

# REVIEW ARTICLE: LOSS OF BIODIVERSITY AND CONSERVATION SCENARIO IN INDIA

MEET MEHTA<sup>1</sup>, CHIRAG SHAH<sup>2</sup>, AKHIL MEVADA<sup>3</sup>, ANIKET PARMAR<sup>4</sup>, MALAY SHAH<sup>5</sup>

<sup>1, 2, 3, 4, 5</sup> Department of Environmental Science, Government Science College, Ahmedabad, Gujarat, India.

<sup>1</sup>Email – [meetahir.mm@gmail.com](mailto:meetahir.mm@gmail.com)

## Abstract:

*This article gives a short outline of the ongoing loss of biodiversity in India. By evaluating the mongrel lease status of biodiversity in India, regions which need genuine consideration can be listed. There is a dire need to screen loss of biodiversity by investigating the circumstances which lead to elimination of species. It was seen in various contextual investigations that significant disaster's happening in creating countries was credited to loss of biodiversity. All these stress for a change in outlook in the manner in which we way to deal with handle the issue. This article attempts to concentrate on the causes which lead to loss of biodiversity in India. This was accomplished by gathering all contextual analyses and reports from logical diaries. A test remains, in any case, in utilizing this data to give worthy answers for powerful protection techniques. This audit will diagram the biodiversity misfortune in India by ordering information into various categories and gives a general picture to Indian situation. What's more, while not being a complete survey of all the biodiversity misfortune in India, various flying creatures, fauna and greenery are incorporated into the audit. Protection systems received so far in India and procedures which have been proposed are talked about toward the end.*

**Keywords:** Biodiversity, Climate change, Conservation, Extinction, India, Invasive species.

## Introduction:

The term organic assorted variety was utilized first by untamed life researcher and moderate Raymond F. Dasmann in the 1968 lay book A Different Kind of Country supporting preservation. The term biodiversity is of generally ongoing root, getting to be across the board in utilization simply after the American National Forum on Biodiversity in 1986. Logical definitions in this manner have to a great extent pursued Wilson (1992), who characterizes biodiversity as: "... all genetically based variety at all degrees of association, from the qualities inside a solitary neighborhood populace, to the species making all or part out of a nearby network, lastly to the networks themselves that make the living parts out of the diverse environments of the world." Defining natural decent variety as "the all out inconstancy of life on earth" isn't indisputable to place by and by. Practically speaking it is characterized as "number of

species." A species is, in generally casual utilization, "a populace whose individuals can interbreed openly under characteristic conditions" In the logical field most consideration has concentrated on contemplating biodiversity regarding the quantity of species present at a spot. Characterizing the spatial furthest reaches of biodiversity has advanced a further gathering of terms;  $\alpha$  (alpha),  $\beta$  (beta) and  $\gamma$  (gamma) decent variety. This gathering of terms separates between neighborhood species lavishness ( $\alpha$  decent variety, the quantity of species at an area), the provincial animal type's pool ( $\gamma$  assorted variety, the quantity of various species that could be at an area) and changeability between territories ( $\beta$  decent variety).

In this paper first segment manages different contextual investigations speaking to loss of biodiversity in India. In next area different protection methodologies that might be embraced are checked on for chiefs.

### 1. Indian biodiversity:

India is a money box of biodiversity which has a huge assortment of plants and has been recognized as one of the eight significant "Vavilorian" focuses of inception and yield decent variety. India represents 8% of the all out worldwide biodiversity with an expected 49,000 types of plants of which 4900 are endemic. The biological systems of the Himalayas, the Khasi and Mizo slopes of north eastern India, the Vindhya and Satpura scopes of northern peninsular India, and the Western Ghats contain almost 90 percent of the nation's higher plant species and are subsequently of unique significance to conventional medication.

The faunal assorted variety involves entomb alia 2,500 fishes, 150 creatures of land and water, 450 reptiles, 1,200 flying creatures, 850 warm blooded creatures and 68,000 bugs. Al-however India is assigned as an uber biodiversity zone, it likewise has two of the world's most compromised 'problem areas', the Eastern Himalayan district and the Western Ghats. To cite Professor M.S. Swaminathan, "both are heavens of significant qualities yet are creeping towards the status of Paradise lost". In any event 10 percent of India's recorded wild greenery and potentially a greater amount of its wild fauna are on the rundown of undermined species. Of the wild fauna, 80 types of warm blooded creatures, 47 of fowls, 15 of reptiles, three of creatures of land and water and countless moths, spread flies and creepy crawlies are imperiled. Out of 19 types of primates, 12 are jeopardized.

The biological systems of southern peninsular India including the southern Western Ghats contain in excess of 6000 types of higher plants including an expected 2000 endemic species. Of these, 2500 species speaking more than 1000 genera and 250 families have been utilized in Indian frameworks of drug in particular Ayurveda, Unani, Siddha and Tibetan Medicine. India has coastline around 8000 km, Exclusive Economic Zone of 2.02 million km<sup>2</sup> and a wide scope of beach front biological systems, for example, estuaries, tidal ponds, mangroves, backwaters, salt bogs, rough drifts, sandy stretches and coral reefs.

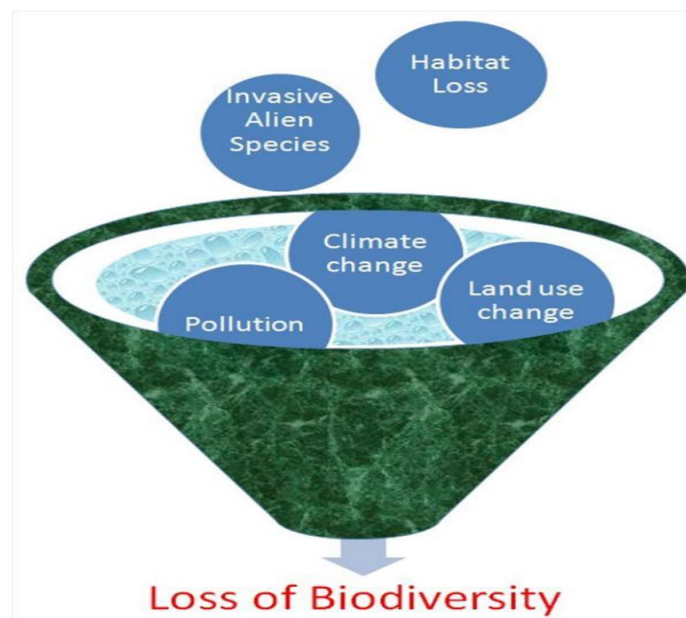
## 2. Loss Of Biodiversity:

Biodiversity is declining on two scales- $\beta$  assorted variety and  $\gamma$  decent variety (worldwide biodiversity is declining), yet at specific areas  $\alpha$  assorted variety might increment because of the expansion of intruders. Sax and Gaines clarify that this wonder isn't confined to islands – rather, lo-cal biodiversity is expanding in numerous mainland areas too. Hardly any creators archived decreases in various segments of biodiversity. The relevant truth is that degrees of termination in the course of the most recent 300 years are at any rate a few hundred times more prominent than anticipated dependent on the land record. Chasing by people is accepted to have been among the most critical elements driving the eradication of enormous natural life species. In India chasing has been perceived as central point in chronicled decreases of untamed life. This paper will be confined to loss of biodiversity in India.

The termination of species brought about by direct bother, for example, wide scale tropical backwoods freedom for horticulture or the end of island populaces by presented predators, and establishes the essential driver of biodiversity misfortune in the advanced setting. Instituted a term 'annihilation elements'; they contemplated collaborations among termination drivers like Habitat misfortune, Over abuse, Climate change, Invasive species and Pollution. Figure 1 presents by and large picture of causes.

## 3. Loss Of Biodiversity In India:

Twenty-five biodiversity problem areas have been distinguished worldwide as territories of more prominent bio-intelligent endemism in the biosphere. Two of these are present in the Indian subcontinent, viz. the Eastern Himalayas and the Western Ghats.



**Figure1.** Causes for loss of Biodiversity.

The 2000 IUCN (International Union for Conservation of Nature) report (Hilton-Taylor) takes into account recognizable examples to be perceived as to geology and environmental (e.g., biome) partiality, in addition to other things. Consequently a vast greater part of the compromised warm blooded creature species happens in tropical nations. The highest priority on the rundown is Indonesia, with 135 species, trailed by India, Brazil, China, and Mexico. As a level of the absolute number of well evolved creature species in every nation, the positioning of the top nations changes, however most of the nations, 8 out of the best 10, are as yet tropical.

With the present degree of deforestation, by year 2100 just about 10% of the land region of the Indian Himalaya will be secured by thick woodland (>40% overhang spread) - a situation where right around a fourth of the endemic species could be cleared out, including 366 endemic vascular plant taxa and 35 endemic vertebrate taxa. In Himalaya, especially in the sub-tropical and mild timberlands (wide leaf, coniferous and blended), species, for example, tiger (*Panthera Tigris*) and different individuals from feline family (*Felidae*) will be exceptionally powerless against termination. The nation has lost about 40% of its mangroves and some essential piece of its wet-lands.

### **3.1 Floral Species:**

India is honored with wide assortment of flower species in different biodiversity hotspots. It is assessed that there are more than 7800 restorative medication producing units in India, which expend around 2000 tons of herbs every year. With increment being developed action, flower species have been imperiled and are moving to-wards eradication.

### **3.2 Wild Life:**

India is wealthy in untamed life biodiversity with wide assortment of species the country over through different biodiversity hotspot. Be that as it may, because of human convergence, absence of logical strategies for taking care of enemies and formative exercises lead to eradication just as danger of species. There are numerous species that have been destroyed, unrecorded either on the grounds that they were not so fabulous or in light of the fact that their reality stayed obscure.

### **3.3 Birds:**

Flying creatures are viewed as a marker of the great state of the regular habitat. In India Birds assume significant job in the customary way of life and dressing propensities for some clans in the State. The inborn individuals utilize the mouth of the feathered creature as a headgear to be worn as a conventional bunch on the temple. Outlines the announced jeopardized winged creatures. Among the imperiled winged animals exceptionally helpless species incorporate monal fowl (*Lophophorus impeyanus*), koklas bird (*Pucrasia macrolopha*), western (*Tragopan melanocephalus*), Himalyan snow cockerel (*Tetraogallus himalayensis*), brilliant falcon (*Aquila chrysaetos*), steppe hawk (*Aquila nipalensis*), dark hawk (*Ictinaetus malayensis*) and unshaven vulture (*Gypaetus barbatus*).

While the Bengal Florican, Lesser Florican, Great Indian Bustard, Sociable Lapwing and Jerdon's Courser are under danger because of obliteration of their natural surroundings of prairies and clean timberlands, survival of the Spoon-charged Sandpiper, Siberian Crane and White-bellied Heron enormously relies upon their wetland environment. The Forest Owllet's survival excessively is outlandish if deciduous timberlands in focal India are devastated according to think about.

### **3.4 Aquatic and Marine Biodiversity:**

There are not many detailed instances of loss of biodiversity in sea-going and marine biodiversity. Loss of biodiversity among marine species has been dismissed as reasons for biodiversity misfortune have not been built up. Following are not many announced cases which had huge effect on amphibian and marine biodiversity.

At the very least 300 outlandish species are exchanged India. There is no guideline to this exchange and there is absence of information on the biological effect of outsider fish species. A few examinations unmistakably demonstrate that there is a connection between recurrence of fish sold in aquarium stores and their presentation and foundation in freshwater living spaces. Subsequently danger from such obscure outcomes must be investigated altogether by following course through which these obtrusive species are entering India. A rundown of such courses must be kept up and each conceivable way should be investigated to restrain the effect.

The high populace thickness of most nations is additionally a noteworthy reason for debasement of waterfront territories, particularly through option of poisons. It has been evaluated that Indian seaside oceans have been accepting  $3.9 * 10^{12}$  liters of local sew-age and  $3.9 * 10^{11}$  liters of modern sewage (taken as 10% of the previous) consistently. An extrapolation, utilizing the proportion of the length of the coastline of India (6,500 km) to that all things considered (66,526 km), would recommend that a contamination heap of  $40 * 10^{12}$  and  $4 * 10^{12}$  liters, individually, of sewage and modern effluents may enter waterfront oceans consistently.

### **3.5 Insects and Amphibians:**

For the most part, the existence history of a creature relies on the living space and the asset circulation importantly affects biology. For creatures of land and water, such information is not many and learning of the job of environment in deciding disseminations is constrained. Coming up next are a portion of the revealed loss of biodiversity among creepy crawlies and creatures of land and water in India.

Among the bugs, butterflies possess a fundamental position in biological systems and their event and assorted variety are considered as great markers of the soundness of some random earthbound biotope. As herbivorous creepy crawlies, the dispersion of larval and nectar host plants distinctly affects the status of butterfly assorted variety. Late reports uncover that around 100 out of 1500 butterfly species happening in India are very nearly termination. Various states

of butterflies have been annihilated by human exercises, bringing about changes to environments past the resilience furthest reaches of the species.

Thirty-six types of anurans and six types of caecilians have been recorded in the Kudremukh National Park, focal Western Ghats, India and the all out land and water proficient species extravagance speaks to 20% of the entire Indian land and water proficient fauna. Among these, 20 species were circulated in both exasperates and undisturbed locales, while 22 were discovered uniquely in undisturbed destinations demonstrating they might be compromised by further natural surroundings fracture.

### **3.6 Mammals:**

Among land warm blooded creatures, undermined species are amassed in South and Southeast Asia. Different pinnacles of danger incorporate the tropical Andes, Cameroonians Highlands, Albertan Rift, and Western Ghats in India, all locales joining high species lavishness, high endemism, and high human weight. Natural qualities of enormous warm blooded creatures their inalienably low densities, long life time length likewise render them to be helpless.

The significant enormous vertebrates confronting extirpation in Himalaya are wild bear (*Ursus thibetanus*), musk deer (*Moschus* sp.), bharal (*Pseudois schaeferi*), Himalayan tahr (*Hemitragus jemlahicus*), serow (*Capricornis sumatraensis*) and normal panther (*uncia*). In Kudremukha, at any rate 26 types of warm blooded creatures were chased, for the most part with firearms, at an expected force of 216 tracker days out of each month per town. In Nagarahole, 6 of the 9 central types of enormous vertebrates happened at fundamentally lower densities at the intensely chased site where implementation capacities were more unfortunate. Information underscore the significance of preservationist ace grams in the protection of enormous warm blooded creatures in a setting of broad nearby chasing.

## **4. Conservation Strategies:**

The majority of the world's biodiversity happens inside creating nations that require benefactor backing to manufacture their preservation limit. Benefactor backing requires appropriate logical measurement and territories where concentrate should be kept up in off the cuff premise. The International Union for the Conservation of Nature (IUCN) keeps up the Red List to evaluate the protection status of species, subspecies, assortments, and even chosen sub populations on a worldwide scale. IUCN noticed that numerous species are undermined with elimination. At risk of elimination are 1 out of 8 feathered creatures, 1 out of 4 warm blooded animals, 1 out of 4 conifers, 1 out of 3 creatures of land and water, 6 out of 7 marine turtles. Such records help in understanding generally speaking situation however discussion procedures contrast from nation to nation. In this manner in past area we attempted to evaluate the species and hotspot which need pressing thoughtfulness regarding control the loss of biodiversity. In this area different preservation methodologies which have been accounted for Indian situation are talked about.

#### **4.1 Indian perspective:**

One of the key difficulties for India in executing the universal responsibilities is to battle destitution and furthermore financial advancement on economical premise. The main very much created administrative structure was the UN Conference on Human Environment held at Stockholm in 1972 (Stockholm Declaration). India, alongside 113 different countries conceded to standards and an activity intend to secure the earth and went under a commitment to execute these locally. To execute these, another specialist for natural assurance known as National Council for Environmental Policy and Planning inside the Department of Science and Technology was set up in 1972. This Council later advanced into Ministry of Environment and Forests (MoEF) in 1985, which to-day is managing and guaranteeing ecological security in India. India turned into the primary nation on the planet to have arrangements for the security and improvement of its condition.

India has as of late endorsed the Nagoya Protocol and formalized its responsibility to it. Way to deal with ensuring and advancing biodiversity has been guided by the conviction that every one of the three destinations of the Convention on Biological Diversity, in particular, preservation, economical use and sharing of advantages from the use of hereditary assets, ought to get sufficient and equivalent core interest. This methodology is the premise of India's Biological Diversity Act of 2002. The 2008 National Biodiversity Action Plan further recognizes explicit activity focuses by different government organizations. In 2010, the nation level status appraisal for tigers demonstrated an expansion in their number to an expected 1706 from an expected 1411 out of 2006. India's tiger populace has fundamentally expanded by the 2014-15 India tiger estimation report. Ongoing years have seen a sensational ascent in numbers—from 1,411 of every 2006 to 2,226 out of 2014 (National Tiger Conservation Authority). The in-wrinkle in the tiger populace can be to a great extent credited to better administration and improved assurance inside tiger saves and other tiger bearing ensured territories.

#### **4.2 Strategic Plan for India:**

Ensured zones conceal to 15.5% of the planet's property surface and are among the most significant apparatus to keep up living space trustworthiness and species assorted variety. For living space security, the Geldmann et al., audit demonstrates that Protected Areas are a significant component of preservation methodologies to safeguard tropical woods. India currently has 448 Wildlife Sanctuaries, 102 National Parks and 18 Biosphere Reserves, covering about 5% of the absolute geological zone (MOEF, 2011).

The administration of normal assets worldwide has generally been driven by two unique and powerful approaches: Sustainable use and Preservationist. The recuperation of Tiger and Prey populace in numerous untamed lives saves under Project Tiger speaks to an effective case of Preservationist Program.

India has a rich convention of biodiversity protection. Customary human connections like convictions, confidence, taboos, traditions and inclinations assumed a significant job in protection of natural surroundings and individual species. The social ethos of the Indian individuals is adequately exhibited by such preservation endeavors. Much of the time, species chosen by the nearby individuals for social importance end up being likewise of natural hugeness.

### Conclusion:

The misfortune in biodiversity additionally harms us in different ways. Our social personality is profoundly established in our organic condition. Plants and creatures are images of our reality, saved in banners, models, and different pictures that characterize us and our social orders. We draw motivation just from taking a gander at nature's magnificence and power. There is requirement for orderly detailing and documentation of protection extends just as the consideration of weights and reactions in the investigation plan of natural trials. Anyway without appropriate documentation and controlled conditions making this assessment is beyond the realm of imagination. At long last, a definitive leader for biodiversity is the individual native. The little decisions that people make signify an enormous effect since it is close to home utilization that drives improvement, which thus utilizes and dirties nature. Biodiversity is basic for human survival and monetary prosperity and for the biological system capacity and solidness. The developing familiarity with significance and high paces of misfortune make it basic to quickly evaluate and ration biodiversity, both at provincial and worldwide levels. Fruitful methodologies for individuals' cooperation in safeguarding biodiversity are deficient. India has a rich convention of protection, and with developing contributions from the Government, researchers and NGOs, ought to give initiative in creating suitable techniques and systems for biodiversity appraisal and preservation.

### References:

- [1] Adams, M. P., Cooper, J. H. and Collar, N. J. 2003, *Extinct and endangered (E and E') birds: a proposed list for collection catalogues. Bulletin-British Orni-thologist Club, 123, 338-354.*
- [2] Alfred, J.R.B. 1998. *Faunal Diversity in India: An Over-view: In Faunal Diversity in India, i-viii, 1-495 ENVIS Centre, Zoological Survey of India, And Calcutta.*
- [3] Antony, B. *West's love of talc threatens India's Tigers 2003* <http://www.guardian.com/uk/2003/jun/22/world.antonybarnett>. Cited 7 November 2014.
- [4] Sukumar, R., Ramakrishnan U. and Santosh, J.A. 1998. *Impact of poaching on an Asian elephant population in Periyar, southern India: a model of demography and tusk harvest. Animal Conservation, 1(4), 281-291.*
- [5] Thomas, J.A. 2005. *Monitoring change in the abundance and distribution of insects using butterflies and other indicator groups. Philosophical Transactions of the Royal Society B: Biological Sciences 360 (1454) 339-357.*



- [6] Thompson, Ross, and Brian M. Starzomski. 2007. What does biodiversity actually do? A review for managers and policy makers. *Biodiversity and Conservation* 16, no. 5, 1359-1378.
- [7] Tiple A.D., Khurad, A.M. and Dennis, R.L. 2007. Butterfly diversity in relation to a human-impact gradient on an Indian university campus", *Nota Lepi-dopterologica*, 301: 179
- [8] Upreti, D.K., Divakar, P.K. and Nayaka, S. 2005. Commercial and ethnic use of lichens in India. *Economic botany*, 59(3) 269-273.
- [9] Venkataraman, K., and Wafar. M. V. M. 2005. Coastal and marine biodiversity of India. *Indian journal of marine sciences*, 34, no. 1, 57-75pp.
- [10] Vitousek, Peter M., Harold A. Mooney, Jane Lubchenco, and Jerry M. Melillo. 1997. Human domination of Earth's ecosystems. *Science* 277, no. 5325, 494-499.
- [11] Vivek Menon. 2003. A field guide to Indian mammals. Dorling Kindersley Delhi, ISBN 0-14-302998-Volume 2 San Diego: Academic Press 697-713.
- [12] Wafar, M., Venkataraman, K. and Ingole. et al. 2011. State of knowledge of coastal and marine biodiversity of Indian Ocean countries. *PloS one* 6(1) e14613.
- [13] Wilson, E.O. 1992. *The Diversity of Life*. Cambridge MA: Belknap press, 424 pp.
- [14] Munro, D.A. and Holdgate, M. W. 1991. Caring for the earth: a strategy for sustainable living. *International Union for the Conservation of Nature and Natural Resources (IUCN)*.
- [15] Myers, Norman, Russell A. Mittermeier, Cristina G. Mittermeier, Gustavo AB Da Fonseca, and Jennifer Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403, no. 6772, pp: 853-858.
- [16] Nagendra, H. and Gadgil, M. 1999. Biodiversity assessment at multiple scales: Linking remotely sensed data with field information. *Proceedings of the National Academy of Sciences*, 96(16) 9154-9158
- [17] Nayar, M.P. 1996. *Hotspots of endemic plants of India Nepal and Bhutan* (Tropical Botanical Garden and Research Institute Thiruvanthapuram, India)
- [18] Pandit, M. K., Navjot S. Sodhi, Lian Pin Koh, Arun Bhaskar, and Barry W. Brook. 2007. Unreported yet massive deforestation driving loss of endemic biodiversity in Indian Himalaya. *Biodiversity and Conservation* 16, no. 1, 153-163.
- [19] Panwar, H.S. 1987. *Project Tiger: the reserves the tigers and their future* Tigers of the world: The biology bio politics management and conservation of an endangered species New Jersey: Noyes Publications 110-117
- [20] Pimentel, D. 2002. *Biological Invasions: economic and environmental costs of alien plant animal and microbe species*. (2002), CRC Press, London, 384pp
- [21] Pimm, Stuart L., Gareth J. Russell, John L. Gittleman, and Thomas M. Brooks. 1995. The future of biodiversity. *Science-AAAS-Weekly Paper Edition* 269, no. 5222, 347-349.
- [22] Pimm, Stuart, Peter Raven, Alan Peterson, Çağan H. Şekercioglu, and Paul R. Ehrlich. 2006. Human impacts on the rates of recent, present, and future bird extinctions. *Proceedings of the National Academy of Sciences* 103, no. 29, 10941-10946.

- [23] Prakash, V. et al. 2007. Recent changes in populations of resident Gyps vultures in India. *Journal of the Bombay Natural History Society*, 104, 129–135.
- [24] Prakash, V., Pain, D.J. and Cunningham, A.A. et al. 2003. Catastrophic collapse of Indian white-backed Gyps bengalensis and long-billed Gyps indicus vulture population. *Biological conservation*, 109 381–390
- [25] Purvis, Andy, Kate E. Jones, and Georgina M. Mace. 2000. Extinction. *Bio Essays* 22, no. 12, 1123-1133.
- [26] Raghavan, R.G., Prasad, P.H., Anvar-Ali, B. and Pereira. 2008a. Exotic fish species in a global biodiversity hotspot: observations from River Chalakudy part of Western Ghats Kerala India. *Biological Invasions*, 10: 37-40
- [27] Raghavan, R.G., Prasad, P.H., Anvar-Ali, B. and Pereira. 2008b. Fish fauna of Chalakudy River part of Western Ghats biodiversity hotspot Kerala India: patterns of distribution threats and conservation needs. *Biodiversity Conservation*, 17: 3119-3131.
- [28] Rahmani, A.R. 2001. Status of Bengal Florican Houbaropsis bengalensis in UttarPradesh, India. Unpublished report. Bombay, India: Bombay Natural History Society.
- [29] Rajaguru, P., S. Suba, M. Palanivel, and K. Kalaiselvi. 2003. Genotoxicity of a polluted river system measured using the alkaline comet assay on fish and earthworm tissues. *Environmental and Molecular Mutagenesis* 41, no. 2, 85-91.
- [30] Raju, A.J.S. and Rao, S.P. 2002. A case study on the decline of butterfly colonies in degraded habitats of Visakhapatnam. In *Bull Andhra University Res Forum*, (Vol 7 pp 57-59).
- [31] Raju, A.J.S., Bhattacharya, A. and Rao, S.P. 2004. Nectar host plants of some butterfly species at Visakhapatnam. *Science and Culture*. 70(5/6)187-190
- [32] Ramakrishnan, P.S. 1996. Conserving the sacred: from species to landscapes. *Nature and resources*, 32(1) 11-19
- [33] Ramesh, B.R., Menon, S. and Bawa, K.S. 1997. A vegetation based approach to biodiversity gap analysis in the Agastyamalai region Western Ghats India. *Ambio*, 26(8) 529-536
- [34] Rangaraju, Mahesh. 1998. The Raj and the natural world: The war against 'dangerous beasts' in colonial India. *Studies in history* 14, no. 2, 265-299.
- [35] Roy, P.S. and Tomar, S. 2000. Biodiversity characterization at landscape level using geospatial modelling technique. *Biological conservation*, 95(1) 95-109

### Acknowledgements:

Every work that one complete successfully stands on the constant encouragement and support of the peoples around. I would like to thank and respect to my guide “**Mr. Chirag Shah**” who give me a great opportunity.