaching and research.⁵⁴ It controls the flood occurring in the rainy season and provides the livelihood to the fisheries. It places a home to the wild animals. "Wetlands that are on the Ramsar list of International importance often provide habitat for wild life whose value is not expressed in monetary terms but whose aesthetic and biological diversity value is nonetheless recognized world -wide."⁵⁵

Loktak Lake is the largest freshwater lake" that covers the 26(km) x 13(km) having the catchment area of 980 kilometre square in the North Eastern Region of India. It has the unique feature that is the floating park in the spread of different islands called the Phumdi⁵⁶ being the home of the Sate Animal called the Sangai(the Brow Antlered Deer). It makes the creation of the Keibul lamjao National Park for the protection and preservation of the rare animal in the Loktak area. Consequently, they float on lake water with about one-fifth of thickness above and four-fifths under the water surface appearing in three distinct vertical zones, lying one above the other. The uppermost root zone is generally 0–15 cm thick followed by the next mat zone of 25–65 cm and the lowermost peat zone 0–25 cm. Free- floating plants, such as water hyacinth and partly decomposed roots and rhizomes contribute greatly to its development."⁵⁷ It provides the several organisms' home for the living.

Considering the peculiar quality and utility of the mentioned above, The Loktak Lake needs the attention of protection and conservation of the physical structure of the environment. For the control and curbing of the menacing of Loktak Lake, Loktak Lake is recognised by the world and listed in the Ramsar site. It has the dire need of the protection that plays the importance utility in the life of various leeways. As the State's initiatives, the Government of Manipur took the step for the enactment of legislations by the legislative assembly. The Loktak Lake came into existence in 2006. During the course of the formation of this statute, many Loktak Lake's

⁵⁴ Gopal.B "Wetlands Functions and Values" Article published in WWF-India's Handbook of Wetland Management ,published by Wetlands Division, WWF -India, 30-35(1995).

⁵⁵ J.S. Larson Article on "Identifying the functions and values of fresh water wetlands"- published in WWF-India's Handbook of Wetland Management, published by Wetlands Division, WWF- India, 74-75(1995).

⁵⁷ T. Kiranbala & Susmita Gupta, Distribution of aquatic insects in phumdis (floating island) of Loktak Lake, 3 Journal of Threatened Taxa 1856, 1856–1861(2011).

fisheries protest against this statute thereby mentioning the rights of the settlers near to the Loktak Lake. Though it was the tough protest, the Government resisted and curbed the situation by giving some amounts to the vulnerable people caused by the eviction of houses. Now, the Loktak Lake Protection Act still needs repealing for the inclusion of the human rights.

2.6.1.1 Issue of construction of Dams and Development

On 19 December, the 10 women from the Thanga and the Loktak Area protested against the controversial MLLPA, 2006 and struggled with the Manipur State police at the Thanga Chingjin to repeal the Act. Later they got injured by the brutal act of the State force. It was organised by the All Loktak lake Fishermen's Union and the all Manipur Thanga People's Welfare association demanding the repeal of the Manipur Loktak Lake Protection Act, 2006, under which the Loktak Development Authority and the Manipur police have unleashed widespread arson and destruction of floating huts over Phumdis, a floating vegetation mass, in Manipur since 15 November 2011 despite stiff opposition by the affected families. The injured women were taken to Community Health Centre Moirang. One of them, Ms Oinam Akasini, wife of Oinam Tomba is in a serious condition and has been referred to the Regional Institute of Medical Sciences. The condition of Ms Khwairakpam Thambalmala and Ms Heisnam Ashangbi also is serious and they are advised to undergo further medical checkups. During the protest rally at Thanga, the protesters demanded the repeal of the Loktak Lake Protection Act 2006 and demanded that the prohibition for fishing and building huts in Loktak Lake to be withdrawn by the state government. They were also protesting against the absence of free, prior and informed consent of the indigenous communities living in the Loktak wetlands in the management and protection measures taken concerning the Lake and against the restrictions imposed upon the communities over the use and dependence on lake. A vital aspect of this division is the ban on building huts or houses on phumdis inside the lake, planting athaphum, or engaging in athaphum-fishing in the core area. The prohibition will adversely affect over 10,000 people living in phumdi huts, as well as others dependent on Loktak Lake. Sections 19 and 20 of the Act, divides the Lake into two zones – a core zone comprising 70.30 sq km, which is declared a 'no development zone', or 'totally protected zone', and a buffer zone of other areas of the lake excluding the core zone.⁵⁸

⁵⁸ Asian Human Rights Commission, India: Manipur Police assault protesting women at Loktak Lake, <http://www.humanrights.asia/news/urgent-appeals/AHRC-UAC-251-2011/>, last seen on 18/08/2020.

Concerning the issues made by the police by violating the International Humanitarian norms. Many human rights defender decried the act of police towards the protesters. The incident violates the convention on the Elimination of all forms of Discrimination against Women and the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. The failure to seek consent of the affected communities before the enactment or the eviction drive is a form of discrimination targeting marginalised communities. It also violates the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on the Elimination of all Forms of Racial Discrimination. The arson and destruction of floating huts and livelihood of the indigenous people living in Loktak Lake constitute a serious violation of the “right to life”, “right to adequate housing” as guaranteed by the Constitution of India and as provided in the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. The burning of huts of the indigenous people depending on the Loktak Wetlands for survival violates the Ramsar Convention, in particular resolutions VII. 8 of Ramsar Convention’s Conference of contracting parties held in May 1999 at Costa Rica and Resolution VIII. 19 held in Spain in November 2002. The two documents provide guidelines for establishing and strengthening local communities and indigenous people’s participation and to consider the cultural values of wetlands in the management of wetlands. India is a contracting party to the convention since 1 February 1982. Nearly the Loktak Development Authority and the Manipur police have already burnt 1147 floating huts since 15 November 2011. These floating huts were used by the indigenous Meitei people for fishing and also as a refuge for landless people who were earlier displaced by the Ithai Barrage of the Loktak Multipurpose Hydroelectric Project, which has inundated nearly 80,000 Hectares of prime agricultural land since its commissioning in 1984. The fishing gears and nets of the communities, the only survival means to catch fish from the Loktak wetlands were also burned which has left the community in further misery. For generations people have been living in floating huts in localities like Khuman Yangbi, Nambul Machin and Karang Sabal within the Loktak Lake. The affected family members including women, children and the elderly had been seeking refuge at Thanga Chingyang Community Hall in Bishenpur district, Manipur.⁵⁹

⁵⁹ Id.

The government of Manipur, though its Loktak Development Authority has been blaming the indigenous peoples dwelling in Loktak lake for polluting and causing contamination of the Lake. However, the Ithai Barrage of the Loktak Multipurpose Hydroelectric Project, commissioned in 1984, has led to large-scale devastation of Loktak wetlands, its ecosystem, loss of indigenous plant and faunal species, disturbance of the wetlands natural balance and cleansing system leading to pollution and an alarming increase in siltation from the rivers.

Despite all these, the national and Manipur governments in their official publications and calendars, highlight the phumdi and the people living on floating huts, as a tourist attraction. During the current Sangai Tourism Festival (21-30 November 2011), the Loktak Lake and traditional floating fishing community has been also showcased. Experts attending the one day discussion on “Contradictions of Ramsar Conventions Standards and Guidelines with Loktak Wetlands Management in Manipur” organised by the All Loktak Lake Areas Fishermen’s Union and All Manipur Thanga People’s Welfare Association at the Conference Hall of Manipur State Central Library, Imphal on 17 December had recommended the repeal of the Manipur Loktak Lake Protection Act, 2006.⁶⁰

The demands submitted by the people of the Loktak Lake Dwellers are to repeal the Manipur Loktak Lake (Protection) Act, 2006. The Government of Manipur should provide immediate alternate relief for the affected landless fishermen living on phum huts inside the Loktak Lake for ages and who are currently seeking shelter at Thanga Haoreng Chingyang community hall after the burning of their floating huts in November 2011 to ensure their reparation and redress. The fishing community living at Thanga, Karang and other peripheral areas of the Loktak Lake should be allowed to build adequate number of floating huts/phums huts inside the lake so as to provide shelter during storm, heavy rains and in summer and also to promote the cultural heritage of the indigenous peoples of Manipur. Provision of land for the landless fisher folks who are displaced by the recent burning of their huts by the state government should be made. No part of the Loktak Lake should be declared as fishery. Formulating Loktak Lake Fisher folk Rights and Welfare Act needs to be made. As per resolution VII. 8 of Ramsar Convention’s Conference of contracting parties held in May 1999 at Costa Rica and Resolution VIII. 19 held in Spain in November 2002, which provides guidelines for establishing and strengthening local communities

⁶⁰ Id.

and indigenous peoples participation and to consider the cultural values of wetlands in the management of wetlands, the Government of India and Government of Manipur to ensure that all management, protection measures of Loktak Lake should be with due participation and consent of all communities depending on Loktak Lake for survival. Review Loktak Multipurpose Hydroelectric Project towards a fair and objective process with the aid of international cooperation and the decommissioning the Ithai Barrage are required to be initiated. It is urged the Government of India to urgently invite a Ramsar Advisory Mission for Loktak Lake in order to assess the increasing threats to its ecological character and recommend appropriate effective steps to ameliorate them. Further it needs to be implemented indigenous people's Right to Free Prior and Informed Consent before introducing any mega development policies and projects in Manipur in accordance with the United Nations Declaration on the Rights of Indigenous Peoples.⁶¹

⁶¹ Id.

Chapter 3

The Legal Analyses of wetland conservation and protection of Loktak Lake under the Indian Perspectives

3.1 The Legal Analyses of wetland conservation and protection of Loktak Lake under the Indian Perspectives

The Indian Constitution provides the Part III, IV and IVA to ensure the healthy environment and proper ecosystem. Article 21 embraces various environment conservations and the healthy environment. In the case of *M.C. Mehta v. Union of India*⁶², the court held that it is not necessary that there should be direct evidence of harm to the environment. In another case, *Intellectual Forum Tirupathi v. State of Andhra Pradesh*⁶³, the Supreme Court held that Under Article 21 and 51A it is the constitutional obligation of the Governments to protect and preserve the environment. In this case, the court observed that in the name of the urban development Environment cannot be destroyed. Therefore, Article 21 provides the room for the wetland conservations.

India is a signatory of Ramsar Convention. The convention puts focusing on the “wise use” philosophy. It is the maintenance of their ecological structure of the wetland by paralleling the regulations of the wetland in keeping the sustainable development in the environment. Further, it covers not only the sites declared as “Wetlands of International Importance”. Guidelines for the implementation of the wise use concept were adopted by the 4th COP in Montreux, Switzerland, in 1990. The Wise use Guidelines emphasize the benefits and values of wetlands for sediment and erosion control; flood control; maintenance of water quality and abatement of pollution; maintenance of surface and underground water supply; support for fisheries, grazing and agriculture; outdoor recreation and education for human society; and climatic stability.⁶⁴

⁶²AIR 2004 SC 4016.

⁶³ AIR2006 SC 1350.

⁶⁴ SURESH CHANDRA GAIROLA, CONSERVATION OF WETLANDS IN INDIA: CRITICAL REVIEW OF THE ADEQUACY OF LAW, 140 *Indian Forester* 113, 113-128(2014), <http://www.indianforester.co.in>, last seen on 11/07/2020.

3.2 A legal Perspective in India:

3.2.1 Indian Forest Act, 1927

The Indian Forest Act, 1927 classifies the different types of Forest notified by the Authority for the protection and conservation of Forest. It extends the window for the wetland conservation under the notified area. It prevents the exploitation and clearance of forest by any unauthorized person. The notified areas are classified into the following type:

1. **Reserved Forest:** It is outlined under the Chapter-II –sections-3-27 of the Indian Forest Act, 1927: Power to reserve forests.–The State Government may constitute any forest-land or waste-land which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest-produced of which the Government is entitled, a reserved forest in the manner hereinafter provided.⁶⁵

Bar of accrual of forest-rights⁶⁶: After the issue of a notification under section 4, no right shall be acquired in or over the land comprised in such notification, except by succession or under a grant or contract in writing made or entered into by or on behalf of the Government or some person in whom such right was vested when the notification was issued; and no fresh clearings for cultivation or for any other purpose shall be made in such land except in accordance with such rules as may be made by the State Government in this behalf. Section-26 of this Act provides the prohibited acts in the reserved forest. It is also a part of the wetland conservations which is impliedly enshrined in the Act.

2. **Village-Forest⁶⁷:**

- i. The State Government may assign to any village-community the rights of Government to or over any land which has been constituted a reserved forest, and may cancel such assignment. All forests so assigned shall be called village-forests;
- ii. The State Government may make rules for regulating the management of village forests, prescribing the conditions under which the community to which any such assignment is made

⁶⁵The Indian Forest Act, 1927, Sec-23.

⁶⁶The Indian Forest Act, 1927,Sec5.

⁶⁷The Indian Forest Act, 1927,Sec-28.

may be provided with timber or other forest-produce or pasture, and their duties for the protection and improvement of such forest;

iii. All the provisions of this Act relating to reserved forests shall (so far as they are not inconsistent with the rules so made) apply to village-forests.

3. Protected Forest⁶⁸: It is also a kind of protected forest made under the Indian Forest Act.

3.2.2 Wildlife Protection Act, 1972

Under this Act, the protected areas come under the protective measures strictly from the human activities like hunting and encroachment of land. In this act, the exact word of wetland is not defined. However, this Act plays a cardinal role in conserving the wetland areas in the country. The Sanctuaries and the national parks do not allow the grazing and minor forest produce collection in the protected area. Considering the participation of the local, the wise use proposed by the Ramsar convention is very difficult to be put here.

3.2.3 Water (Prevention and Control of Pollution) Act, 1974

This Act plays a key role in the different dimensions that the domestic waste and industrial effluents are not allowed to discharge into the rivers or water without maintaining the proper treatment. The state approval is required for the discharge of the effluents discharging into the rivers. In case, violation of the statute extends the 6 years imprisonment and fine both. It is provided for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith. Moreover, it is provided for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution and for conferring on and assigning to such Boards powers and functions relating thereto.

⁶⁸ The Indian Forest Act,1927,Sec-29.

Chapter V of this statute lays down the prevention and control of water pollution. Section 19 of this Act talks about the power of state government to restrict the application of the Act to certain areas.

3.2.4 Forest (Conservation) Act, 1980

Under the Forest (Conservation) Act, 1980, the non-forest use of the forest areas needs a prior approval of government for the existence of the activities. However, it is not encouraged to execute for the non forest use of the forest areas. There are many obligations need to be fulfilled like the compensatory afforestation and payment of Net present value etc. The Government takes a strict watchdog over the conflicts of the conservation of the forest entailing the protective measures of the wetland.

3.2.5 The Environmental (Protection) Act, 1986

The legislation gives the central government empowering to protect and conserve the environment at its best expedient approach. It embodies the air, water, land and their inter-relationship with mankind. Section-2 of this Act defines the word “Environment” putting that water, air and land and living creatures and their inter-relationship etc. It promotes the primary take in conserving and protecting the wetland areas. The hot-spot areas of the environment are notified as the protected areas in order to maintain the ecological balance. As a part of conserving the wetlands under this Statute, the Wetlands (Conservation and Management) Rules, 2010 was enacted to ensure the wetland areas.

Chapter III of this statute has laid down the prevention, control and abatement of environmental pollution. No person carrying on any industry, operation or process shall discharge or emit or permit to be discharged or emitted any environmental pollutants in excess of such standards as may be prescribed.⁶⁹ No person shall handle or cause to be handled any hazardous substance except in accordance with such procedure and after complying with such safeguards as may be prescribed.⁷⁰ Section 10 talks about the powers of entry and inspection. Section 18 says about the protection of action taken in good faith.

⁶⁹ The Environmental Protection Act, Sec-7.

⁷⁰ The Environmental Protection Act, Sec-8.

3.2.5.1 The Environmental Impact Assessment

The Environmental Impact Assessment is the formal process used to predict the environmental consequences (positive or negative) of a plan, policy, program, or project prior to the decision to move forward with the proposed action. Formal impact assessments may be governed by rules of administrative procedure regarding public participation and documentation of decision making, and may be subject to judicial review.⁷¹ It is a step taken up by the authority concerning the environmental repercussion before projecting any plan. It is subjected to the review for the approval. There are different phases to exhibit the environmental impact assessment. In the first stage, screening is the first step towards establishing the process of environmental impact assessment. In this stage, the list of the projects is sent for the review of the environmental impact assessment. In the second phase, the scoping is concerned for the extensive consultations, discussions and experts' opinion for the plan project. Aftermath, the selection of alternative are considered at the stage of the scoping. This reveals the adverse hazardous environmental impact of the project. In India, EIAs of development projects were first started in 1977-78 when the Department of Science and Technology took up environmental appraisal of river valley projects. Subsequently, various other projects were brought under the purview of EIA. It was, however, in 1994 when EIA was made mandatory in India under the Environmental Protection Act of 1986. The Ministry of Environment and Forests (MoEF), Government of India, has prepared environmental guidelines, to help the project proponents to work out an EIA. Guidelines have been prepared to bring out specific information on the environment required for environmental clearance. The agencies, which are primarily responsible for the respective sectors are closely involved in preparing the guidelines. River valley projects, thermal power projects, mining projects and industries, ports and harbours, development of beaches, highway/railway projects are the sectors for which guidelines have already been prepared. These guidelines basically consist of aspects regarding planning and implementation of development projects. Projects where EIA is mandatory and requires clearance from central government as of now, EIA clearance is required for 30 categories of industries.⁷²

⁷¹ D. Kalitha, Environmental Impact Assessment in India: An appraisal, 3 Dimorian Review 50, 50-54(2016).

⁷² Id.

The project proponent is required to submit an application along with duly filled up questionnaire, EIA and environment management report, public hearing proceeding and the No Objection Certificate (NOC) from the state pollution control board. The MoEF has set up five multidisciplinary expert committees in the areas of industry, thermal power, river valley, mining and infrastructure and miscellaneous project to evaluate the environmental impact of proposed project. The committee evaluate the environmental impacts of the proposed project and wherever necessary, site visits and independent assessment of environmental aspects are also undertaken. Based on such examination the committee make recommendation for the approval or rejection of the proposal which are then processed in the ministry for approval or rejection. In case of site specific project, such as mining, river valley, ports and harbours etc the project proponent has to obtain sit clearance before applying for environmental clearance of the project. In India, public consultation have been made compulsory component of EIA by an amendment dated April 10, 1997 to the EIA notification 1994. The State Pollution Control Board and concern district collectors are responsible for the public consultation process through duly constituted public hearing panel.⁷³

In *Sterlite Industries (India) Ltd. v. Union of India*,⁷⁴ the Supreme Court discussed the specific grounds on which administrative action involving the grant of environmental approval could be challenged. The grounds for judicial review were illegality, irrationality and procedural impropriety. Thus the granting of environmental approval by the competent authority outside the powers given to the authority by law would be grounds for illegality. In *Gram Panchayat Navlakh Umbre v. Union of India and Ors*⁷⁵, the Court held that the “decision making process of those authorities besides being transparent must result in a reasoned conclusion which is reflective of a due application of mind to the diverse concerns arising from a project such as the present. The mere fact that a body is comprised of experts is not sufficient a safeguard to ensure that the conclusion of its deliberations is just and proper.” *Samata and Forum of Sustainable Development v. Union of India & Ors*⁷⁶ the NGT held that “In order to demonstrate the threadbare nature of discussions while considering a project for giving its recommendation, it is essential that the views, opinions, comments and suggestions made by each and every member of

⁷³ Id.

⁷⁴ AIR SCW,2013,3231.

⁷⁵ Public Interest Litigation No. 115 of 2010. Judgment of Bombay High Court, 2012.

⁷⁶ Appeal No. 9 of 2011. Judgment of NGT Southern Zone, Chennai, 2013.

the committee are recorded in a structured manifest/ format.” In *Deepak Kumar v. State of Haryana and Ors*⁷⁷, referring to the recommendations of the Committee on Minor Minerals⁷⁸, the court underlined that, state governments should be discouraged from granting a mining license/lease to plots less than five hectares so as to reduce circumvention and ensure sustainable mining. Further, where land is broken up into smaller parcels, prior environmental approvals should be sought from the MoEF. In *Adivasi Majdoor kisan Ekta Sangathan and Another v. Ministry of Environment and Forest and Others*⁷⁹, the evidence of persons who voiced their opposition to the project was not recorded and no summary of the public hearing was prepared in the local language nor was it made public. Therefore the Court declared the approval invalid.

However, in India, this environmental impact assessment becomes the nightmare for the people when it comes into the ground reality. For instance, the Loktak Hydro electric project tremendously affects the people living nearby and the natural structure of the Loktak Lake. The scenario can be seen in the present draft of environmental impact assessment 2020. Still the draft 2020 has many controversies and protests from the environmentalist and the nature lovers.

3.2.6 The Panchayat (Extension of the Scheduled areas) Act, 1996

In the Indian Constitution, the word “Panchayat” was introduced under the XI schedule of the Indian constitution by 73rd amendment of the constitution”. Highlighting the importance of the local government, under the Panchayat (Extension of the scheduled Areas) Act, the State Government cannot make any laws pertaining with the planning and management of minor water bodies of the local.

3.2.7 Wetlands (Conservation and Management) Rules, 2010

The Ministry of Environment and Forests (now, the Ministry of Environment, Forests and Climate Change) notified the wetlands (Conservation and Management) Rules, in December 2010. Wetlands Conservation takes the most important role by India. Since 1987, the financial supports for the wetland conservation across the country have been taken by the National Wetlands Conservation Programme of India. By this programme, 115 wetlands are recognised

⁷⁷ Special Leave Petition (Civil) No. 19628-19629 of, 2009.

⁷⁸ Environmental Aspects of Quarrying of Minor Minerals, Report of the Group, MOEF. Report available at, http://www.indiaenvironmentportal.org.in/files/file/min_ing_minor%20minerals_sand_India_moef.pdf.

⁷⁹ Appeal No. 3/2011 (T) NEAA No. 26 of 2009. Judgment of Principal Bench of the National Green.

including Loktak Lake is one of them. This rule is a way forward in conserving and protecting the wetlands. It is the first one legally recognized for the eco-sensitive areas in India.

Protected wetlands⁸⁰ -Based on the significance of the functions performed by the wetlands for overall well being of the people and for determining the extent and level of regulation, the following wetlands shall be regulated under these rules, namely:-

- (i) wetlands categorised as Ramsar Wetlands of International Importance under the Ramsar Convention as specified in the Schedule;
- (ii) wetlands in areas that are ecologically sensitive and important, such as, national parks, marine parks, sanctuaries, reserved forests, wildlife habitats, mangroves, corals, coral reefs, areas of outstanding natural beauty or historical or heritage areas and the areas rich in genetic diversity;
- (iii) Wetlands recognized as or lying within a UNESCO World Heritage Site;
- (iv) High altitude wetlands or high altitude wetland complexes at or above an elevation of two thousand five hundred meters with an area equal to or greater than five hectares;
- (v) Wetlands or wetland complexes below an elevation of two thousand five hundred meters with an area equal to or greater than five hundred hectares;
- (vi) any other wetland as so identified by the Authority and thereafter notified by the Central Government under the provisions of the Act for the purposes of these rules.

Restrictions on activities within wetlands⁸¹:

(1) The following activities within the wetlands shall be prohibited, namely:-

- (i) Reclamation of wetlands;
- (ii) Setting up of new industries and expansion of existing industries;
- (iii) manufacture or handling or storage or disposal of hazardous substances covered under the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 notified vide S.O. No. 966(E), dated the 27th November, 1989 or the Rules for Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/Genetically engineered organisms or cells notified vide GSR No. 1037(E), dated the 5th December, 1989 or the Hazardous Wastes (Management,

⁸⁰THE WETLANDS (CONSERVATION AND MANAGEMENT) RULES, 2010, R-3.

⁸¹ The Wetlands (Conservation and Management) Rules, 2010,R-4.

Handling and Transboundary Movement) Rules, 2008 notified vide S.O. No. 2265(E), dated the 24th September, 2008;

(iv) solid waste dumping: provided that the existing practices, if any, existed before the commencement of these rules shall be phased out within a period not exceeding six months from the date of commencement of these rules;

(v) discharge of untreated wastes and effluents from industries, cities or towns and other human settlements: provided that the practices, if any, existed before the commencement of these rules shall be phased out within a period not exceeding one year from the date of commencement of these rules;

(vi) any construction of a permanent nature except for boat jetties within fifty meters from the mean high flood level observed in the past ten years calculated from the date of commencement of these rules;

(vii) Any other activity likely to have an adverse impact on the ecosystem of the wetland to be specified in writing by the Authority constituted in accordance with these rules.

(2) The following activities shall not be undertaken without the prior approval of the State Government within the wetlands, namely:-

(i) Withdrawal of water or the impoundment, diversion or interruption of water sources within the local catchment area of the wetland ecosystem;

(ii) harvesting of living and non-living resources;

(iii) Grazing to the level that the basic nature and character of the biotic community is not adversely affected;

(iv) treated effluent discharges from industries, cities or towns, human settlements and agricultural fields falling within the limits laid down by the Central Pollution Control Board or the State Pollution Control Committee, as the case may be;

(v) Plying of motorized boat, if it is not detrimental to the nature and character of the biotic community;

(vi) Dredging, only if the wetland is impacted by siltation;

(vii) Construction of boat jetties;

(viii) Activities within the zone of influence, as per the definition of wetlands, that may directly affect the ecological character of the wetland;

(ix) Facilities required for temporary use, such as pontoon bridges, that do not affect the ecological character of the wetland;

(x) Aquaculture, agriculture and horticulture activities within the wetland;

(xi) Repair of existing buildings or infrastructure including reconstruction activities;

(xii) Any other activity to be identified by the Authority.

(3) Notwithstanding anything in sub-rule (1) or sub-rule (2), the Central Government may permit any of the prohibited activities or non-wetland use in the protected wetland on the recommendation of the Authority.

(4) The State Government shall ensure that a detailed Environment Impact Assessment is carried out in accordance with the procedures specified in the notification of the Government of India in the Minister of Environment and Forests S.O. No. 1533(E), dated the September 14th, 2006 as amended from time-to-time.

(5) No wetland shall be converted to non-wetland use unless the Central Government is satisfied on the recommendation of the Authority that it is expedient in the public interest and reasons justifying the decision are recorded.

Constitution of Central Wetlands Regulatory Authority⁸²:

(1) The Central Government, in exercise of the powers conferred by sub-section (3) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), hereby constitutes Central Wetlands Regulatory Authority consisting of the following Chairpersons and members for the purpose of these rules, namely:-

(a) Secretary, Ministry of Environment and Forests, Government of India - Chairperson;

(b) A representative (not below the rank of Joint Secretary) from Ministry of Tourism, Government of India - Member ex-officio;

(c) A representative (not below the rank of Joint Secretary) from Ministry of Water Resources, Government of India - Member ex-officio;

(d) A representative (not below the rank of Joint Secretary) from Ministry of Agriculture, Government of India - Member ex-officio;

⁸² The Wetlands (Conservation and Management) Rules, 2010,R-5.

- (e) A representative (not below the rank of Joint Secretary) from Ministry of Social Justice, Government of India - Member ex-officio;
- (f) Chairman or his nominee, the Central Pollution Control Board, - Member ex-officio;
- (g) Joint Secretary or Adviser, dealing with the wetland in the Ministry of Environment and Forests, Government of India - Member ex-officio;
- (h) Dr. Asad R. Rahmani, Director, Bombay Natural History Society, Hornbill House, Dr. Salim Ali Chowk, Shaheed Bhagat Singh Road, Mumbai - 400 023; Expert Ornithology - Member;
- (i) Dr. M.R.D. Kunadangar, Darul Aloom Qasmia Lane, Botshah Mohalla, Lal Bazar, Srinagar, Kashmir; Expert Limnology - Member;
- (j) Dr. C.K. Varshney, 88 Vaishali, Pitampura, New Delhi-110034; Expert Ecology - Member;
- (k) Dr E.J. James, Director, Water Institute, Karunya University, Coimbatore, Tamil Nadu; Expert Hydrology - Member;
- (l) Director or Additional Director or Joint Director dealing with the Wetland in the Ministry of Environment and Forests - Member Secretary.
- (2) The term of the Authority shall be three years effected from the date of publication of the notification referred to in sub-rule (1).
- (3) The Authority shall exercise the following powers and perform the following functions, namely:-
- (i) appraise proposals for identification of new wetlands, projects or activities in consultations with the concerned local authorities;
- (ii) Identify and interface with the concerned local authorities to enforce the provisions contained under these rules and other laws for the time being in force;
- (iii) Grant clearances or identify in consultation with the local State Government, the areas for the grant of clearance for regulated activities in the wetlands within their respective jurisdictions;
- (iv) Determine, in consultation with concerned local authority, the zone of direct influence of the wetlands;
- (v) Issue whatever directions, necessary for the conservation, preservation and wise use of wetlands to the State Governments.
- (4) The Authority shall periodically review the list of wetlands and the details of prohibited and regulated activities under the rules.

(5) The Authority shall specify the threshold levels for activities to be regulated and the mode and methodology for undertaking activities in wetland.

Moreover, the Wetlands within the protected areas of national and sanctuaries are strictly protected under the wildlife protection Act and the wetlands within the notified areas are overlooked by the Indian Forest Act, 1927 and Forest (Conservation) Act, 1980. The Environment Protection Act, 1986 also provides the ecological maintenance of the wetlands.

3.2.8 The National Conservation Strategy, 1992

The plan has an objective to provide the environmental sustainable and management of ecosystems including wetlands.

3.2.9 National Water policy, 2002

Water is an essential element for all living beings to sustain the creatures. In order to ensure the conservation and protection of water, the national water policy, 2002 was made to lay down the watershed management through extensive soil conservation, catchment area treatment, preservation of forests and increasing the forest cover and promotion of check dams. Further, it prevents the water pollution by steeping the tools like the hydrological basis, participatory approach and integration of water quality and quantity and environmental aspects etc.

3.2.10 National Water Policy, 2006

The national Water Policy lays down the protection and conservation of water resources by applying the judicious use of the available resources for the future needs. Polluter pays principle is applicable in the water resources area. The policy provides the development of wetlands, formulation of conservation with the participation of local people and NGOs, promote eco-tourism and promotion of commercial (economic values) etc.

3.2.11 National Forest commission, 2006

Some of the recommendations made by this commission are national wetland conservation be framed, inclusion all types of wetlands, national wetland bio-diversity register be introduced, user groups for the collection of information, establishment of national wetland inventory and monitoring programme and national wetland information system, economic evaluation of wetlands, wetland productivity studies for long term purposes etc.

3.2.12 Wetlands Conservation Guidelines, 2007

MoEF issued the Wetlands conservation Guidelines, 2007 to enumerate the present status of conservation of wetlands in India. The procedure for submission of proposals by the state governments under the national wetlands conservation and Management Programme and National Lake Conservation Plan, formulation of management action plans and monitoring mechanism were made for the conservation of wetlands. The National wetlands committee, Expert group on Wetlands and Research Advisory committee on Wetlands are enshrined.

3.2.13 National Bio-diversity action Plan, 2008

The important features of the national bio-diversity action plan, 2008 are integrate conservation and wise use of wetlands, consider particular unique wetlands, promote traditional techniques and practices for conserving village ponds, adopt a comprehensive approach and policies, impact assessment of the development and develop the supportive regulatory regime etc.

Taking all the above mentioned regulations while formulating the conservation and protection of wetlands, the various regulations, policies and the legislation pertaining to the Water policy, forest Act, wildlife protection Act, Environmental Protection Act and National action plan etc embrace the wetland conservation and protection mentioning inexplicitly. Though the country has the wetland regulation Act, the implementation of this Act is not up to the appreciation for the maintenance of the natural resources of the wetland. As a result of these glitches, the state regulation Act related to the wetland conservation are reflecting in the administration of the wetland in the State. The concept of wise use propagated by the Ramsar Convention arise the major controversy in several state laws. Therefore, the tussle takes place between the Government Authority and the local communities. Lack of participation from the communities nearby slows down the progress in the protection and conservation of the wetland. This is clear that the Loktak Lake would become the threat from the anthropological activities. The principle of sustainable development should remain maintaining while planning the various development projects in the surroundings of the Loktak Lake.

3.3 The International: A legal forward

3.3.1 Convention on Biological Diversity 1992

After signing both the secretariats of the Ramsar Convention and the CBD as the first Memorandum of cooperation in January 1996, the Contracting parties of CBD invited the Ramsar to cooperate to promote the activities like wetlands conservation. “The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding.⁸³ States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.⁸⁴

General Measures for Conservation and Sustainable Use⁸⁵:

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

- (a) Develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and
- (b) Integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

The Convention on the Biological Diversity 1992 lays down in-situ Conservation, ex-situ conservation, incentives measures to the contracting parties economically and socially, research

⁸³ The Convention on Biological Diversity 1992,art.1.

⁸⁴ The Convention on Biological Diversity 1992,art.2.

⁸⁵ The Convention on Biological Diversity 1992, art.6.

and training, public education and awareness, impact assessment and minimizing adverse impacts etc.

3.3.2 The Convention on Conservation of Migratory Species of Wild Animals (CMS)

In February, 1997, the first Memorandum of Understanding was signed by both the secretariats of the Ramsar Convention and the CMS. The contracting of parties of the CMS ensures the cooperation between the Ramsar Convention and CMS. The endangered migratory species and species with an unfavourable conservation status were adopted later.

Under the aegis of the United Nations Environmental Programme, CMS is an inter-governmental treaty concerning the conservation of wildlife and habitats on a global scale. Further, in particular terrestrial, aquatic and avian migratory species throughout their range are put into the protected zone. It was signed in 1979 in Germany. The appendix I of the convention mentions the list of the threatened migratory species. Moreover, it says that the protection and conservation and restoration of the endangered species. The appendix shows the list of the migratory species requiring international cooperation. As a step taken by India, India is a signatory to the CMS since 1983. The whole convention is known as the Bonn Convention.

3.3.3 UNESCO World Heritage Convention

In 1972, UNESCO World Heritage Convention was adopted to promote the nature conservation and the preservation of cultural properties. It has five objectives as follows: credibility, conservation, Capacity-building, communication and communities etc. The kind of natural or cultural sites are protected under the UNESCO World Heritage Convention which is listed on the World Heritage List. The state parties have the motivational approach for the protection of the cultural and natural heritage into regional planning programmes. It has undertaken the scientific and technical conservation research by adopting certain measures. Therefore, the conservation and protection of wetlands are accounted into the UNESCO World Heritage Convention.

3.3.4 UNFCCC

UNFCCC (United Nations Framework Convention on Climate Change) was adopted on 9 May 1992. It opened for signature at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992. It is mainly focused on the environmental sustainability. Some of the Provisions of the UNFCCC:

Objectives⁸⁶: The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

PRINCIPLES⁸⁷: In their actions to achieve the objective of the Convention and to implement its provisions, the Parties shall be guided, inter alia, by the following:

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.
2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.
3. The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost. To achieve this, such policies and measures should take into account different socio-economic contexts, be comprehensive, cover all relevant sources, sinks and reservoirs of greenhouse gases and adaptation, and comprise all economic sectors. Efforts to address climate change may be carried out cooperatively by interested Parties.

⁸⁶ UNFCCC,art.2.

⁸⁷UNFCCC,art.3.

4. The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change.

5. The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

Moreover, the contracting parties have the commitment towards the conservation and protection of the environment by applying the common but differentiated responsibilities. It supports the research and education technique in the insights of conservation of environment. Needless to say, India is a signatory to the UNFCCC. Following the guidelines, India has made laws to fulfil the combat of the challenging environmental conflicts.

3.3.4 The Kyoto Protocol

The first subsidiary agreement to the UNFCCC was the 1997 KP, which entered into force in 2005.⁸⁸ The KP established legally binding targets for 37 high-income countries and the European Union (EU) to reduce their GHG emissions on average by 5% below 1990 levels during 2009-2012. It precluded GHG mitigation obligations for developing countries.⁸⁹ India is a signatory to the Kyoto Protocol ensuring to reduce the emission of greenhouse gases. Therefore, the protection and conservation of wetlands is indirectly impacted by the increasing of GHGs. It is high time that the local and indigenous people should involve with the confrontation of the climate change.

⁸⁸ U.N. Treaty Collection, Chapter XXVII Environment, 7.1, “Kyoto Protocol to the United Nations Framework Convention on Climate Change,” December 11, 1997, <https://treaties.un.org/>, last seen on 14/07/2020.

⁸⁹ Id.

3.3.5 The Paris Agreement⁹⁰

Key aspects of the agreement include:

- i) Temperature goal: The PA defines a collective, long-term objective to hold the GHG-induced increase in temperature to well below 2o Celsius (C) and to pursue efforts to limit the temperature increase to 1.5 degree Celsius above the pre-industrial level. As discussed below, a periodic Global Stock take is to assess progress toward the goals.
- ii) Single GHG mitigation framework: The PA establishes a process, with a ratchet mechanism in five-year increments, for all countries to set and achieve GHG emission mitigation pledges until the long-term goal is met. For the first time under the UNFCCC, all Parties participate in a common framework with common guidance, though some Parties are allowed flexibility in line with their capacities.
- iii) Accountability framework: To promote compliance, the PA balances accountability to build and maintain trust (if not certainty) with the potential for public and international pressure (“name-and-shame”). Also, the PA establishes a compliance mechanism designed to use expert-based and facilitative review and response rather than punitive measures. Many Parties and observers are to closely monitor the effectiveness of this strategy.
- iv) Adaptation: The PA also requires “as appropriate” that Parties prepare and communicate their plans to adapt to climate change. Parties agreed that adaptation communications would be recorded in a public registry.
- v) Collective financial obligation: The PA reiterates the collective obligation in the UNFCCC for developed country Parties to provide financial resources—public and private—to assist developing country Parties with mitigation and adaptation efforts. It urges scaling up from past financing. The Parties agreed to set, prior to their 2025 meeting, a new collective quantified goal for mobilizing financial resources of not less than \$100 billion annually to assist developing country Parties.

⁹⁰ Jane A. Leggett , Congressional Research service, The UNFCCC, The Kyoto Protocol, and the Paris Agreement: A summary, January 29, 2020.

3.3.6 United Nations Convention to Combat Desertification, 1994 (UNCCD)

India is a signatory of the United Nations Convention to Combat Desertification, 1994(UNCCD). Some of the important definitions:

- i) desertification⁹¹ : land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities;
- ii) combating desertification⁹² includes activities which are part of the integrated development of land in arid, semi-arid and dry sub-humid areas for sustainable development which are aimed at:
 - Prevention and/or reduction of land degradation;
 - Rehabilitation of partly degraded land; and
 - Reclamation of desertification land.

Objective⁹³:

The objective of this Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas. Achieving this objective will involve long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level. Article 9 mentions about the action programmes like National Action Programmes (article 10), Sub regional and regional action programmes(article-11), International cooperation(Article 12) and support for the elaboration and implementation for action programmes etc. Article 17 promotes the research and development in the field of desertification. Therefore, the conservation of wetlands is the part of the combating of desertification.

⁹¹ UNCCD,art.1(a).

⁹² UNCCD,art.1(b).

⁹³ UNCCD,art.2.

3.3.7 Universal Declaration of Human Rights 1948

The Universal Declaration of Human Rights 1948 extends the inherent rights to each person sustaining the healthy environment. Here some of the provisions can be laid down:

- i) All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.⁹⁴
- ii) Everyone has the right to life, liberty and the security of person.⁹⁵
- iii) Everyone has the right to freedom of movement and residence within the borders of each State. Everyone has the right to leave any country, including his own, and to return to his country.⁹⁶
- iv) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, and housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.⁹⁷
- v) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.⁹⁸

3.3.8 International Covenant on Civil and Political Rights 1966

The International Covenant on Civil and Political Rights came into force on 23rd March 1976. India has not only signed but also ratified the ICCPR. Some of the provisions are:

- i) All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development. All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic

⁹⁴The Universal Declaration on Human Rights,art.1

⁹⁵The Universal Declaration on Human Rights,art.3.

⁹⁶ The Universal Declaration on Human Rights.art.13.

⁹⁷ The Universal Declaration on Human Rights.art.25.

⁹⁸ The Universal Declaration on Human Rights.art.27.

co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence. The States Parties to the present Covenant, including those having responsibility for the administration of Non-Self-Governing and Trust Territories, shall promote the realization of the right of self-determination, and shall respect that right, in conformity with the provisions of the Charter of the United Nations.⁹⁹

- ii) Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.¹⁰⁰
- iii) Everyone shall have the right to freedom of thought, conscience and religion. This right shall include freedom to have or to adopt a religion or belief of his choice, and freedom, either individually or in community with others and in public or private, to manifest his religion or belief in worship, observance, practice and teaching. No one shall be subject to coercion which would impair his freedom to have or to adopt a religion or belief of his choice. Freedom to manifest one's religion or beliefs may be subject only to such limitations as are prescribed by law and are necessary to protect public safety, order, health, or morals or the fundamental rights and freedoms of others.¹⁰¹
- iv) The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.¹⁰²
- v) In those States in which ethnic, religious or linguistic minorities exist, persons belonging to such minorities shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language.¹⁰³

⁹⁹ICCPR,art.1.

¹⁰⁰ICCPR,art.6(1).

¹⁰¹ICCPR,art.18.

¹⁰² ICCPR,art.23.

¹⁰³ ICCPR,art.27.

3.3.9 International Covenant on Economic, Social and Cultural Rights 1966

The International Covenant on economic, social and Cultural Rights came into force on 3rd January, 1976. India has not only signed but also ratified the ICESCR. Some of the Provisions are:

- i) All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.¹⁰⁴
- ii) The States Parties to the present Covenant” recognize the right of everyone to social security, including social insurance.¹⁰⁵
- iii) The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international cooperation based on free consent. The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes, which are needed¹⁰⁶:

(a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources;

(b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.

These international Laws are just inheriting the principle for the party state. Concerning the compliance, it is a moral obligation but not strictly compelled to enforce the laws. Therefore, even though India is a signatory to many covenants, conventions and International laws, the

¹⁰⁴ ICESCR,art.1(1).

¹⁰⁵ ICESCR,art.9.

¹⁰⁶ ICESCR,art.11.

qualified suggesting principles are not completely fulfilled in their Domestic Laws. No doubt, Climate change and Global warming are the threats to the mankind and thereby global leaders including India step out to initiate the conscious about the significance of the environment. Still Locate Lake regulation act was adopted in consonance with the Ramsar Convention and National Wetland Regulation Act of India. However, it therefore needs to review the provision as with the latest trend.

3.4 Comparative studies of different countries in the light of Indian perspective

3.4.1 Sweden

In 1974, Sweden has ratified the Ramsar Convention for the protection and conservation of the wetlands. The fifth of the land covered in the country belongs to the habitat of the wetlands. So, Sweden is the hotspot of the flora and fauna in the world. In order to promote and preserve the rich flora and fauna in the country, the Swedish wetland inventory has been formed to take the survey of the transition of the wetlands physical structure. As of data recorded, the Swedish national wetland inventory did the survey of the wetlands down the alpine area. The inventory covered the wetlands around 35000 areas in which the areas are remote sensed and the commitment towards the sense of the natural conservation of wetlands. The survey shows the hydrology and vegetation sites that cover 12% of the areas are being well assessed. This survey ensures the wetland conservation knowledge among the people of Sweden. It is a well planned environmental mechanism for monitoring the wetlands conservation. It provides the handling tools for the surveying of the impact of human activities on wetlands. Considering the issue, the wetland conservation is a must for the preservation and conservation of the ongoing losses of flora and fauna from extinction. Waste monitoring and procedures are embraced for the conservation of the wetland before discharging the affluent into the rivers needing the waste water treatment.

Further, in 1994, the mire protection of plan was adopted for the protection of the mires which is one of the rich diversity of flora and fauna. In this plan, it includes the sites and their conservation value. However, the Swedish wetland committee has not been adopted yet. Sweden's national wetland strategy was adopted on the basis of 16 environmental quality objectives to achieve the sustainable environment. The framework deals with the maintenance of

ecosystem of the wetlands. Focusing on the area of human impacts on the wetlands, the conservation requires the wetland protection and management, provision of long term protection in the listed wetlands, review the road constructions plan that affects the wetlands, restoration of wetlands like ponds and preparation of action programmes for threatened flora and fauna which needs the dire protection. The aim of the strategy is the wise use, conservation and protection of the flora and fauna and valuable cultural features. They strive to fulfil the objectives of the European Union Water Framework Directive. They focus to avoid the road constructions and minimise the outdoors recreation to the wetlands. The strategy mentions the responsibilities for the “Environmental Protection Agency, the Forest Agency, the Board of Agriculture, the National Heritage Board, the County Administrative Boards, the national rail traffic authority and road administration, the Board of Fisheries, the municipalities, non-profit organizations and owners and users of land and drainage companies. The Sweden government still thrives to conquer the objectives of thriving wetlands in the future prospects.

3.4.2 Canada

In Canada, the federal and the provincial government follow the federal structure form of government in the field of wetlands and agricultural use of land. This is the important policy that the level of any government should comply with the policy of the government. The provincial government is empowered to look over the matters related to the proprietary rights that regulate the land and water use of the country. The wetland drainage becomes the part and parcel jurisdiction for the provincial government. The migratory bird protection has to be the main aim for the provincial government. The Prairie province has the water provisions law which provides the permitting setting for the drainage of wetlands. No doubt, the public policy affects the wetland directly or indirectly.

The Prairie province and the federal government welcome the public consultation to develop wetland policies. The public interest and private interest over the wetland and the agricultural area are counted for the consideration of the conservation of wetlands. The policy provides the balance between the public benefits and private costs regarding the wetland and agricultural land. Some of the appreciated policies apply in the Prairie areas are:

- a. Information and Extension

- b. Land use Incentives which helps the habitat or soil and water conservation programs.
- c. Tax and agricultural policies.
- d. Public acquisition.
- e. Land use restrictions
- f. Compensation programs for crop depredation
- g. Rural land use.

Farmland preservation also serves conservation, biodiversity, and other wildlife habitat-related objectives. For example, New York City has utilized easements to secure the protection of its water supply by using a purchase program to prevent further subdivision, ungoverned development, and installation of septic systems within critical watersheds. Similarly, the state of Florida is using easements to "protect the scarce supplies of fresh water that lie beneath low-intensity cattle farms" that are critical for the continued environmental function of the state's Green Swamp. With respect to habitat and biodiversity objectives, these efforts can prevent habitat fragmentation for certain target species. One current example is the effort to protect the greater sage grouse across the Western United States. The Natural Resources Conservation Service (NRCS) and its partners are targeting private lands, as this contains critical habitat for many of the few remaining leeks; a significant goal is to reduce the pressure for potential ESA listings. Other species have similarly benefited from farmland protection efforts, and habitat conservation objectives have played a role in garnering support for farmland preservation efforts. To the extent that farmland preservation can advance correlated conservation and wildlife protection goals, this is an important priority for the many conservation organizations engaged in this work.¹⁰⁷

Farmland protection advocates engage in this work for a variety of reasons, which often are well aligned. For example, a project primarily designed to secure land for the continued production of food and fiber can still protect open space; this demonstrates the potential multifunctionality of the working landscape and, in turn, of farmland preservation as a societal goal. This functional hybridity explains perhaps some of its paradigmatic appeal as well as its future challenge. Although the various articulated goals do often link, there remains the potential for conflict, as some forms of agricultural production can significantly impair scenic attributes and can similarly

¹⁰⁷ Supra 17.

interfere with important conservation or habitat objectives. Ultimately, each easement reflects the policy choices and value judgments of both the easement holder and landowner, which will influence the future management of the protected resources and the working landscape. Reconciling the actual and perceived conflicts amongst these competing priorities is critically important to ensuring that the underlying effort actually accomplishes its intended purpose.¹⁰⁸

In order to analyze through the judicial decisions, *Wetlands America Trust, Inc. v. White Cloud Nine Ventures, L.P.*¹⁰⁹, it was held that this easement was intended to protect the property's general agricultural setting as well as the significant conservation values associated with its open-space and wildlife-habitat characteristics. *Wetlands America Trust* involves an easement protecting working land in rural Virginia. After the lease was signed, Chrysalis began preparing to use the protected land for expanded vineyard use, as pasture for cattle and for raising wheat. Further the Virginia Supreme Court held that This decision drew a fair amount of attention within the preservation and conservation community-not with regard to the interpretation of the easement language itself necessarily, but with regard to the trial court's determination that conservation easements should be interpreted the same as other easements. Several well-known nonprofit organizations within the land trust and historic preservation community filed an amicus brief challenging this conclusion, arguing that Virginia's enabling act modified common law principles and that these agreements should be interpreted in light of the important public values that were protected by this agreement, not the open and free use of land.

3.4.3 Australia

Australia plays a cardinal role in the wetland conservation matters. It ensures to come up with the international treaties and agreements towards the formation of the mechanism of dealing with the environmental issues. For instance, Japan and Australia Migratory Bird Agreement is one of the well mentioned agreements. The Commonwealth of Australia strives to promote the values of wetland conservation and maintain the natural resources data collection for the improvement of the petulant related to wetland conservations.

¹⁰⁸ Id.

¹⁰⁹ L.P., 88 Va. Cir. 341, 356 (2014).

The loss of habitats and natural resources in the European settlement of Australia looms to put the attention on the drainage and other modifications of wetlands on the floodplain region. The modifications of wetlands are done by the explosion of population due to concerns of domestic land use. They change the pattern and structure of the wetlands either biologically. The major issues concerning the wetlands degradations are water pollution, sedimentation, loss of flora and fauna and tourism landscape. At the some point of time, the estuaries wetlands are severely affected by the human intervention and activities. In order to put the restriction, the NGOs and environmentalists initiated the campaign to save the wetlands from extinction. As a result of the campaign, the government realized to establish or enact the various laws for the administration of wetlands conservation and survey with the cooperation of Ramsar Convention.

Some of the mechanisms are: Australia Nature Conservation Agency 1993 deals with the wetlands and migratory bird conservation for the assurance of the wetlands conservation. Murray-Darling Basin Commission 1990 is the commission demanding the conservation of natural resources, rivers and agricultural wetlands. The national wetlands policy of Commonwealth of Australia plays a key stand for the promotion of the wetland conservations. The inclusion of state environment planning policy is one of the policies which targeting the local participation. Environmental protection policy extends the serious concern over the wetlands conservation. The department of conservation and natural resources has established the wetland unit for the coordination of inventory and formation of wetlands classification system mechanism.

In *Save Beelir Wetlands (Inc) & Anr v. The Hon Albert Javob MLA & Ors*¹¹⁰, In these proceedings the applicants, Save Beelir Wetlands Inc and Ms Carol De Barre, challenged the validity of the decision made by the Environmental Protection Authority of Western Australia (the EPA) to recommend to the Minister for Environment (the Minister) that a proposal by the Commissioner of Main Roads to extend the Roe Highway from Kwinana Freeway to Stock Road (the Proposal) may be implemented subject to certain conditions, and the decision of the Minister to the effect that the Proposal may be implemented subject to the conditions which he specified. The applicants sought judicial review of each of those

¹¹⁰ CIV 2445/2015

decisions on a number of grounds. One of those grounds relied upon the EPA's publication of three statements of the policy which it would apply to the assessment of environmental impact. Those statements of policy were operative throughout the period during which the EPA assessed the Proposal, and at the time the EPA made its decision to recommend to the Minister that the Proposal may be implemented subject to specified conditions. Each of the three statements enunciated a policy to the effect that in cases in which the process of assessment leads the EPA to conclude that implementation of a proposal would result in significant residual impact to critical environmental assets after all efforts to mitigate those impacts on site have been exhausted, then:

- (a) the EPA would not consider the provision of environmental offsets to be an appropriate means of rendering such a proposal environmentally acceptable; and
- (b) There would be a presumption that the EPA would recommend to the Minister that the proposal not be implemented.

In its report to the Minister following its assessment of the Proposal, the EPA concluded that implementation of the Proposal would result in significant residual impacts to critical environmental assets after all efforts at mitigation of those impacts on site had been exhausted. However, the report to the Minister made no reference to the policy which the EPA had asserted it would apply in the three relevant policy statements current at the time the EPA made its decision and presented its report to the Minister. In particular, no reference was made in the report to the proposition that in light of the EPA's conclusions with respect to the environmental impact of the Proposal, environmental offsets would not be an appropriate means of rendering the proposal environmentally acceptable, or to the proposition that there was a presumption that the EPA would not recommend to the Minister that the Proposal may be implemented. To the contrary, the report which the EPA provided to the Minister embodied the assumption that the Proposal would be environmentally acceptable if adequate environmental offsets were provided. Also, there was no reference to the policy enunciated in the three relevant policy statements in any minutes of the meetings of the EPA in which the Proposal was considered in the three years prior to the decision of the EPA as to the outcome of the assessment, nor in any briefing note provided to the EPA relating to the Proposal. The court concluded that the EPA took no account of its own

published policies at the time it made its decision and provided its report to the Minister. The court also concluded that the EPA was legally obliged to take account of the policy enunciated in its own published policy statements as a condition of the valid exercise of the jurisdiction conferred upon it by the Environmental Protection Act 1986 (WA) with respect to environmental impact assessment. That conclusion was drawn from the proper construction of pt IV of the Act, viewed in the context of the Act as a whole. The court therefore concluded that the environmental impact assessment undertaken by the EPA was invalid.

Because the Minister's decision to allow the Proposal to be implemented subject to conditions which he specified was made in reliance upon the recommendation and report of the EPA which the court found to be invalid, the court found that the Minister's decision was also invalid. It will be for the EPA to determine, in the light of the court's reasons and current circumstances, the steps which must be taken to undertake and complete an assessment of the environmental impact of the Proposal which conforms to the obligations imposed upon the EPA by the Act. Later, the court dismissed all grounds of review.

3.5 Manipur: A Legal perspective

3.5.1 The Manipur Loktak Lake (Protection) Act, 2006

The Act gets the Governor Assent from Manipur on 1/4/2006 is put in the official Gazette”. It came into force on 5th April, 2006. It provides for the administration, control, protection, improvement, conservation and development of the natural environment of the Loktak Lake. It shall extend¹¹¹ to the whole of 236.21 Sq. km, comprising of large pockets of open water and marshy land formed at the southern part of the Imphal valley upto the confluence of Manipur river and Khuga in the districts of Imphal West and Bishnupur, Manipur located between 93 degree 46 minute & 93 degree 55 minute E-longitude and 24 degree 25 minute & 24 degree 42 minute N-latitude. The area is surrounded by the following Dag Nos.

Direction	Dag No.	Sheet No.	No. & Name of the village	District

¹¹¹ The Manipur Loktak Lake(Protection) Act, 2006, s-1(3).

North	138	01	22/Naorem Ultrapat	Bishnupur
North East	3078	04	85/Wangoitop	Imphal West
East	108	01	73/Hayel	Imphal West
South East	1209	02	68/Laphupat	Imphal West
South	1028	02	65/Wapokpi	Bishnupur
South West	155	13	53/Moirang	Bishnupur
West	2150	03	43/Thinungei	Bishnupur

Provided that the Act shall not apply to the Keibul Lamjao National Park covering an area of 40 Sq. Km. and Takmu Fishery Farm covering an area of 5 Sq. Km.

Definitions

- i) “Loktak Lake”: The Loktak Lake measuring an area of about 236.21 Sq. Km.¹¹²
- ii) “Occupiers”: A person who dwells in huts or houses on the phumdis or uses the phumdis.¹¹³
- iii) “Phumdis” : Heterogeneous mixture of vegetation, organic debris and soil in floating condition.¹¹⁴
- iv) “Sewage effluent”¹¹⁵ : Effluent from any sewage system or sewage

Disposal works and includes sludge from open drains.

Division of Loktak Lake¹¹⁶:

The Lake shall be divided into two zones, namely:-

- (i) “Core Zone” which will be the No-Development Zone or Totally Protected Zone consisting 70.30 Sq. Km. surrounded by the following Sheet Nos:-

¹¹² The Manipur Loktak Lake(Protection) Act, 2006, Sec-2(e).

¹¹³The Manipur Loktak Lake(Protection) Act, 2006, Sec-2(g).

¹¹⁴ The Manipur Loktak Lake (Protection) Act, 2006, Sec-2(h).

¹¹⁵ The Manipur Loktak Lake(Protection) Act, 2006, Sec-2(j).

¹¹⁶ The Manipur Loktak Lake(Protection) Act, 2006,Sec-3.

Direction	Sheet No.	No. & name of Village	District
North	01	76/Mayang Imphal	Imphal West
North East	03	72/Hangul	Imphal West
East	02	70/Phubakchao	Imphal West
South East	02	70/Phubakchao	Imphal west
South		Keibul Lamjao national Park and Takmu	Bishnupur
South West	02	47/Sunusiphai	Bishnupur
West	03	44/Ningthoukhong	Bishnupur
North West	04	40/Khoijuman Khunou	Bishnupur

(ii) “Buffer Zone” means the remaining area of the lake excluding Core Zone area.

Prohibition of alienation of Loktak Lake¹¹⁷.-

No part of Loktak Lake whatsoever standing within the Loktak Lake together with all additions thereto or alterations thereof which may be made after the commencement of this Act, shall be sold out or leased out or let out on hire or exchanged or mortgaged or otherwise transferred or conveyed or allotted or converted in any form whatsoever to any person or organization or society or agency or trust.

¹¹⁷ The Manipur Loktak Lake(Protection) Act, 2006,Sec-4.

REGULATIONS OF ACCESS TO LAKE RESOURCES

Previous approval of the Authority¹¹⁸:

- i) No person shall without the previous approval of the Authority obtain any lake resources or knowledge associated thereto for research or for commercial utilisation or for bio-survey and bio utilisation.
- ii) No person shall, without the previous approval of the Authority, transfer the results of any research relating to take resources.

Constitution of Loktak Development Authority¹¹⁹:

The State Government shall, by notification in the Official Gazette constitute a body to be called the Loktak Development Authority to exercise such powers and functions conferred upon it under this Act. The Authority shall be a body corporate by its name having a perpetual succession and common seal and shall by the said name sue and be sued through its Member-Secretary. Section 7 talks about the composition of the Loktak lake Development Authority. Power and functions of the Authority¹²⁰:- Subject to such rules as may be made under this Act, the powers and duties of the Authority shall be –

- (a) To administer the affairs of the Loktak Lake and to protect and improve the Natural environment of lake;
- (b) Regulate by granting of approvals or otherwise requests for commercial Utilization or bio-survey and bio-utilisation of any lake resources; and
- (c) To do such other things as may be incidental or conducive to the efficient.

: Prohibition of the following activities within the Buffer Zone¹²¹ :-

The following activities are prohibited within the Buffer Zone, namely-

¹¹⁸ The Manipur Loktak lake(Protection) Act, 2006,Sec-5.

¹¹⁹ The Manipur Loktak lake(Protection) Act, 2006,Sec-6.

¹²⁰ The Manipur Loktak lake(Protection) Act, 2006, Sec-17.

¹²¹ The Manipur Loktak lake(Protection) Act, 2006, Sec-19.

- (i) Setting up of new industries and expansion of existing industries.
- (ii) Setting up and expansion of fish processing units.
- (iii) Setting up and expansion of units, mechanisms for disposal of wastes and effluents.
- (iv) Discharge of untreated wastes and effluents from industries, cities or towns and other human settlements.
- (v) Dumping of city or town waste for the purpose to land filling.
- (vi) Land reclamation, bunding or disturbing the natural course of drainages, lake water with similar obstructions except those required for control and erosion and maintenance or cleaning of waterways.
- (vii) Construction activities in ecologically sensitive areas as specified in the notification, and
- (viii) Dressing or altering of hills, natural features including landscape drainage for beautification, recreational and other such purposes.

Prohibition of certain activities in Core Zone¹²² :- No person or occupier shall

- (i) discharge or emit any sewage or domestic waste into the lake;
- (ii) plant or cultivate any vegetation;
- (iii) deposit or fix any stones, bamboo, log, net etc., into the lake for the purpose of rearing fish;
- (iv) build any hut or house on phumdis inside the lake.

¹²²The Manipur Loktak Lake(Protection) Act, 2006, Sec-20.

(v) engage in athapum-fishing in the lake;

(vi) use any fishing feeds and pesticides into the lake; except with the prior permission of the authority constituted under this Act.

Moreover, Section 21 lays down the power of entry and inspection. Section 25 entails the Loktak Development Fund. Section 29 says about the power of the state Government to take measures to protect and improve the natural environment of the lake. Section 31 talks about the right to fisheries¹²³: The Authority may, with the approval of the State Government and by notification in the Official Gazette, declare any part of the Lake, to be a fishery, and no right in any fishery so declared shall be deemed to have been acquired by any person or group of persons, either before or after the commencement of this Act, except as provided in the rules framed under this Act.

3.5.2 Manipur Tourism Policy 2011

Manipur has a pleasant weather that embeds the cultural heritage, natural beauty promoting the growth of the tourism in the state. Loktak Lake is one of them in the tourist spot. Being a wonderful land called as the jewels of India by Former PM Pt. Jawaharlal Nehru, Loktak lake is the home for the State animal called Sangai living in the home of Keibul Lamjao National park as a part of the conservation and protection of the Animals.

Loktak Lake is the largest fresh water lake in the North east of India. It has the floating park which attracts the spot for tourism in the Loktak Lake. Manipur and its tourism policies become all the more important in view of India's Look East Policy and the Trans-Asian Highways and Railways. The Government is keen to take advantage of these developments and therefore seeks to create a unique brand to market Manipur Tourism as the "Gateway to South-East Asia" in conformity with its modernity, relevance, competitiveness, strategic location and commercial aspects. It is the belief of the Government that once the appropriate infrastructure and services are suitably placed, Manipur is destined to become a rich commercial hub and a tourist hotspot in South-East Asia akin to Bangkok.¹²⁴ All efforts shall be placed into the areas of Welcome, Information, Hospitality, Accommodation, Transportation, Safety, Leisure, Cooperation, Hygiene, and Environment. Make the stay comfortable, Make the visit an endless temptation

¹²³The Manipur Loktak lake(Protection) Act, 2006, Sec-31.

¹²⁴ Manipur Tourism Policy 2011.

and Make everyday a new day with a fresh input” shall be the guiding framework for the Mission. The friendly nature of the people should be enthused into the industry for the spirit of Meeting as a stranger and Parting as a friend.¹²⁵

Considering all the facts mentioned, the Manipur Tourism policy 2011 does not mention the strict provisions for the maintenance of the ecological balance in the environment. However, it leaves the concept of sustainable development in the Loktak area.

3.5.3 THE WILDLIFE PROTECTION (MANIPUR) RULES

The Wildlife Protection (Manipur) Rules, 1974 extends to the whole of the state of Manipur. Some of the Provisions are: section 9 talks about Hunting of wild Animals like special game hunting license, big game hunting license and small game hunting license. Section 11 talks about the wild animal trapping licence. Section 13 lays down the grant of license. Section 26-30 talk about the sanctuaries and national parks providing the protections of wetland called Loktak Lake.

3.5.4 THE MANIPUR FOREST RULES, 1971

The Manipur Forest Rules, 1971 mentions about the protection of reserved or protected forest from fire under section 3-11 of this Act. Further, section 12-20 talks about the hunting and shooting etc. in Reserved and Protected forests. Chapter IV talks about the prohibition of pasturing of cattle in reserved and Protected Forest. Chapter VI talks about the restriction on the cutting of trees, cultivation, etc. in protected forests.

3.5.5 The Manipur Conservation of Paddy land and Wetland Act, 2014

The Manipur Conservation of Paddy Land and Wetland Act ensures to conserve the paddy land and wetland and to restrict the conversion or reclamation thereof in order to promote growth in the agricultural sector in the state of Manipur. It extends to the whole of the State of Manipur where the Manipur Land Revenue and Land Reforms Act 1960 is extended. Paddy land¹²⁶: all types of land in the states where paddy is cultivated at least once in a year or suitable for paddy cultivation but uncultivated and left fallow, and includes its allied constrictions like drainage channels, ponds, canals, bunds, ridges. wetland¹²⁷ means land lying between terrestrial and

¹²⁵ Manipur Tourism Policy 2011(2.3).

¹²⁶ The Manipur Conservation of Paddy Land and Wetland Act, 2014,Sec-2(1).

¹²⁷ The Manipur Conservation of Paddy Land and Wetland Act, 2014, Sec-2(t).

aquatic system where the water table is usually at or near the surface or which is covered by shallow water or characterized by the presence of sluggishly moving or standing after saturating the soil with water and includes fresh water lakes, marches and swamp forest. Penalty¹²⁸ is mentioned that any person who, in violation of the provisions of this Act, converts or reclaims any paddy land shall on conviction be punishable with imprisonment of either description for a term which shall not be less than three years but which may extend to 5 years and shall also pay fine which shall not be less than 50000 rupees but which may extend to 2 lacs rupees. This Act provides the protection of wetland called the Loktak Lake.

3.5.6 The Manipur Panchayati Raj Act, 1994

The Manipur Panchayati Raj Act, 1994 provides the local self government to the administration of their own. Making the Loktak Lake more protective with a proper efficient, the local government plays a key role in controlling and conserving the Loktak Lake. Now the Wetland Conservation needs a relation between the Government and the local communities.

3.6 Judicial Decisions

The Wetland Conservation is the most heated talks in the town now-a-days. It becomes the attention to all the people of the world to protect and preserve the wetland. In order to maintain the balance, the Wetland convention and Rules are the emerging laws in the country to have the strict laws to curb the deterioration of the wetlands. There are many laws separately for the state and local to overlook the present situation of the wetlands. These are the governing laws for the regulation of the wetlands. Many of the wetlands conservers and individual are taking the course of judiciary to protect the wetlands. The judiciary plays a key role in the present development of the law to protect the wetlands. Some of the cases can be discussed which were laid down by the apex court:

- i) Courts on its Motion v. State of Jammu & Kashmir¹²⁹:

In this petition, the consideration of the maintenance of the wetlands provided by the Ramsar convention should be considered in the protection of the wetlands. Environment (Protection) Act and the Rules framed there under being Wetlands (Conservation and Management) Rules are applicable in the State of Jammu and Kashmir is put into the question for the wetland

¹²⁸ The Manipur Conservation of Paddy Land and Wetland Act, 2014, Sec-18.

¹²⁹ (PIL No. 11/2017 (Wetland), 28 August, 2018.

conservation. It is evident that public interest demands that not only the Wetlands covered under the Ramsar Convention on Wetlands, but also the Wetlands which have been identified by the State Government and are an essential part of the highly protective ecosystem services and biodiversity needs protection and inclusion in the full range of wetland biodiversity and ecosystem services in development planning and decision making sectors. It is, therefore, directed that this writ petition would include consideration of the preservation and maintenance of the wetlands which are covered under Ramsar Convention on Wetlands as directed by the Supreme Court of India as well as other 1230 Wetlands which have been so recognized and identified by the State Government in the Atlas prepared by the Department of Ecology, Environment and Remote Sensing of the Government of Jammu and Kashmir.

i) Pooja Dhull v. Union of India and Others¹³⁰:

The court focused on the implementation of the Wetlands(Conservation and Management) Rules, 2010 and decided to remove the encroachments from the wetlands and clean up the hazardous waste from the wetlands posing danger to the flora and fauna of the area. The two main issues are brought into the court. They are: In Bhindawas Wildlife Sanctuary, concrete action will be taken after the implementation of Management Action Plan.

a. Fishing & Poaching: No such problem exist in core area of the Sultanpur National park, as being a fenced/walled area, Bhindawas Wildlife Sanctuary which is an open area is protected through regular patrolling of the staff. However, offenders are booked under the Wild Life (Protection) Act, 1972.

b. Grazing: No problem of cattle grazing inside National park except some abandoned cows which are in side of the National Park and have become part of the ecosystem with other related benefits for the ecology of Sultanpur national park through controlling the excess grasses. In Bhindawas Wildlife Sanctuary offenders are booked under Wild Life (Protection) Act, 1972.

Aftermath of this , the union government concerned the issues like "(i) Monitoring of works carried out under the management action plans of identified wetlands in the states is done by the state level steering committees constituted by the State of Punjab under the chairmanship of

¹³⁰ CWP No.2691 of 2012 (O&M), 28 January, 2013.

Chief Secretary, Punjab and by the State of Haryana under the chairmanship of Principal Secretary. Deptt. Of Forests, Haryana.

(ii) As per condition given in the sanction letters, there is also a provision of evaluation of activities under the Management Action Plans of identified wetlands by independent expert/technical agency engaged by the implementing departments. Further grant is released by the ministry on receipt of Physical Progress Report and Utilization Certificate from the State Govts.

(iii) Regular site visits are also made by the State Govt. officials to verify the works carried out by the implementing agencies.

(iv) As reported by the concerned states, the grants released by the Ministry are subjected to audit by A.G. Office of the concerned state.

Further, this case puts some relevant in regards to the he solid waste dumping and discharge of untreated wastes and effluents from industries, cities or towns and other human settlements.

ii) Indian National Trust v. Jamnagar Municipal Corporation¹³¹:

The dispute of this case is that the objection to the Jamnagar Municipal Corporation implementing the development of the Ranmal lake is the problematic to the lake. It was held that the lake in question would fall within the definition of wetland under section 2(g) of the Wetlands (Conservation and Management) Rules, 2010. From the record, it is not emerging clearly whether any exercise has been undertaken by the State Government in term of rule 6 for identification of the wetlands in the State in different categories.

Moreover, in the case of People United for Better Living in Calcutta v State of West Bengal¹³², the petitioner organization approached the High Court for protection of a Ramsar site on the eastern side of Calcutta. While staying all developmental activities at the Ramsar site, the court observed:

¹³¹C/WPPIL/83/2014, 20 August, 2014.

¹³² AIR 1993 Calcutta 215.

Wetland acts as a benefactor to the society and there cannot be any manner of doubt in regard thereto and as such encroachment thereof would be detrimental to the society which the Law Courts cannot permit. This benefit to the society cannot be weighed on mathematical nicety so as to take note of the requirement of the society - what is required today may not be a relevant consideration in the immediate future, therefore, it cannot really be assessed to what amount of nature's bounty is required for the proper maintenance of environmental equilibrium.

This landmark decision has purportedly been subsequently modified in 'public interest'. The High Court permitted the construction of a water treatment plant in the East Kolkata Wetland Area, which is a Ramsar site under the East Kolkata Wetlands (Conservation and Management) Act, 2006. However, the court has imposed a condition that the construction should be in the most eco-friendly manner and remedial measures must be adopted in the vicinity of the area. It has also appointed a monitoring committee to ensure compliance with its directions.¹³³

The national Green Tribunal heard so many cases about the wetlands protection and conservation. The applicants have alleged that the Dadri wetlands, also called as Bil Akbarpur wildlife habitat and home to the protected black buck species, Nilgai as well as over 200 migratory and resident birds, are being destroyed due to activity of builders and others. The NGT has restrained construction in and around the wetlands. In another case concerning the construction of a school and real estate development in the Dheerpur wetlands in Delhi, the NGT has restrained the release of any sewage or sludge in and around water bodies in Dheerpur. The NGT has also directed the MoEF and the Delhi Government to identify and assess the status of wetlands in the capital and to submit a plan for conservation and management of wetland.

¹³³ Id.

Chapter IV

The Challenges and Problems meted out in the protection and conservation of

Loktak Lake

4.1 The Challenges: The Protection and Conservation of Wetlands in India

The legislations we have in India to protect and conserve the wetlands overlook into the administration of the entire recourse of the wetlands. The Central and State Government took the juggernaut steps to balance the ecosystem of the wetlands that is severely impacted by the increase of the populations, urbanisation and industrialisation though the scientific method and policies are highly kept into consideration while considering the maintenance of the wetlands. On the other hand, the freelancers, environmentalists, Research organisations and the NGOs are taking the cardinal role in promoting the existence of the genesis of the wetlands. Here comes the minute stepping out to have the effective legislations thereby minimising the rising of the threats faced by the wetlands.

Now let's take the adequacies about the rampant law called the Wetlands (conservation and Management) Rules, 2010. It is just a rule not the mandate law which every citizen should keep in mind to protect the wetlands. However, in this rule, the issues and loopholes are being clearly laid down which needs the updated laws at the needs of the present situation. It is a state subject which lacks in the different fields like the policy formulation, enactment of laws and financial assistance. The state government is empowered to give permit for the certain activities in the wetlands¹³⁴. Likewise, the constitution of the central wetlands regulatory authority is provided under rule 5 of this rule. The larger picture which shows the lacunae is the non representation of the state governments. The forest officials who control the wide area of the wetlands are left out in considering the constitution of the wetlands. Further, the local people, NGOs and indigenous people are also left out for the involvement of constituting the threads. The Rules should have the room for all the above mentioned luminaries to conserve and protect the wetlands. Category C mentioned under Rule 3 ignores the room for the Zilla Parishad, representative and a member

¹³⁴The Wetlands (Conservation and Management) Rules, 2010, r-4(2).

of the gram Panchayat. The state government should take up the launch to involve the local communities in the participation of the wetlands conservations. They are the important elements which cannot be left out.

As per the Rule 7, the provisions of wildlife (protection) act, 1972 handles the wetlands come under the protected areas of national parks and wildlife sanctuaries. The notified wetlands are at the control of the Indian Forest Act, 1927, Forest (conservation) Act. 1980 and Environment Protection Act, 1980. The non notified wetlands come under the provisions of the Environment (Protection) Act 1986. Mentioning the legislations in a close look, there is a lack of clarity at the reach of the regulatory, monitoring and appraisal mechanism for private wetlands. Moreover, the traditional Rights for livelihood and consultative are completely ignored. They are wondering for the jobs what they had before. The 6th Conference of the contracting parties of Ramsar Convention in 1996 laid down the specific efforts to encourage active and informed participation of local and indigenous people at Ramsar listed sites and other wetlands and their catchments, and their direct involvement, through appropriate mechanisms, and their wetland management.¹³⁵ So far and as of now, No mechanism for the local communities are provided for their livelihood. They are completely restricted from the entry of the wetlands. As a result, they are unemployed.

Wetlands as defined under the rules include “the zone of direct influence on wetlands that is to say the drainage area or catchment region of the wetlands as determined by the authority..”. However, how the zone of direct influence will be determined, has not been clarified. Rule 4 prohibits solid waste dumping in the wetlands and existing practices, if any, are to be phased out within a period of six months. It is clear that identification of zone of direct influence by the Authority is going to be long and tedious process in the absence of any guidelines and as such, the provisions of phasing out solid waste dumping within 6 months is impracticable.¹³⁶ Some of the smaller wetlands are completely at the ignorant for the conservation and protection of its sustenance. Most of the provisions do not comply with the National Action Plan on Climate change.

¹³⁵ Suresh Chandra Gairola, Conservation of wetlands in India: critical review of the adequacy of Law, 140 Indian Forester 113, 113-128(2014), <http://www.indianforester.co.in> , last seen on 18/07/2020.

¹³⁶ Id.

The Objective of the Ramsar convention of wise use has the contradiction with the Indian Wildlife protection Act 1972. Under this Indian legislation, they unfortunately don't provide the provision that aims to protect and conserve the wild animals, birds and plants and its connected matters of wise use. Non-considering the philosophy of the wise use, the tussle happens at many instances between the state government and local people. Under the Wild life protection act, the grazing and collection of fodders are not allowed in the restricted area. The wise use provides the complete control of erosion and sediments in the wetlands, the economic value and maintenance of water quality and abatement of pollution etc.

At last but not the least, the Panchayats (extension to the Scheduled Areas) act 1996 is not considered for the formulation and figuring out the conservation of wetlands. Every Gram sabha maintains "the safeguard and conserving the traditions and customs of the people, their cultural identity and community resources". These are the drawbacks that the legislations need to be improved for the conservation and protection of the wetland. The key holder of the community cannot be ignored while considering the genesis of the wetlands conservation.

4.2 The Challenges: Protection and Conservation of the Loktak Lake in Manipur

The Manipur Loktak Lake (Protection) Act, 2006 does not lay down the special provisions for the community people, indigenous people, fishermen, cultural and traditional protection in which they are living on the resources getting from the Loktak Lake. 90% of the Loktak Lake nearby communities depend their livelihood on the Loktak Lake. This statute left out the rights of the community participation in protecting and conserving the eco-system of the Loktak Lake. It is against the Universal declaration of Human rights' provisions. This legislation ignores the socio-economic and cultural rights of the community of the Loktak Lake. It directly threatens the living culture of the indigenous community. Considering the lack of the needs of the community, this statute is against the idea of the United Nations Covenant on Civil and Political Rights 1966 and United Nations Covenant on socio-economic, cultural and political rights 1966. It is high time that the Government should have the equity provisions for the conservation and protection of Loktak Lake. This lake is the abode of folklore in the Meitei community. For instance, Khamba Thoibi folklore is the popular one.

On the other hand, the principle of the Ramsar convention clearly mentions the involvement of the local communities and stakeholders for the development and conservation of the Loktak lake. This Convention never ignores the community participation in uplifting the ecological sustenance of the Wetlands. However, the Loktak Lake Protection Act ignores the community Participation. Instead they apply the harsh law for the community fishermen. These fishermen and community people treated this statute as the second law of AFSPA, 1958. This law strangulates many lives of the indigenous people.

State Government of Manipur constituted Loktak Development Authority (LDA) in 1986 to check deterioration of the lake and to bring improvement in the areas of power generation, fisheries, tourism and siltation control. A project on Sustainable Development and Water Resources Management of Loktak Lake (SDWRML), jointly formulated by Wetlands International South Asia (WISA) and LDA was initiated in 1997 to address the root cause problems and develop strategies for sustainable management of the lake, with financial support provided by India-Canada Environmental Facility. Loktak Development Authority and India-Canada Environment Facility have brought out a publication 'Atlas of Loktak lake' in 2004 that presents information on ecological, hydrological and socio-economic aspects of this Wetland of International Importance in India.¹³⁷ The removal of Phumdi is taken up by the LDA. However, this Authority cannot give the exact requirement of the wetlands conservation and protections of the Loktak Lake.

4.2.1 Impact of Loktak Hydro electric Project

Famous for its floating islands (*phumdis*) and picturesque landscape, the condition of the Loktak Lake in Manipur is, sadly, deteriorating. Researchers blame changes in the hydrology due to the construction of dams, blockage of migratory routes for fish, drying up of wetlands from siltation and exploitation for declining indigenous fish variety in the lake. A study funded by Society of Wetland Scientists indicated that the highest loss of land used class was in *phumdis* with thin vegetation (49.38 sq km) followed by *phumdis* with thick vegetation (8.59 sq km), while there was an overall increase in open water bodies (27 sq km) in the past 38 years. The 266-sq-km Loktak is Northeast India's largest freshwater lake and a Ramsar site of international importance.

¹³⁷ http://www.rainwaterharvesting.org/loktak_lake/loktak_lake.html,last, last seen on 18/07/2020.

This ancient lake plays an important role in the economy of the state. It serves as a source of water for hydropower generation, irrigation and drinking water supply. The lake is also a source of livelihood for the rural fishermen who live in the surrounding areas and on *phumdis*, also known as *phumshongs*. Loktak Lake is fed by the Manipur river and several tributaries and Ithai Barrage (Ungamel Channel) is its only outlet now. The origin of the Manipur river system and its tributaries, which flows in a north-south direction and drains into the lake is from the hill ranges immediately to the west of the lake. The five major rivers with indirect catchment area of 7,157 sq km are Manipur, Iril, Thoubal, Sekmai and Khuga. The other streams which drain into the lake and which bring in lot of silt are Nambul, Nambol, Thongjarok, Awang Khujairok, Awang Kharok, Ningthoukhong, Potsangbam, Oinam, Keinou and Irulok. The lake is located on the southern side of the Manipur river basin and is at the lowest elevation in the valley and no other major river flows into the lake, except a few rivulets.¹³⁸

The Ithai Barrage impounds the Manipur River just below the confluence of the Imphal River and the Tuitha River south of Loktak Lake, and is part of the Loktak Hydroelectric project that supplies hydropower to the seven Northeast states. Over time, the dam has affected the hydrology of the lake and caused harm to the ecology and economy of the region. The Manipur government is now urging the Centre to consider decommissioning the barrage. The Loktak Hydroelectricity Project was conceived as a multipurpose project to supply electricity to various parts of Manipur and the neighbouring states, and included a lift irrigation facility. Loktak Lake formed the headwater for the project.¹³⁹ The Ithai barrage has a total length of 68.6 meters, with a full reservoir level (highest level at which water can be stored safely without compromising structural safety) of 769.63 meters above sea level and a flood level (beyond which the peripheral area of the lake will flood) of 768.50 meters above sea level.¹⁴⁰ The minimum drawdown level to abstract water from the lake for hydropower generation is fixed at 766.23 meters above sea level.¹⁴¹ A barrage was created on the Manipur river, near the village of Ithai, to maintain the water level required for the continuous generation of hydropower.¹⁴² Although

¹³⁸ Tanmoy Bhaduri, Manipur: Loktak Lake gasping for breath due to haphazard planning, EastMojo, <https://www.eastmojo.com/in-depth/2019/10/26/manipur-loktak-lake-gasping-for-breath-due-to-haphazard-planning>, last seen on 18/08/2020.

¹³⁹ Singh, "Hydrological And Hydraulic Modelling"

¹⁴⁰ PWD, "Loktak Lake Multi-Purpose Project.

¹⁴¹ Id.

¹⁴² Id.

the Ithai Barrage served immediate purposes, it had significant impacts on the hydrology of the lake and affected the ecology and socioeconomic structure of the region. After the construction of the Ithai barrage, when the outflow of the lake during the dry season was controlled, the lake's hydrology was drastically modified. The influence of the Manipur River on the lake increased. A new channel, Ungamen, was used to divert the backflow from the barrage into the lake. The restriction and modification of the flow has resulted in an almost stagnant body of water until the barrage. While the fluctuation of water level in the lake before the barrage's construction was around 3.1 meters, the post-barrage level fluctuations have reduced to about 1.4 meters.¹⁴³

A study noted that for 46 percent of its four-year duration, the water level of the Loktak Lake was maintained above the flood level, causing flooding in the peripheral areas, including agricultural and residential lands.¹⁴⁴ Such flooding began in 1983, the year the barrage was constructed, causing displacement and loss of economic activity in the surrounding areas. After being displaced to make way for the dam, many locals were forced to create permanent residence on the phumdis, which were mostly seasonal before the prolonged floodings.¹⁴⁵

The construction of the Ithai Barrage has impacted the natural hydrological regime and obstructed the migratory routes of fish through the Manipur River. As a result, there has been a substantial decline in the population of riverine fish like Pengba, Khabak, and Shareng.¹⁴⁶ The people living around the lake were dependent on it for fishing. With the loss of their residential and agricultural lands and a decline in the fish population, they have become more dependent on the ataphums (floating fishing ponds). Traditionally, ataphum fishing was a monsoon activity. But with the construction of the Ithai Barrage and the continuous high water level, ataphum is now carried out through the year, resulting in a proliferation of ataphum and phumdis.¹⁴⁷ However, the presence of many ataphums obstructs the movement and circulation of the water and sediments in the lake.¹⁴⁸ An estimated 25 percent of the lake's water holding capacity has

¹⁴³ Jaya Thakur, *The Ithai Barrage of Manipur: To decommission or not*, ORF issue brief, 2020.

¹⁴⁴ *Supra* 113.

¹⁴⁵ *Id.*

¹⁴⁶ Singh, "the Ithai barrage of Manipur".

¹⁴⁷ *Supra* 117.

¹⁴⁸ C. L. Trisal & Th. Manihar (Eds), *Management of Phumdis in Loktak Lake*, (Proceedings of a Workshop on Phumdi Management, Loktak Development Authority, Manipur, India and Wetlands International-South Asia, New Delhi, India, 2002).

been lost due to the annual deposit of 336,325 tonnes of silt.¹⁴⁹ The enhanced sedimentation is partially due to the obstructed flow pattern inside the lake caused by the proliferation of *phumdis* and *ataphums*. The lake's navigational benefits have also decreased due to the *ataphum's* interference.¹⁵⁰ One major impact of the Ithai Barrage on the environment of Manipur is the flooding of several thousand hectares of agricultural land around the Loktak Lake. The maintenance of constant water level of Loktak Lake due to the Ithai Barrage has flooded the agricultural land around the lake, which were previously utilised for cultivation. Secondly, *phumdis* have been disappearing. The third impact of Ithai Barrage is high level of siltation in Loktak Lake. The blockade of water current in the outlet of Loktak Lake through Manipur river has affected the normal flow of river and helped in depositing of silts at Loktak Lake itself from different inlets of the catchment areas. In addition, the run-off from chemical fertilisers used in agriculture and untreated sewage from Imphal also directly affects the biodiversity of the lake. Fourthly, ecology of the peripheral areas of Loktak Lake, which were used as grazing ground of cattle in the past, have become inundated due to the maintenance of constant water level of Loktak Lake by Ithai Barrage. Even the existence of endangered brow-antlered deer of Keibul Lamjao National Park is at high risk.¹⁵¹

In 2018, Manipur governor Najma Heptulla claimed, "As many as 16 species of indigenous fishes are believed to have become extinct due to the blocking of water by the Ithai barrage." Heptulla was speaking at a closing function of the 63rd Wildlife Week celebration organised by the Manipur state forest and environment department.¹⁵² Due to construction of the Ithai barrage in 1979, the water level in the wetland increased and the movement of water in and out of the water body got reduced. This led to increase of siltation in the lake. The construction of the barrage also inundated the area and more people migrated to the *phumdis* for shelter and took up fishing for their livelihood. The *phumdis* is one of the major threats to the lake. The growth of *phumdis* blocks the sunlight falling on the lake and thus affects the fishes in the wetlands. Remote sensing studies conducted jointly by the Manipur Remote Sensing Application Centre and the Space Application Centre, Ahmedabad (1999) shows that the area under *phumdi* has

¹⁴⁹ WISA, Conservation and management of Loktak Lake and Associated Wetlands Integrating Manipur River Basin: Detailed Project Report, (Wetlands International-South Asia, New Delhi, India, 2005).

¹⁵⁰ Id.

¹⁵¹ Supra 124.

¹⁵² Id.

increased from 10,499 ha. in 1990 to 13,506 ha. in 1994. Consequently, the water mass has reduced from 15,441 ha. in 1990 to 7,875 ha. in 1995. The live of a *phumdis* is up to 20 years, after that it sinks into the lake causing all the possible environmental degradation to the lake.¹⁵³ This is one of the human made crises in the conservation and protection of Loktak lake. Though it has the Loktak Hydro power project producing electricity, till now the whole village of the Loktak Area cannot get the proper electricity. The Environment Impact Assessment is to be put at the first priority for the allotment of the project. As the existence of the Ithai Barrage already influences the morphological character of the lake, the removal of the structure will have long-lasting effects. A substantial amount of sediment accumulation has already happened over the last 37 years, resulting in a water-holding capacity loss of about 25 percent, as of 2005.¹⁵⁴ India must also learn from this experience and conduct proper pre-project environmental impact assessments for other proposed engineering interventions.

Many Development projects taken up by the State government violates the Manipur conservation of Paddy Land and Wetland Act, 2014. Indeed, we cannot ignore the complete development and industrialization. However, the government should maintain both development and the ecological balance of the wetland. In this Act, the rights of the agriculturist are not mentioned that the farmers should have the rights for the agricultural land. It threatens the sustainable livelihood and right to food enshrined under Article 21 of the Indian Constitution. Most of the agricultural lands in the Loktak Lake are encroached by the farmers o. Owing to the snatch of the agricultural land, the nearby farmers of the Loktak Lake encroach the land for the agricultural purposes. The Objective of the Ramsar convention of wise use has the contradiction with the Indian Wildlife protection Act 1972 as well as the Wildlife Protection (Manipur) Rules, 1974. Under this Indian legislation, they unfortunately don't provide the provision that aims to protect and conserve the wild animals, birds and plants and its connected matters of wise use. Non-considering the philosophy of the wise use, the tussle happens at many instances between the state government and local people. Under the Wild life protection act, the grazing and collection of foddors are not allowed in the restricted area. The wise use provides the complete control of erosion and sediments in the wetlands, the economic value and maintenance of water quality and

¹⁵³ Id.

¹⁵⁴ WISA, "Conservation and Management of Loktak"

abatement of pollution etc. Ultimately, state government ignored the discussion with the local panchayats for the development of the Loktak Lake.

4.2.2 Rights of the Indigenous People

Anthropologically, the Meetei community belongs to the indigenous people who are settling in and around the Loktak area. Some of the Meeteis people belong to Scheduled Caste. The rest of the people are treated as the on indigenous people. However, the constitution of India does not define the indigenous people and as to who are the persons who belong to Scheduled caste. Under Article 341, the president after consultation with the governor with respect to the State, specify the castes, races or tribes or of groups within castes, races or tribes for the purpose of their constitution if such notification is in respect of a state it can be done after consultation with the governor of the state concerned. Any inclusion or exclusion from the presidential notification of any caste, race, and tribe can be done by the Parliament by law.

Therefore, it is evident that the protection of the economic rights of the indigenous people we have Article 244 which deals with the administration of Scheduled Area and Tribal Area. Article 275 also empowers parliament to make special grants given to the state which undertakes the scheme of development for the purpose of promoting the welfare of Scheduled Tribes. Scheduled Caste's and Scheduled Tribe (Prevention of Atrocities) Act, 1985 and 1995 is to protect them from any discrimination and from any kinds of torture. The Scheduled Tribe's Bonded Labor Abolition Act, 1976 is to protect them from bonded labor and other practices where less money is given to them for their work. We also have Forest Conservation Act, 1980 to protect and conserve the tress as these tribes are dependent on them. However, there is no clear picture for the definition of the Indigenous people. Though the constitution has mentioned the protection of SCs/STs, but many of the indigenous people are losing the culture, customs and traditions pertaining to the area. Likewise, the people of the Loktak Lake areas are facing a lot of challenges like banning of fishing, harvesting lotus seeds and leaves and agricultural purposes etc. The Loktak Development Authority and the local peoples are always in the tussle. Therefore, lack of community participation is the lack of imparting and understanding the socio-economic problem of the local people.

Even India is a party to many conventions, treaties and covenants. Still they cannot fulfill the dreams of the indigenous people. Some of the international conventions and treaties which provide the right of indigenous people are: The UDHR (Universal declaration of Human Rights) is an international instrument passed by the United Nation in 2007. It defines the rights of indigenous people including their rights to cultural, identity, language and many more. It helps to prevent any discrimination against them and also help them to pursue their own vision of economic and social development. Some of the major principles of the declaration are as follows¹⁵⁵:

1. Fundamental Rights with no Discrimination: Article 1 of the declaration provides that indigenous people are entitled to enjoy every fundamental right and according to the Article 2 they have right to free from discrimination against them.
2. Cultural Rights: According to the Article 7 they have right to free from any acts of violence or genocide and also have right to live peacefully. They also have right to maintain and strengthen their cultural rights with free from destruction of their culture.
3. Self-Determination Right: This is one of the important principles because the indigenous people have continuously fought for this right. Article 3 provides the indigenous people the right to self-determination. By this right they can determine their political status and can also pursue for the development of their culture.
4. Rights to use land, territories and other natural resources: They have right to control and maintain their land, territories and natural resources for self-determination and for sustaining their culture.
5. Rights to ownership and control: Article 36 of the declaration provides that they have right to land, territories and natural resources which they originally acquired. They can own, control and use of their land and various natural resources. State has duty to protect their land and natural resources for the sustainability of their cultures and traditions.
6. Social and Economic Rights: Article 21 of the declaration provides that the indigenous people have right to continuously make improvement in their social and economic conditions for their well-being.

¹⁵⁵ <https://www.latestlaws.com/articles/rights-of-indigenous-people-under-indian-and-international-law-by-lakshay-bansal>, last seen on 19/08/2020.

7. **Certain State Responsibilities:** State are requires to give financial and technical assistance to the indigenous people by consulting them. Indigenous people are also entitled to adequate grievances and effective remedies whenever their rights are violated.

Even though India has many laws for the protection and rights of the indigenous people, the people of indigenous people are getting the rights. Most of the time, the authority violates and encroach the lives of the indigenous people. Therefore, the indigenous people of the Loktak Lake area are under the grave losing of their livelihood.

4.3 Problems meted out in the protection and conservation of Loktak Lake

The socio-economic significance of Loktak Lake is an indispensable part of the Meetei community living in and around the Loktak Lake. This Loktak Lake is the mother of everything for them in their livelihood. The fishermen make their children educated from the money getting from the fisheries. This is the lifeline and God for them. Due to the concern of the loktak lake Conservation and hydro electric projects, the indigenous people face many hardships in their livelihood. The question arises whether the Loktak Lake protection really provides the environmental conservation or not. Even the wise use propagated by the Ramsar convention is properly included or not. Now the problems when the conservation of Loktak Lake can be discussed as follows.

1. Impact of Anthropogenic activities on the Loktak Lake

Generally, the development project and industrialisation cannot be ignored at this present development. However, the ecological balance should be maintained while setting out the planning project. Owing to the development in the area of the Loktak Lake (the Ithai Barrage), in different ways, the human activities slowly erode the profound ecosystem of the Lake. They make the Lake having the larger change in the environment. Given the human selfish nature, the Loktak Lake gets the threat from various anthropogenic activities. Therefore, human is the main spoiler of the Lake. The development project like dam building, tourist spot and reservoir development impacts a lot in the deterioration of the Loktak Lake. Further, the agricultural activities done in the nearby Lake produce or release the hazardous or chemical products giving a havoc to the environment like DDT, PCBs, greases, phenols, plastics, plasticizers, metallic

substances, pesticides, insecticides, oil and petroleum products, toxins, salts, dyes and municipal waste brought by the Nambul river creates the lake the polluted Lake. On account of the contamination in the Lake, the flora, fauna and humans are severely facing the threats. The food poisoning and diseases are reported after eating the poisoned fishes and other foods.

Moreover, the domestic waste coming out of the human settlement pollutes the Lake at a larger extent. At the same time, the siltation occurs due to the degradation of the catchment area. Consequently, the Ithai Barrage caused people to lose their job and livelihood due to the submergence of the agriculture and now having the flood prone area. At the forefront of the problem, Keibul lamjao national Park's phumdis thickness was severely impacted which threatens the Sangai's livelihood. Therefore, it is a significant that the every citizen and Government should take the urgent steps to maintain the ecological balance. Otherwise, the gift of the nature called Loktak Lake cannot be seen by the coming generation.

2. Problems of Waste products

Almost 29 to 30 rivers feed the Loktak Lake. Among the rivers, the Ungamel Channel (Ithai Barrage) is the only outlet for this Lake. All these rivers are flowing and ends at the Loktak Lake by bringing the sediments which deposits in the Lake. As a result of this deposition, the depth of the Loktak Lake becomes the surface of the lake having shallower. Moreover, the Nambul River which is the most polluted river in Manipur lies in the heart of the Imphal city flows and ends at the Loktak Lake. On this river, the urban settler throws and dumps the industrial waste, domestic waste and agricultural waste etc making the Loktak Lake more dangerous. On the other hand, Thongjaorok River brings sediment caused due to the mass cutting of trees in the upper part of the hilly region of this river.

3. Soil erosion at Thanga Island

Now the people of Thanga are becoming afraid from the natural and human activities. In this island, the natural activities are very common like the wind, waves, rainfalls and weathering of the rocks. This process is expedited by the human disturbance to have their desires. Many human developments like road building, houses, playgrounds, colleges, clubs, theatres etc aggravate the Loktak Lake. Circular cutting of trees for the road constructions around the hilly area caused the soil erosion. The preventive measures are out of the thought and it becomes unseen by the

Government. Indeed, the Thanga Island will be submerged in the water otherwise the government, NGOs and clubs should take the dire steps for the conservation and protection of the Island.

4. Floating huts or Phumsang

The unique feature of the Loktak Lake is the floating park on which the fishermen of the Loktak Lake build the hut for their fishing easier. It is the traditional form of the making the house that caused the problem in the ecosystem of the Loktak lake. Due to the increase of the population in the state, more fishermen increases for searching the livelihood .Now the huts can be in the number of 2000 (approx). While constructing the hut, the fishermen use the plastic ropes, heavy rocks, woods, bamboos, zinc plates, iron rod which spoils the ecosystem of the Lake. Sometimes, the fishermen use the pesticides and insecticides to harvest the fishes. The life span of the hut is 20 years. After the used of hut, the hut is left out without caring which disturbs the environment.

5. Loss of indigenous species.

Manipur Government introduced many alien species, plants and insect into the water without having the conscience of the preserving of the local plants and species. Now, the Local fish like pengba, Tharak, Ngasep are hardly found in the Loktak Lake.

6. Water Pollution

Detergents, soaps and other phosphates and nitrates containing chemicals, which are brought down by the rivers to this lake, cause ‘eutrophication’ of the lake. In this process algal blooms started and compete with other aquatic plants for light and nutrients. These blooms release toxic chemicals killing aquatic plants, animals, and birds and deplete oxygen; thus water begins to stink. As the water body is lentic, the decomposed organic matters remain in the lake for a very long time. Use of chemical weedicides, rapid accumulation of weeds near the lake shores, use of pesticides and insecticides, chemical fertilizers, and other non-biodegradable substances are all

the factors for causing the lake water to be polluted.¹⁵⁶ On account of the water pollution, the water scarcity occurs in the area of the Loktak Lake.

7. Impacts on Migratory birds

Loktak Lake is the home of many migratory birds from the different parts of the world, especially like Siberia. Some of the birds are Siberian Cranes, wild ducks, herons, pink headed ducks etc. Due to the increasing of the climate change, excessive hunting, human overpopulation, deforestation, degradation of habitats, use of pesticides and insecticides in agricultural practices in the world, the number of migratory birds is gradually reducing at the recent times.

8. Loss of Biodiversity

The thinning of phumdis and poaching in Keibul Lamjao National Park threat in the live of habitat of sangai. Over the years, many species like 35 faunal species, including 5 mammals, 3 birds, 9 reptiles, 3 amphibians, 12 fishes, 2 molluscs and 1 annelid, have reduced in number and now , are slowly disappearing.

9. Low Power Generation

The Lake's power generation capacity has been declined due to siltation, weed infestation and proliferation of phumdis giving the decrease in water holding capacity.

10. Decrease in Fisheries productions

Catching fish is the main source of livelihood of people of Thanga and its surrounding villages. The catch was so abundant that we (fishing community) had to develop the skills and process of

¹⁵⁶ Khwairakpam Gajananda and Thokchom Sundari Chanu, Feature article: The Fate of Loktak Lake, India, 25 September 2001, <https://www.ramsar.org/news/feature-article-the-fate-of-loktak-lake-india>, last seen on 19/07/2020.

preserving fish for future uses by drying in the sun and smoking in the fire and further keep dry fish over long periods for sale. In 1990, the Ramsar Convention declared Loktak a wetland of international importance. And in 2006, the Loktak Development Authority (LDA) enforced the Manipur Loktak Lake (Protection) Act, under which the government began to clear the lake of human encroachment and fisher folks were asked to leave the *phumdis*. But the fishing families refused to leave their traditional habitat. The LDA issued a notice on November 11, 2011 and asked *phumsang* dwellers to evacuate their settlement and take Rs 40,000 each as compensation. LDA officials claimed that 519 families received the compensation and the rest refused to accept the compensation, saying it was too little and protesting the disruption to their means of livelihood. After few days, LDA officials and armed policemen torched their huts and around 777 huts were burnt down. Due to this, All Loktak Lake Areas Fishermen's Union Manipur moved the Gauhati High Court and currently only 333 families live in their *phumsangs* at Loktak after High Court passed a stay order on eviction on February 25, 2012. However, Leishangthem Susindro Meitei, who was recently appointed as the chairman of LDA, said, "Central government is continuously monitoring the insurgency activity in Manipur. The eviction was carried out by the Congress government as a part of maintenance of internal security of the state." However, adequate fish is not available in the lake. There is a need to balance ecological protection and human needs. The government needs to take up some development schemes for the fishing community of the Loktak and others around the lake. The primary reasons for a decrease in fish production are the over exploitation, indiscriminate fishing activities, in-depth growth of *phumdis* and weeds etc. The construction of Ithai Barrage made the water course affecting the movement of the fish from the Union of Burma's Chindwin-Irrady watercourse system.¹⁵⁷

11. Impacts on socio-economy and culture of the state¹⁵⁸

Loktak Lake is the common resource of the people of Manipur. Large amount of incomes can be generated, if it is managed and utilized in proper and sustainable ways. Resources such as fisheries, agriculture, irrigation, biological resources, tourism, hydropower projects, etc., are readily utilizable from this lake. Presently, it is found that resource utilization is minimal

¹⁵⁷ Supra 124.

¹⁵⁸ Id.

whereas resource depletion is very high. Thus, it brings about the concept of the Tragedy of common. The tragedy of common or the major economic crisis are brought about by the submerged cultivable lands, submerged grazing fields of cattle, poor harvesting of fishes, failure of the power supplies due to lesser water volume, unemployment etc. One best example of the economic crisis is the submerged grazing grounds, which leads to reduction in the cattle population. Social participation was found low among the fishers which suggest clearly that there is a great need to train the fishers of Loktak lake region on aspects of the lake's fisheries and management. The people in the region have high dependence on Loktak Lake; fishing is the most important direct benefit they are getting from the Lake and people favor intensive conservation measures for restoration of the lake ecosystem. In the northern zone, 100% of the respondents gave historical value as indirect benefit followed closely by pollution removal and religious value with 98.2% and 85.6% respectively. Water sport was observed to be the least important benefit derived from the Lake with only 11.7%. In southern villages, 100% of the respondents gave ground water recharge, waste procession, pollution removal, historical, religious and recreational value as benefits. Similar result was observed in the eastern zone. The only difference was that 100% of the respondents gave provision for water as benefit in the eastern zone. In the western zone, 100% of the respondents gave pollution removal, religious, historical and recreational value as benefits followed closely by ground water recharge (82.05%), provision for water (34.6%) and aesthetic value (1.20%). The overall benefits, in all the four zones were observed to be pollution removal (99.1%), followed by religious values (93.1%) and sports (5.7%). No benefit from silt trapping was observed in all the four zones. The people living around the Lake are not highly educated. The Government should take actions to remedy the situation and provide the necessary requirements to educate the people. As per the study, the main occupation of the local people was fishing. Though rice is the staple food for the people of Manipur, only 1.3% of the households around the Lake are engaged in agriculture. This shows the total dependence of the people on the services provided by the Lake ecosystem. The government should take up steps to spread awareness about the Lake so that the local people can continue to use the services provided by the Lake without harming the Lake in the process. The study has given valuable information about the use of Lake, and its environment, culture, and most important of all, the extent of dependence of the local people on the Lake and the impact of their dependence on the Lake. Even though maximum income comes from the services provided

by the Lake ecosystem, monthly income for maximum of the household is very low. This low income generation may be the main reason behind the low literacy rate of the local people around the Lake.¹⁵⁹

To cope with the problems, new management strategies should be taken up by monitoring and evaluating the various potential impacts and drawing attention to the public for participation in restoring this lake.

12. Impact of tourism promoting in the area of the Loktak lake

Loktak Lake is the most scenic beauty in the world which attracts as many as tourist from all over the world. The Manipur government promotes the tourism as a source of revenue. On the other hand, the Government is not taking the strict actions to administer the surroundings of the Lake. Due to the tourist place, many waste products are thrown out into the Lake. It causes the disturbance in the ecosystem of the Lake. On the other hand, motor boats are introduced as the entertainment and connecting to the other islands. This motor boat spills the oil over the Lake affecting the Lake into the polluted lake.

13. The future of the Loktak Development Authority

The Loktak development Authority was set up to reduce the deterioration of the pristine ecosystem of the Loktak Lake. Now this authority even cannot control the extinction of the flora and fauna. It is still uncertain whether the LDA is going to scour the buffer zone of the Keibul Lamjao National Park where the endangered deer species Sangai bloom.

¹⁵⁹ Supra 16.

CHAPTER 5

CONCLUSION AND SUGGESTIONS

5.1 Conclusion and Suggestions

Observations made in the existing laws in the state and the country, it is imperative that the problems faced by the legislations to implement them effectively for the conservation and protection of wetlands in the country. Given the importance of the wetlands, the Ramsar Convention plays an amazing role in the development of the wetlands in the state and the country. The contracting parties of this Convention are complying with the motto of conserving the significance of the wetlands. Taking the serious note, in India, the Government has enacted and adopted many legislations and policies for the administration and watchdog of the wetlands conservation in the country. The “Ministry of Environment, Forest and Climate Change” is an instrument in the Centre to supervise and render the issues and problems of the environmental related matters. Concerning into the State Wetlands conservation, Loktak Lake is the most prominent wetlands listed in the Ramsar List for the recognition of its needs of conservation and protection of the wetlands.

The present laws need to be re-evaluated for the proper management of the wetlands conservation though it has some values towards the protection and conservation of the Loktak Lake. The only law of Loktak Lake cannot fulfill the promises made in the legislation for the management of the wetlands and conservation of Loktak Lake. It completely ignores the community or local participation which exclusively promoted and appreciated by the Ramsar Convention because the management of the Loktak Lake needs the proper cooperation and understanding between the local and state government. The encroachment of the land in the area of the restricted zone by the local cannot be strictly checked by the Loktak Development Authority. The recreation introduced in the region of wetlands affect the hydrological or physical structure of the Loktak Lake. Loktak lake is the most scenic beauty in the world which attracts as many as tourist from all over the world. The Manipur government promotes the tourism as a source of revenue. On the other hand, the Government is not taking the strict actions to administer the surroundings of the Lake. Due to the tourist place, many waste products are thrown out into the Lake. It causes the disturbance in the ecosystem of the Lake. On the other

hand, motor boats are introduced as the entertainment and connecting to the other islands. This motor boat spills the oil over the Lake affecting the Lake into the polluted lake. The Provision of Manipur Loktak Lake Protection Act 2006 ignores the principles of environmental law like principle of polluter pays principle, principle of sustainable development, principle of preventive, principle of permanent sovereignty, principle of fair and equitable sharing etc. These principles should be embraced while introducing the any environmental law related legislation like wetlands and estuaries etc.

The development projects in the region of the wetland zone, wildlife protection area, national parks and wildlife sanctuary should be strictly undertaken by the Central authority through the Environmental Impact Assessment. Hydropower projects in Himalayan basins are extremely challenging endeavors and should require a detailed in-depth assessment of their impact before any construction begins. When created on unique ecosystems like mountain lakes, the need for a thorough evaluation of such projects becomes even more severe. Several hydropower projects in India have faced controversies for starting construction without accurately assessing the possible implications.¹⁶⁰ To move towards a safe and sustainable future, India may need to reconsider some structural constructions, especially if the structure harms the ecology and economy of the region. While decommissioning the Ithai Barrage and returning to a pre-dam state might seem lucrative and righteous, this may not be entirely possible given that the structure has been standing for 37 years and has undoubtedly caused significant changes in the local hydro-geomorphology.¹⁶¹ Before obstructing the flow of a lake, as has happened with the Loktak Lake, all potential impacts and outcomes must be evaluated and addressed. Similarly, any decommissioning should also be scientifically planned and not just follow populist sentiments. This Assessment can be able to give the long evaluation of the proposed project made by the project planners. On the other hand, Judiciary plays a key in the various instances to put the attentive needs of the conservation of the wetlands.

The way forwards to implement the Manipur Loktak Lake Protection Act 2006 effectively are:

- a. The wise use of the natural resources envisioned by the Ramsar Convention takes the robust stand in the further amendment of the provisions to a larger extent.

¹⁶⁰ Jaya Thakur, Exploring the Hydropower Potential in India's Northeast , ORF, March 2020.

¹⁶¹ Id.

- b. Proper maintenance of the Loktak Development Authority and training programme to all the staff members of the authority.
- c. Provide more assistance to the State Government in management of the wetlands conservation.
- d. Minimize the human movement in and around the restricted zone.
- e. Constructions of solar powered fencing and protection walls in the national park and wildlife sanctuary areas.
- f. Encouraging and supporting instrument of research about the wetlands and its analogous.
- g. Relocation of human settlement in case of encroachment and fishermen, Loktak lake dwellers.
- h. Promote the eco-tourism with the more government supervision.
- i. Improvement of the flora and fauna, migratory birds, water purity assessed by the authority annually.
- j. Killing and poaching of animals and birds should be stopped.
- k. Awareness programmes or campaign should be prompted in and around the local area and city. For example, Nambul River is the most polluted river which flows in the heart of the Imphal City and ends at the Loktak Lake. It brings the plastic waste and domestic waste into the Loktak Lake; it disturbs the ecosystem system of the wetland.
- l. Use GPS tracking mechanism to get the updates and change of the Loktak Lake.
- m. Encourage the industries to embrace wetlands as the corporate social responsibilities.
- n. The Government should promote the community or local people participation in the conservation and protection of the Loktak Lake.
- o. The School, colleges and Universities should come out and take the stand for the conservation of the Loktak Lake.
- p. Apply the restoration technique for the wetlands.
- q. Top down and bottom up approach should be applied as per the circumstances.

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