

Endangered species in India

“The theory of evolution is quite rightly called the greatest unifying theory in biology.” (-Ernst Mayr). The world has indeed evolved quite a lot over the centuries, inhabiting millions of flora and fauna. The fertile grounds and environments gave rise to the species into what they are today, coming at the cost of numerous that had to taste extinction due to unfavorable conditions.

An organism that faces extinction is referred to as an endangered species. Their quantity in the scope of research is lesser than expected. These species are under-populated in ecosystems. The equilibrium of every ecosystem is withheld by the close interaction of all species present in it, and when the equilibrium is hampered, species within definitely take a toll. Needless to say, human actions are the cause of most of the flora and fauna becoming threatened.

Moreover, the causes of a species going endangered also extends to lack of habitat and genetic variation. Human activity is responsible for habitat loss as well. The habitats of native creatures are being reduced as a result of construction for residential, commercial, and agricultural purposes. Large portions of the woods are cut down for logging, construction, and cattle ranches, and indirect hazards to species may also emerge from development. It is the sad reality of the Indian Development cycle and agendas that in the name of Development we are losing behind on our core responsibilities as a human being. Time has told us that species whose habitats were substantially impacted by Indian industrialization have actually gone extinct, vertebrates are the biggest example for the same.

Another important factor is lack of genetic mutation. A species' genetic variation often increases with population size. Evidently, many species have lost genetic diversity. Taking an example of Asian cheetahs, there is a possibility that they may not have much genetic diversity. According to researchers, during the previous ice age, cheetahs underwent a protracted period of inbreeding. Cheetahs have extremely low genetic variety as a result and human actions cause genetic diversity to disappear. Taking another example, overfishing over the Indian coastal region has caused aquatic diversity to fall drastically.

India is known by all to be a diverse country, that's reflected in both its flora and fauna. It harbors numerous plant life, animals, mammals, and reptile species.

The endangered species of India include Asiatic Lions, Snow Leopards, Nilgiri Tahr, Bengal Tigers, One-horned rhinoceros, Blackbuck , blue whale banteng, Kashmiri purple Stag, central Kashmir vole; Sadly the list is quite long.

Approximately 650 Asiatic lions remain in the entire country. It is astonishing to know that 70% of the Bengal Tiger's entire population is in India. The species have become endangered as a result of frequent poaching incidents in India. Bengal tigers are said to be in abundance at Corbett National Park, yet the number is as less as only 2000. There are currently various locations in Kerala where the Nilgiri Tahr, a vulnerable species of mountain goat, is found. The species has also become endangered, like many others, as a result of persistent poaching and the lack of adequate natural habitats. There are so many examples that can be given to showcase the magnitude of this issue yet there is a lack of awareness.

In fact there are many plant species that face the risk of extinction due to loss of habitat caused by deforestation and because of their overuse in India. For example, red sandalwood, ebony, Assam katkin yew, Indian mallow, umbrella tree, spiderwort etc. These trees and plants are overused for a variety of reasons including their medicinal properties, durable wood, skin care etc.

The government has made a number of actions to conserve the country's endangered wild animal species and plant species which includes many acts such as Wildlife Protection Act, establishment of Wildlife Crime Control Bureau, National Parks, Sanctuaries, Conservation Reserves and Community Reserves etc.

It is our duty to be aware of the various steps that we can take to safeguard the flora and fauna of India.

- Control of pollution can have a much needed impact on animals, fish, and birds all around the country, providing them with a better habitat.
- Breeding programmes can be added to save the endangered species from extinction.
- Reintroducing the endangered animals to the wild as soon as their numbers increase.
- Acts that strengthen the controls on hunting and poaching can, pretty evidently, have staggering effects and desired rises in the number of the endangered animals.

Major Endemic species of India

Endemic species are the ones that are highly limited to local environments being found nowhere else in the world. As an example, Indian giant squirrel is an endemic species to the Indian flora and fauna, the Tasmanian tiger is one such animal that has become endemic to Australia, Tasmania and New Guinea. Also The Indian lions are indexed as endangered and discovered in and around Gir woodland national Park of Gujarat. Gujarat Lion is one of the five big cats that rule the Indian lands, others being the Bengal Tiger and Indian Leopards, Kashmir Stag additionally known as Hangul, is a species of elk local to India and located in dense riverine forests of Dachigam country wide Park, Kashmir Valley of Jammu & Kashmir and Chamba in Himachal Pradesh. Also the Lion Tailed Macaque is India's endangered primate species and additionally ranks as some of the rarest and most threatened monkeys, endemic to the Western Ghats of South India.

Now Let's observe the endemic species of India(fauna).

1.The Kashmir Stag is found in the dense forests of Dachigam National Park, Kashmir Valley and Chamba district, Himachal Pradesh.

2.Asian Lion is also known as the Indian Lion and can be only found in and around Gir Forest National Park of Gujarat.

3.The purple frog, also known as the Pignose frog, is only found in the rainforests of western ghats in India. It spends most of its life underground.

Many plant species(flora) of India are endemic to the country. Examples include Charophyta, Jungermannopsida, Marchantiopsida, Bryopsida etc.

India presents a very diverse ecosystem that conserves its natural and rare flora and fauna. Now we Indians should uphold a sense of duty which prevents us from performing acts that intentionally or unintentionally harms this vulnerably balanced ecosystem.

Role of individual in conservation of natural resources

Natural Resources are the most important assets to a country , they support a country's economy. Also a country's natural reserve which dictates its say in the major decision making and factors that run the world. We need to understand that the resources are much needed to be conserved and it has been noticed that the world is continuously making efforts for crunching down the dependence on natural resources for daily needs, On the other hand as the world works in a practical way, it has not been followed at the root level as it should.

Let's talk about some of the most important natural resources that we interact with in daily life and since they are present, we need to make sure that they are well preserved.

Much of the water that is being wasted is done in our daily household lives(cleaning in automatic washing machines, open taps while brushing, and taking a shower). One significant method of water usage is how much water one individual uses in one period, or per-capita water usage. This issue is commonly expressed as gallons of water used per person per day. Typically, our country supplies nearly 100 gallons of drink water per person per day. Out of the drinking water provided by open food organizations, only a minimalistic part is really used for consumption. Residential food consumers have most drinking water for different purposes, , e.g., bathroom flushing, washing, cooking, cleaning, and lawn watering.

Due to its unique traits, water is a critical resource and is used in many specific approaches. All living things want water to survive, therefore to save water we should spend adequate resources while doing daily needs such as brushing, shaving, washing, or taking a bath. Also investigation of pipes and toilets for water leaks should be done and repaired right away. Around 640 liters of water might be wasted in line with the month because of a tiny pinhole leak. Now speaking of agriculture, to boost irrigation effectiveness and reduce evaporation we should use drip irrigation and sprinkler irrigation. Also installing a simple gadget to collect rainwater and wasted water from

sinks, clothes washers, bathtubs, and different sources in order that it is able to be utilized to irrigate vegetation.

Similarly the major natural resources like soil, food and energy are getting wasted, Let's have a look at various roles through which a person can help in conservation of natural resources :

Conservation of energy:

1. transfer off mild, fan and other appliances whilst not in use.
2. Use a sun heater for cooking.
3. Dry the fabric in the sun mild as opposed to driers.
4. Use always pressure cookers
5. develop trees close to the house to get cool breeze in place of using AC and air cooler.
6. experience bicycle or just stroll as opposed to the usage of a scooter for quick distance.

Conservation of water:

1. Use minimum water for all home functions.
2. take a look at the water leaks in pipes and restore them well.
three. Reuse the soapy water, after washing clothes for the laundry courtyard, carpets etc.
4. Use drip irrigation.
5. Rain water harvesting gadgets should be installed in all of the houses.
6. Sewage remedy plants can be hooked up in all industries and group.
7. non-stop going for walks of water faucets ought to be avoided.
8. Watering of flora must be carried out inside the evening.

Conservation of soil:

1. grow distinct kinds of vegetation i.e trees, herbs and shrubs.
2. In the irrigation method, the usage of sturdy waft of water must be averted.
3. Soil erosion may be prevented by using sprinkling irrigation.

Conservation of meals resources:

- 1.cook required quantity of meals.
- 2.Don't waste the meals, give it to someone before spoiling it.
- 3.Don't save large amounts of meal grains and shield them from unfavorable insects.

Conservation of forest:

- 1.Use non wood products.
- 2.Plant extra bushes.
- 3.Grassing have to be controlled
- 4.Minimise the usage of paper and gas.
- 5.keep away from the development of dam, roads in wooded areas.

Equitable use of resources for sustainable development

Sustainable development is vital as it is the improvement that meets the current needs and which should not limit the future generations to fail their desires. There are multiple ways this can be achieved, but it is important to come up with a solution which offers stability, which can be evaluated on a regular basis and works toward the environmental, social and financial challenges that are prevailing.

There are a few important questions that are raised when discussing sustainable development. One such issue that keeps coming up is whether sustainable development puts too much emphasis on the future and compromises our immediate needs. To address these concerns, it is important to note that sustainable development does not always include identifying methods of operation that are beneficial for both the present and the future. Although we may need to adjust the way we live and work now, this does not imply that we will have a lower standard of living. Contrary to the posed issue, a sustainable development approach has a lot of short- to medium-term advantages. For instance: Choosing to walk or cycle for short distances instead of driving will help you save money, improve your health, and is frequently just as quick and convenient.

In the past 50 years, the consumption of aid in our society has accelerated many folds which has led to a big hole in the customer's life-style in both developed and developing countries. Urbanisation has modified the lifestyle of the middle-class population in growing nations thus leading to the usage of natural sources. It has been estimated that more economically developed countries represent 22% of worldwide's population however they use 88% of natural sources. These countries use 73% of energy sources and make 85% of earnings and in turn they contribute to a large proportion of pollutants. On the other hand, economically developed nations have moderate business growth and constitute 78% of world's population and use 12% of natural sources, 27% of strength and have only 15% of global earnings.

With the mentioned facts it is notable that there's a massive gap between the spectrum of countries' economic status. In this age of improvement the wealthy have become richer and the poor are becoming poorer. This has caused an increase in using unsustainable resources. Given that there is a growing worldwide situation about the management of natural sources, the solution to this hassle is to have a greater equitable distribution of assets and earnings. The major causes of increase in using unsustainable sources are overpopulation in less economically developed nations and over consumption of resources with the aid of rich nations. An international consensus needs to be reached for balanced distribution of natural assets.

For the equitable use of natural resources, more developed nations need to decrease their degree of usage to bare minimum in order that these resources can be shared by less developed nations to fulfill their needs. Time has come to assume that it's the need of the hour that the wealthy and poor must make equitable use of resources for sustainable improvement of mankind.