

Biodiversity at risk due to urbanization assignment



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Forestry “ Indo-Burma Forests” Forests, some of the most essential ecosystems in the world, house about forty to seventy-five percent all plants and animals globally. Unfortunately, the amount of biodiversity in forests is severely at risk due to the increasing deforestation over the past four decades. It is estimated in the biological community that approximately 50, 000 species are completely wiped out annually as a result of arbitration, land clearance, logging, and other human techniques.

Dry. Edward Wilson, a Harvard professor, predicts that half of all of earth’s species could be extinct in about 50 years, unless the deforestation rate decreases. In 2011, Conservation International (also known as C’) conducted a study of the top ten most endangered forests in the world (half of them located Asia-Pacific Region). Of the ten, the Indo-Burma forests were deemed the number one most endangered forest. Encompassing approximately 2, 373, 000 km, the forests spreads from eastern India to Southern china.

The Indo- Burma forests are considered to be one of 34 “ biodiversity hotshots,” a term coined y Norman Myers (a British biologist), which is a biographic landscape characterized by outstanding levels of habitat loss and plant endemics. Over ninety- five percent of the region’s forests have been destroyed, which leaves only about five percent of the original forest area still standing; therefore, the Indo-Burma forests are the most vulnerable forests globally. The Indo-Burma forests are positioned in the midst of floodplains, lakes, and rivers.

These various waterways give off life and prosperity, allowing richness in biodiversity as well as resources. This region is home oh number of the

largest freshwater fish, bird, and turtle species. There is also, an assortment of ecosystems embodied in this hotshot, comprising of dry evergreen, wet evergreen, and deciduous forests. There are also several patches of woodlands and scrubblings on karst limestone ridges, some in coastal lands as well as dispersed heath forests. Additionally, a broad range of distinct, restricted vegetation developments, including seasonally flooded grasslands, lowland floodplain swamps, and mangroves.

This vast biological diversity is a result of topographical interaction, soil hegemones, climate change, and seasonal rainfall patterns. The plant species are abundantly diverse with 13, 500 vascular plants estimated with about half of them being endemic. The flora of forests range from a variety of ginger and orchids (over 1, 000 different orchid species found in Thailand alone) to tropical hardwood trees including Disintegrations (teak) and Dipterous (which happens to be commercially valuable).

The animal species are even more widespread as Indo-Burma is continually unmasking biological treasures. In the last twelve years, [the following] six age mammals have been discovered: The Salsa, the Inmate Mountain, the Large- Antlered Mountain, the Leaf Deer, the Grey Swanked Doug, and the Inmate Rabbit. There are approximately 430 mammal species residing in the region; over seventy species and seven types are endemic. Over 280 amphibian species are found in the hotshot, but there is not high level of endemics outside of the genus level.

The region has noteworthy freshwater fish creatures; there are over 1, 260 recognized species (about 10% of the world's total freshwater fish). There

are more than 1, 260 bird species with over 60 being endemic. The floodplain wetlands and the rivers are absolutely essential for bird species conservation since population numbers have declined due to human expansion and hunting. The reptile population is one of the more prevalent species of the region. Almost 520 species of reptile reside there which more than 200 species being endemic and twelve genera.

This Indo-Burma hotshot carries perhaps the largest assortment of freshwater turtles globally; there are exactly 53 species (57 including tortoises), signifying 20% of the world's species. A popular species is the Chitchatted, a striped narrow-headed turtle with a soft-shell, which can grow up to about 120 centimeters. These species are decreases in number as well, mostly due to the overexploitation on behalf of wildlife trade. Of the 22 non-marine turtle species that are endangered, almost half of them are found in the Indo- Burma region.

Other prominent reptiles include the Ellipsis butterfly lizard, the Chinese crocodile lizard, and the Siamese crocodile. Humans have greatly impacted life for the animals, however, and the overall environment. Indo-Burma was actually one of the primary lands used by humans in the development of agriculture; Hereford, fire has been used more and more over the years to clear out land needed to fit agricultural needs and other human demands. As demand for agricultural goods has skyrocketed over the past years due to population and market expansion, forest destruction became widespread.

Huge areas of lowland forests soon became replaced with tree plantations (oil palm, teak, and rubber), while hill forests and Montana were threatened

by sugarcane, coffee, tea, and vegetable crop plantations. In addition to plantations, forests become endangered by mining for ores and gems, firewood collection, charcoal production, and logging. The marine ecosystem simultaneously became under great pressure in many areas due to development. Draining for the cultivation of wet rice has damaged freshwater wetlands and floodplain swamps (mainly in Vietnam, Thailand, and Manner).

The damming of rivers have also become way more prevalent in efforts to generate electricity and maximize water storage to support the economic growth of the country as well as for exportation of goods and services to bordering countries to increase foreign exchange income; regrettably, damming a river not only converts that small body of eater into a large pond, but it decreases the oxygen content and overall temperature, as well as in amplifies water turbidity down the river and river-bed erosion.

The operational measures of the reservoir has resulted in sporadic or frequent flooding of sandbanks, stretches of channel assortment, sandbars, and other territory that is generally uncovered during dry season [severely impacting turtle species and nesting birds]. Mangroves in the region have been transformed to aquaculture ponds, while mudflats have been comprehensively afforested with mangrove or shed by piles of nets, which greatly effects their significance as a feeding habitat for migrating birds and other specimen.

Furthermore, ecosystems of sand dunes are in severe danger due to forestation, and overfeeding along with excessive use of [destructive] fishing

methods have produced a considerable problem with both the offshore and coastal aquatic ecosystems. Being that only 5% of natural habitats are left in a pristine state and 10%-25% of damaged land due to habitat loss and exploitation of resources, something had to be done to decrease the probability of omelet extinction of the forests. In the Indo-Burma hotshot, protected area structures have become the foundation of government conservation program.

There is officially 236, 000 km of land protected, representing nearly ten percent of the original amount of vegetation in the region. Conversely, only 132, 000 km (almost six percent) is in the International Union for the Conservation of Nature and Natural Resources (CNN) protected area categories one to four. Together, the countries of Lower Mekong (Thailand, Cambodia, Vietnam, and Ala P. D. R.) have above 13 percent f their territory contained by an arrangement of protected areas.

A fine approach to ensuring that the system of protected areas effectively preserves representative biodiversity is by securing the species that face the greatest danger of extinction globally. Endangered species worldwide are shielded best by targeting preservation investment to the sites in which they are prevalent; these areas are known as “ key biodiversity areas” (Kbps). More efforts towards the conservation of the Indo-Burma forests are currently in the making and there are many organizations and individuals that are eager to contribute.