

INSTIGATION OF NEW PROTOCOL & PHILOSOPHY FOR THE CONSERVATION OF LARGE MAMMALS IN ASSAM

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The primordial Indian traditions and civilization have stressed on the importance for all forms of life. The total area of India's protected wilderness is approximately 90,000 sq. km. and constitutes 3 per cent of the country's total land area. Its climatic and geographic diversity makes it the habitat of over 350 mammal and 1,200 bird species. A number of these species are not found elsewhere on the earth. In a land once famous for its White Tiger, Snow Leopard, Asiatic lion, Lion Tailed Macaque, Great Indian Bustard, Himalayan Tahr, Pigmy hog, Andaman Teal and the Monal Pheasant are just a few animals and birds that are peculiar to the region. The country's protected wilderness consists of 53 National Parks and 247 Sanctuaries. The North eastern region is equally rich in faunal diversity. An estimated 3,624 species of insects, 50 molluscs, 236 fishes, 64 amphibians, 137 reptiles, 541 birds and 160 mammalian species have been so far described (Anonymous 1998). Most importantly, Asom, being at the confluence of three major bio-geographical realm of the world (i.e. Indo-Chinese, Indo-Malayan & Indian biogeographic region), is extremely rich in floral and faunal biodiversity with several endemic mammalian species.

The foothill grasslands and broadleaf forest of Asom harbor important population of Asian elephant *Elephas maximus*, one horned rhinoceros *rhinoceros unicornis* and wild water buffalo *bubulas bubulis*. IUCN, the World Conservation Union, estimates that there are between 38 and 51 thousand wild Asian Elephants, as compared to more than 600 thousand African Elephants. That makes the population of the Asian Elephant a mere 6% to 8% of their African cousins. The world's second largest land mammal is in urgent need of effective conservation under both national and international legislation. The Asian Elephant has been given the highest level of protection in India by its inclusion in Schedule-I of the Indian Wildlife (Protection) Act 1972. They are also included in Appendix I of the **Convention on International Trade in Endangered Species of Wild**

Fauna and Flora (CITES). The elephant population in the north bank of the Brahmaputra River in Assam is one of the India's largest and most important (Sukumar, 1992). Of the 28000 wild elephants in India, about 33% are found in Northeast India. In fact, Assam alone accounts for more elephants than Myanmar, Thailand, Indonesia or any other country in Asia. In Northeast India Great Indian Rhinoceros (*Rhinoceros unicornis*) is now restricted to Kaziranga, Pabitora and Orang in Assam. The population at Manas in Assam is believed to have been demolished in recent years. Historical records suggest that both the One-horned Javan Rhinoceros (*Rhinoceros sondaicus*) and the Two-horned Sumatran Rhinoceros (*Didermocerus sumatrensis*) were once found in parts of Northeast India.

The Gaur *Bos gaurus* is another large mammal that is found in the forests of Asom. Its The Gaur is found in three dislocate regions, i.e. south-western India, central India and north-eastern India (including Nepal, Bhutan and Bangladesh). Within these regions the distribution is highly fragmented and includes a number of small non-viable isolated populations. The habitat in north-eastern India is still contiguous with that in Bhutan, Myanmar and Bangladesh and to some extent with Nepal. Although the estimated population of the Gaur is 23 000–34 000, it is declining alarmingly. Populations outside the protected areas may not last long. (Choudhury, 2002).

The Royal Bengal Tiger *Panthera tigris* has become a very rare animal in the entire region with exception of Assam which is still considered as one of the safest shelter as compared to other states of North eastern India for this large cat. With the noble mission to save the tiger from extinction, project tiger completes 30th year, with its rich history and a healthy foundation. It has been estimated that at the beginning of the 20th century there were probably around 40,000 tigers in India. With protection after impinging ban on hunting, during 1970s and 1980s the Tiger population had risen to hardly 4,000. But the trade on the tiger bone and its skin, and conversion of forestland to non-forest purposes has driven the numbers down again, possibly to less than 2,000 today.

Despite the conservation measures, taken both by the governmental agencies like forest department and other non-governmental agencies, the survival of the large mammals are still a hinder in the state of Asom. All the large mammals continue to be threatened by fragmentation and degradation of natural habitat, poaching for ivory in case

of Elephants and for skins in case of tigers. Mostly the dreadful conditions of the huge wooded area in our state are mainly responsible for the loss of mammals in this part. Mainly most of the mammalian species plays a great keystone role in any kind of ecosystem. So loss of anyone of this species leads to imbalance to the whole of the ecological unit. Today, however, large mammals, which are believed to be the indicator species of any good ecosystem are in decline in many parts of Asom including entire earth and require serious conservation efforts.

Another problem that came up in the recent years in the field of conservation is the human-wildlife conflict. Most amusingly the intense human-wildlife conflict is seen more often with the large mammalian species than small one, e.g. Human-elephant conflict, or human-tiger conflict. It refers to negative interaction between wild mammals and human beings such as crop raiding by elephants, human death and injury caused by elephants, cattle killed by tigers and humans killing elephants and tigers. In order to ensure the long-term survival of this wild-wealth, it is important to identify and understand the direct and indirect threats to their survival.

There has been considerable debate over whether the implementation of laws and regulation for the conservation of the animals is the only way out to save the wildlife!! Lots of logic are put on the desk to solve the problem out with the engross community for the management of the wild-species. Still there are lots of success stories of the conservation of the mammals involving the community people, but more localization of the ideas can be more effective. In this regard I can put examples like that of **CAMFIRE (Communal Areas Management Program For Indigenous Resources)** campaign by the government of Zimbabwe in Africa for the conservation elephant, if truth be told it was achieved by involving the forest tribes of the nearby elephant reserves. **CAMPFIRE** involves rural communities in conservation and development by returning to them the stewardship of their natural resources, harmonizing the needs of rural people with those of ecosystems. Since it started in 1989, more than a quarter of a million rural Zimbabweans have benefited. In-fact it is one of the success story of the world to safeguard Elephant involving community. This kind of conservation efforts can also be implemented in the state like Asom but we have to be much more localized while exercising such community conservation practices. Meaning is that the conservation of wild fauna and flora was always a fundamental part of the rich Indian culture and there

still exists strong believe in the mind of the people. Only we have to strengthen the ideas and believe which could work as what I term the localization of the planning of other ideas like that of **CAMPFIRE**.

Some of the optimists argue for the cloning of the large mammals for its fortification. But it is sanguinity only, as far as ecological point of view is concern. Because, one might clone a species or two, but we definitely can't recreate or restore the complex and little-understood interactions between individual species, their ecosystems and the role they play in maintaining environmental/ ecological stability. So as an environmentalist we have to straightly turn down any possibilities of such unhealthy cloning.

So undoubtedly the question will arise what's the way out for the conservation of the wildlife? May be a amalgamation of both the community conservation effort and government agency and proper implementation of the rules and regulation with constant yearly or biyearly monitoring of the large mammals, which is quite possible, can trace the path for people like us who always argue for conserve animals first.

As far as the youth perspective for the conservation these species, we could term our state as a kind of hidden treasure, where the potential is yet to discover. As a youth we also believe it's high time for not only youths but other section of society of Asom & North east region of India to become aware about the conservation of the wild species specially the large mammals. Because, the ecosystem is sustaining or functioning due to which the human civilization is also sustaining.

References:

Choudhury, A. 2002. Distribution and conservation of the Gaur *Bos gaurus* in the Indian Subcontinent. Mammal Review Volume 32 Issue 3 P. 199

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Some photographs relevant with the articles



Poaching: The greatest constrain in saving the wildlife of the area. In photo students of Assam University collected one plam civet killed by poachers.



Deforestation: A view of the clearance of the forest patches which is one of the major anthropogenic threats to the wildlife of the region.



Community Conservation: Involving community for conservation of forest and wildlife is the only way out for large scale protection.