**UNIVERSITY OF CALCUTTA**

# REPORT ON CONSERVATION OF TIGER


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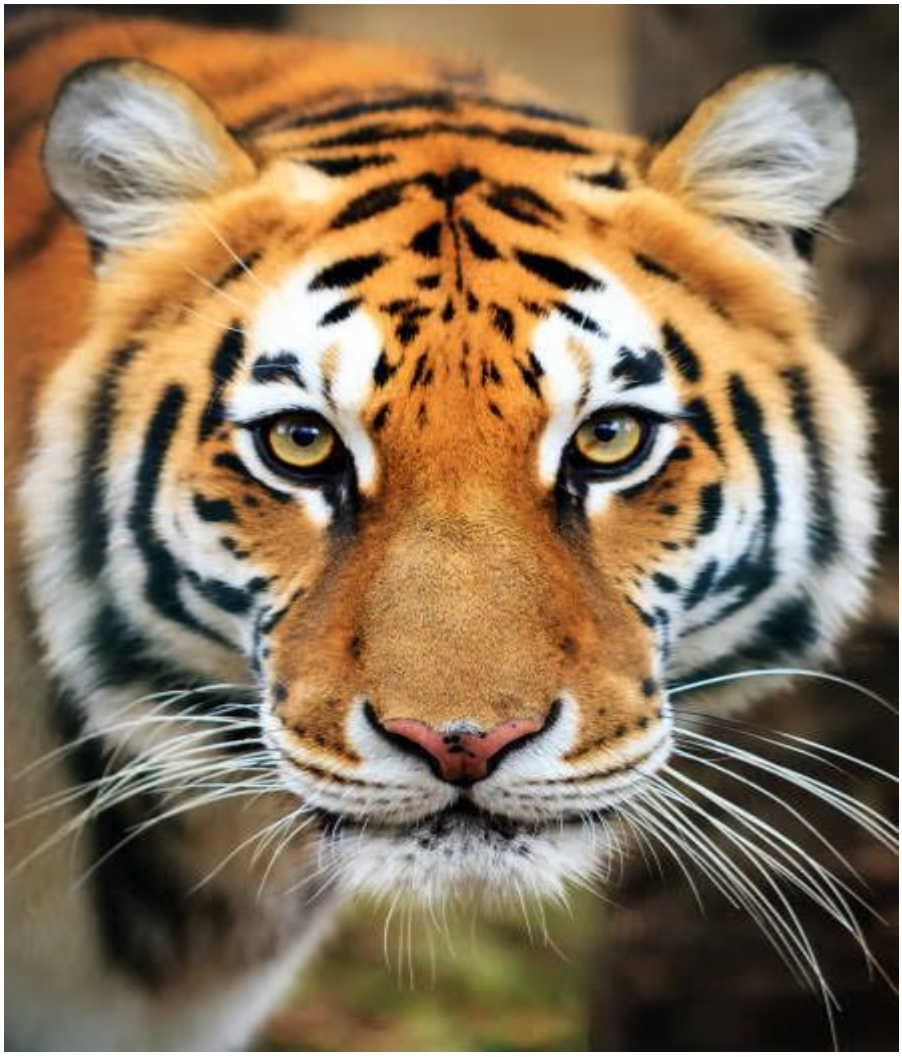


# ACKNOWLEDGMENT

I would like to express my special thanks to University of Calcutta and Dr.Indronil Kar ,the Principal of our college, Surendranath college for giving me this golden opportunity to do this wonderful project on the topic ”Report on the conservation of “Tiger” .I would also like to thank my mentor Dr. Manish Kanti Biswas and Dr.Subhadra Roy and other teachers of the department of Zoology.

I came to know a lot of new things during the course of this project.

Secondly, I would like to thank my parents and friends who have helped me a lot in finishing the project.

Thank you again to all those who helped me.

# INTRODUCTION

Tiger conservation in India represents an excellent case study of the many challenges facing conservation programs internationally. It is well understood that tigers are sensitive to human disturbances and large areas of habitat need to be protected for their conservation. Such protected areas in India are managed by the governments using an exclusionary approach. However, this approach is known to create several issues with local communities, including historical, legal, livelihood and management issues; with a volume of literature suggesting the inclusion of local communities in management. Yet, other evidence suggests that inclusion of communities in tiger conservation may lead to anthropogenic disturbances that can jeopardize tigers. The gravity of the situation is reflected in the recent disappearance of tigers from two key protected areas in India, the Sariska and Panna Tiger Reserves. Tigers are increasingly disappearing from the ecosystems where they evolved and the nation states in which they live. Their vast range in Asia has been reduced to a small number of isolated populations, they are hunted intensively for the trade in tiger parts, and the prey on which they depend is reduced throughout much of their range.

**COMMON NAME**- Tiger

**SCIENTIFIC NAME-** Panthera tigris

**SYSTEMATIC POSITION-** Kingdom- Animalia

Phylum- Chordata

Class- Mammalia

Order- Carnivore

Sub order- Feliformia

Family- Felidae

Sub family- Pantherinae

Genus- Panthera

Species- P.tigris

## CONSERVATION STATUS/IUCN CATEGORIES

The tiger is an iconic species. **Tiger conservation** attempts to prevent the animal from becoming extinct and preserving its natural habitat. This is one of the main objectives of the international animal conservation community. The Convention on International Trade in Endangered Species of Wild Fauna and Flora played a crucial role in improving international efforts for tiger conservation. At the International Union for Conservation of Nature and Natural Resources (IUCN) General Assembly meeting in Delhi in 1969, serious concern was voiced about the threat to several wildlife species, and the shrinkage of wilderness in India from poaching. In 1970, a national ban on tiger hunting was imposed, and in 1972 the Wildlife Protection Act came into force. The framework was then set to formulate a project for tiger conservation with an ecological approach.

## CHARACTERISTICS OF THE ANIMAL

## Morphological characteristics-

1. The tiger has a muscular body with powerful forelimbs, a large head and a tail that is about half the length of its body.
2. Its pelage is dense and heavy, and colouration varies between shades of orange and brown with white ventral areas and distinctive vertical black stripes that are unique in each individual
3. Stripes are likely advantageous for camouflage in vegetation such as long grass with strong vertical patterns of light and shade.
4. They have a mane-like heavy growth of fur around the neck and jaws and long whiskers, especially in males.
5. The pupils are circular with yellow irises. The small, rounded ears have a prominent white spot on the back, surrounded by black.

6. The tiger's skull is similar to a lion's skull, with the frontal region usually less depressed or flattened, and a slightly longer postorbital region.
7. The tiger has fairly stout teeth; its somewhat curved canines are the longest among living felids with a crown height of up to 90 mm
8. **Size**- Generally, males vary in total length from 250 to 390 cm (8.2 to 12.8 ft) and weigh between 90 and 300 kg (200 and 660 lb) with skull length ranging from 316 to 383 mm (12.4 to 15.1 in). Females vary in total length from 200 to 275 cm (6.56 to 9.02 ft), weight 65 to 167 kg (143 to 36

   with skull length ranging from 268 to 318 mm (0.879 to 1.043 ft). In either sex, the tail represents about 0.6 to 1.1 m (24 to 43 in) of the total length.
9. **Colour variations**- There are three colour variants – white, golden and stripless snow white – that now rarely occur in the wild due to the reduction of wild tiger populations, but continue in captive populations. The white tiger has white fur and sepia brown stripes. The golden tiger has a pale golden pelage with a blond tone and reddish-brown stripes. The snow white tiger is a morph with extremely faint stripes and a pale reddish-brown ringed tail. Both snow white and golden tigers are homozygous for CORIN gene mutations. A black tiger is a colour variant due to pseudo-melanism. They have thick stripes close together so that the background colour is barely visible between stripes.

## Behaviour characters

The tiger is a long-ranging species, and individuals disperse over distances of up to 650 km (400 mi) to reach tiger populations in other areas.

Adult tigers lead largely solitary lives. They establish and maintain territories but have much wider home ranges within which they roam. Resident adults of either sex generally confine their movements to their home ranges, within which they satisfy their needs and those of their growing cubs.

Young female tigers establish their first territories close to their mother's. The overlap between the female and her mother's territory reduces with time. Males, however, migrate further than their female counterparts and set out at a younger age to mark out their own area.

A young male acquires territory either by seeking out an area devoid of other male tigers, or by living as a transient in another male's territory until he is older and strong enough to challenge the resident male. Young males seeking to establish themselves thereby comprise the highest mortality rate (30–35% per year) amongst adult tigers.

Occasionally, male tigers participate in raising cubs, usually their own, but this is extremely rare and not always well understood. In May 2015, Amur tigers were photographed by camera traps in the Sikhote-Alin Bioshpere Reserve. The photos show a male Amur tiger pass by, followed by a female and three cubs within the span of about two minutes.

Male tigers are generally more intolerant of other males within their territories than females are of other females.

Fig: Tigers are comfortable in water

Fig: Tiger scent marking its territory

## Hunting

Tigers are thought to be mainly nocturnal predators, but in areas where humans are absent, remote-controlled, hidden camera traps recorded them hunting in daylight. They generally hunt alone and ambush their prey as most other cats do, overpowering them from any angle, using their body size and strength to knock the prey off balance.

When hunting larger animals, tigers prefer to bite the throat and use their powerful forelimbs to hold onto the prey, often simultaneously wrestling it to the ground. The tiger remains latched onto the neck until it target dies of strangulation. By this method, gaurs and water buffaloes weighing over a ton have been killed by tigers weighing about a sixth as much.

Although they can kill healthy adults, tigers often select the calves or infirm of very large species Healthy adult prey of this type can be dangerous to tackle, as long, strong horns, legs and tusks are all potentially fatal to the tiger.

## Feeding

The wild, tigers mostly feed on large and medium-sized mammals, particularly ungulates weighing 60–250 kg (130–550 lb). Range-wide, sambar deer, wapiti, barasingha and wild boar are significantly preferred.

Tigers are capable of taking down larger prey like adult gaur but will also opportunistically eat much smaller prey, such as monkeys, peafowl and other ground-based birds, hares, porcupines, and fish. They also prey on other predators, including dogs, leopards, pythons, bears, and crocodiles.

Tigers generally do not prey on fully grown adult Asian elephants and Indian rhinoceros but incidents have been reported. More often, it is the more vulnerable small calves that are taken. When in close proximity to humans, tigers will also sometimes prey on such domestic livestock as cattle, horses, and donkeys. Although almost exclusively carnivorous, tigers will occasionally eat vegetation for dietary fibre such as fruit of the slow match tree.

Fig: Bengal tiger attacking a Sambar

Fig: Bengal tiger subduing an Indian boar

## Enemies and competition

Tigers usually prefer to eat prey they have caught themselves, but may eat carrion in times of scarcity and may even pirate prey from other large carnivores. Although predators typically avoid one another, if a prey item is under dispute or a serious competitor is encountered, displays of aggression are common. If these are not sufficient, the conflicts may turn violent; tigers may kill competitors as leopards, dholes, striped hyenas, wolves, bears, pythons, and mugger crocodiles on occasion. Tigers may also prey on these competitors. Attacks on smaller predators, such as badgers, lynxes, and foxes, are almost certainly predatory. Crocodiles, bears, and large packs of dholes may win conflicts against tigers and, in the cases of crocodiles and bears, even can kill them. The considerably smaller leopard avoids competition from tigers by hunting at different times of the day and hunting different prey.

## Reproduction

The tiger mates all year round, but most cubs are born between March and June, with a second peak in September. Gestation ranges from 93 to 114 days, with an average of 103 to 105 days.

A female is only receptive for three to six days. Mating is frequent and noisy during that time. The female gives birth in a sheltered location such as in tall grass, in a dense thicket, cave or rocky crevice.

The father generally takes no part in rearing. Litters consist of two or three cubs, rarely as many as six. Cubs weigh from 780 to 1,600 g (1.72 to 3.53 lb) each at birth, and are born with eyes closed. They open their eyes when they are six to 14 days old. Their milk teeth break through at the age of about two weeks. They start to eat meat at the age of eight weeks. At around this time, females usually shift them to a new den. They make short ventures with their mother, although they do not travel with her as she roams her territory until they are older. Females lactate for five to six months. Around the time they are weaned, they start to accompany their mother on territorial walks and are taught how to hunt.

A dominant cub emerges in most litters, usually a male. The dominant cub is more active than its siblings and takes the lead in their play, eventually leaving its mother and becoming independent earlier. The cubs start hunting on their own earliest at the age of 11 months, and become independent around 18 to 20 months of age. They separate from their mother at the age of two to two and a half years, but continue to grow until the age of five years. Young females reach sexual maturity at three to four years, whereas males at four to five years.A dominant cub emerges in most litters, usually a male.

Fig: Tiger's family

## Habitats

The tiger is essentially associated with forest habitats. Tiger populations thrive where populations of wild cervids, bovids and suids are stable.

An animals habitat is the area in which it would naturally choose to live. Generally, each species will have a fairly specific habitat that displays certain characteristics and boasts particular features that cater to that animals needs.

Tigers can live in a wide range of habitats, and are commonly found in:

.Evergreen forests
.Mangrove swamps
.Tropical rainforests

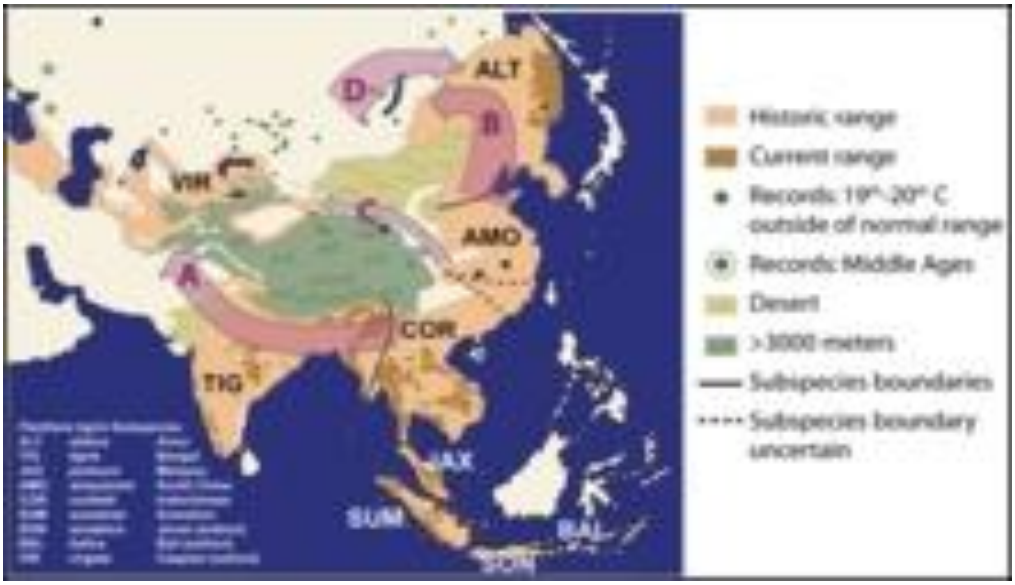
.Savannahs
.Grasslands
.Rocky mountains

The ideal habitat needs to fulfil three main requirements for the animal. There needs to be 1) shelter, 2) food and 3) water.

Tigers require shelter to remain concealed from potential prey as they stalk their victim and threats (which are, usually, from human sources), as well as for protection when the female has cubs. Food comes in the form of prey, for which the tiger spends much of its life hunting. When there is interference with the population numbers of the prey, the tigers lives are in serious danger. In terms of water, there needs to be enough to sustain the tigers themselves as well as their prey. They are also susceptible to high temperatures and enjoy cooling down in refreshing water. They are excellent swimmers and can pursue their prey into relatively deep water.

# Distribution:

The tiger historically ranged from eastern Turkey and Transcaucasia to the coast of the Sea of Japan, and from South Asia across Southeast Asia to the Indonesian islands of Sumatra, Java and Bali.[50] Since the end of the last glacial period, it was probably restricted by periods of deep snow lasting longer than six months. Currently, it occurs in less than 6% of its historical range, as it has been extirpated from Southwest and Central Asia, large parts of Southeast and East Asia. It now mainly occurs in the Indian subcontinent, the Indochinese Peninsula, Sumatra and the Russian Far East. In China and Myanmar, breeding populations appear to rely on immigration from neighbouring countries while its status in the Korean Peninsula is unknown.




# Tiger Conservation:

The tiger is an iconic species. Tiger conservation attempts to prevent the animal from becoming extinct and preserving its natural habitat. This is one of the main objectives of the international animal conservation community. The Convention on International Trade in Endangered Species of Wild Fauna and Flora has played a crucial role in improving international efforts for tiger conservation.

For example, in the 16 reserves of Madhya Pradesh, Rajasthan, Maharashtra and Chhattisgarh there may be only 490 tigers – a 60% reduction from the 1,233 tigers previously estimated for these areas in 2002. Indeed, the same 2002 survey had claimed that in total, India had 3,500 tigers, whilst the new survey claims that just 1,400 remain.Wildlife resources constitute vital link in the survival of the human species and have been a subject of much fascination, interest, and research all over the world. Today when wildlife habitats are under severe pressure and a large number of species of wild fauna have become endangered, the effective conservation of wild animals is of great significance. Because every one of us depends on plants and animals for all vital components of our welfare, it is more than a matter of convenience that they continue to exist; it is a matter of life and death. Being living units of the ecosystem, plants and animals contribute to human welfare by providing-

- MATERIAL BENEFIT OF HUMAN LIFE.
- KNOWLEDGE ABOUT GENETIC RESOURACES AND THEIR PRESERVATION AND.
- SIGNIFICANT CONTRIBUTIONS TO THE ENJOYMENT OF LIFE

Our tiger conservation experiences are located in protected national parks in India. These are some of the most important areas in the world for tiger conservation and protection, as they provide a safe haven in which the tigers can live freely. Populations of these big cats have been declining for a century as they compete with growing human populations for habitat space, which is a serious concern when you consider that tigers are solitary animals and claim large territories. This pressure exists alongside relentless poaching, conflict with humans and the demand for their bones as an ingredient in Chinese medicine.

# MERITS OF TIGER CONSERVATION:

From the world's largest mangrove forests in the Sundarbans to temperate forests in the snowy mountains of Bhutan, protecting tigers and their natural homes helps provide benefits for thousands of other animals and millions of people.

## Saving tigers is equivalent to conserving the Ecosystem

Tiger is a symbol of wilderness and well-being of the ecosystem. By conserving and saving tigers the entire wilderness ecosystem is conserved. In nature, barring human beings and their domesticates, the rest of the ecosystem is wild. Hence conserving wilderness is important and crucial to maintain the life support system. So saving a tiger amounts to saving the ecosystem which is crucial for man's own survival.Tigers play a pivotal role in the health of the ecosystem.

## Saving tigers in their biggest home is not just a moral call—it has immense economic value

A comprehensive study by the Indian Institute of Forest Management, Bhopal, conducted in two phases over five years, has attempted to put an economic valuation to 16 tiger reserves in India. The second part of the study, released recently, showed that just ten tiger reserves ensure flow of economic benefits worth up to Rs 16,202 crore every year. Not just that, these reserves also conserve "enormous stock" of timber Ecosystem It is valued up to Rs 96,745 crore.

## Forest-

The presence and promise of tigers motivate governments to help protect Asia's forests. Forest

trees and other plants soak up carbon dioxide—a heat-trapping greenhouse gas contributing to the warming of the planet—and store it as they grow. Safeguarding tiger landscapes could protect the last remaining forests critical for this carbon storage, helping mitigate climate change.

## Other wildlife-

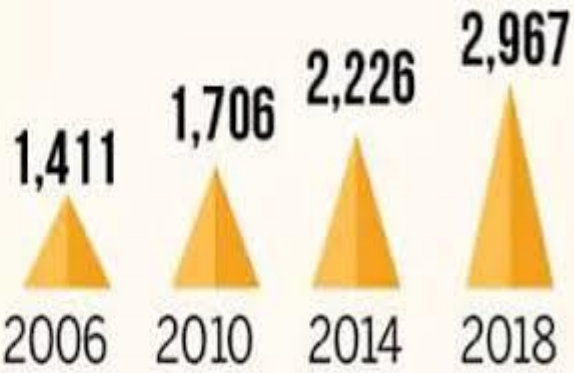
Tiger habitats are home to far more animals than just the iconic big cat. More than 30% of Asian elephant populations live within tiger landscapes, including in Bhutan, India, Indonesia, Malaysia, Myanmar, Nepal, and Thailand. That means protecting tiger habitats is important for elephants, too. And all Sumatran rhinos and Sumatran orangutans—both critically endangered—live within the tiger's range.India's national animal – TIGER

## The Existence of the national amimal

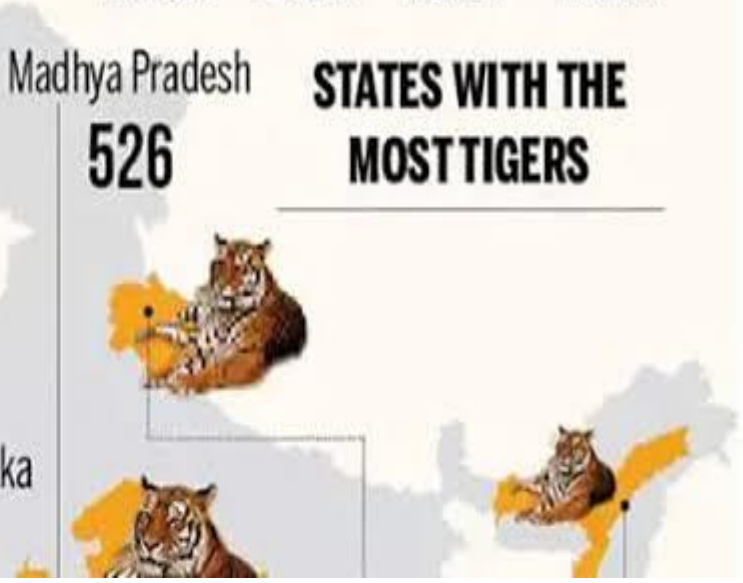
Tigers occupy an important place in the Indian culture. Since ages, it has been the symbol of magnificence, power, beauty and fierceness and has been associated with bravery and valor. The tiger also has a significant place in Hindu mythology as the vehicle of Goddess Durga. So conservation of tigers helps to keep the existence of national animals.

# THE ROAR IS BACK

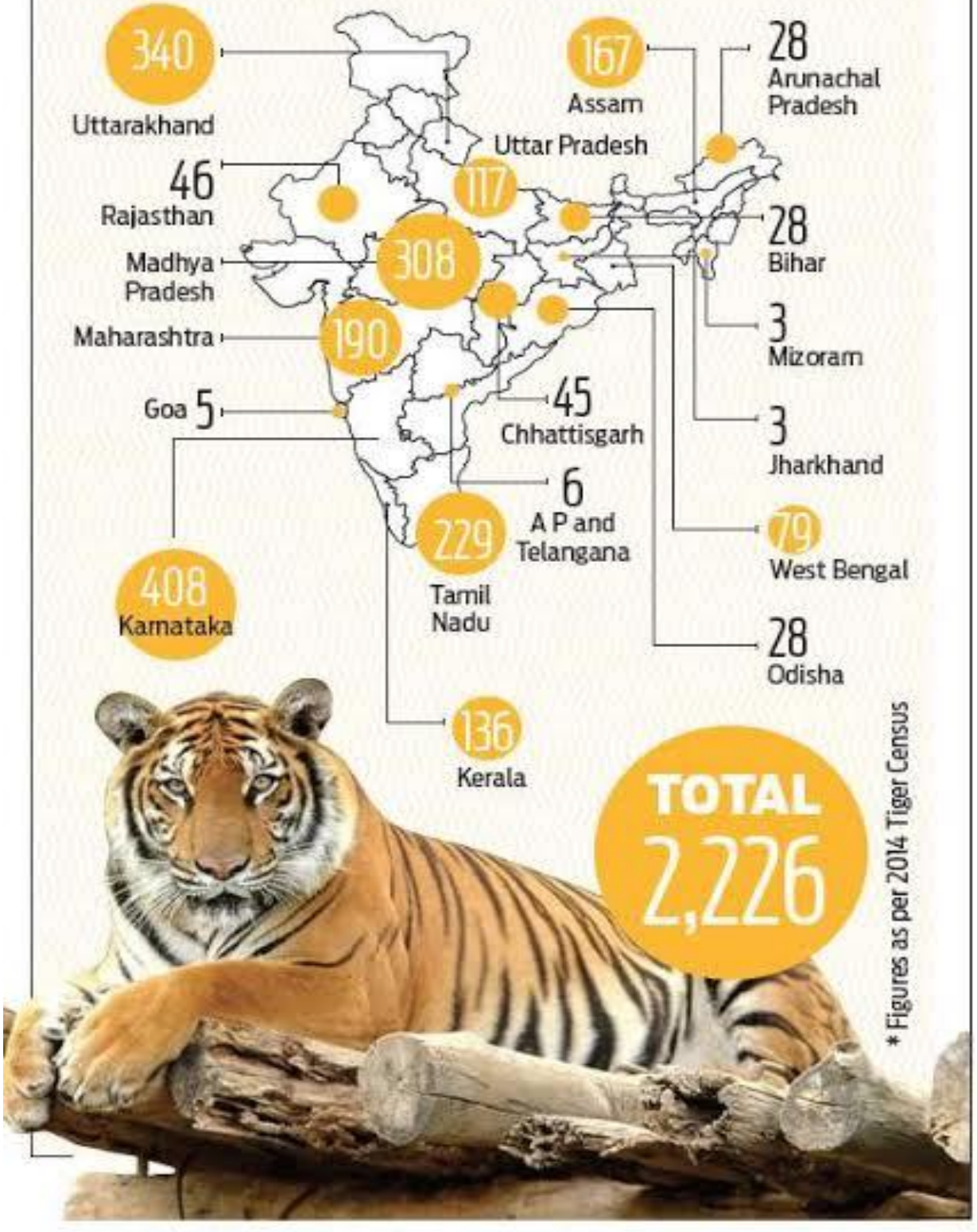
## INCREASING TIGER NUMBERS

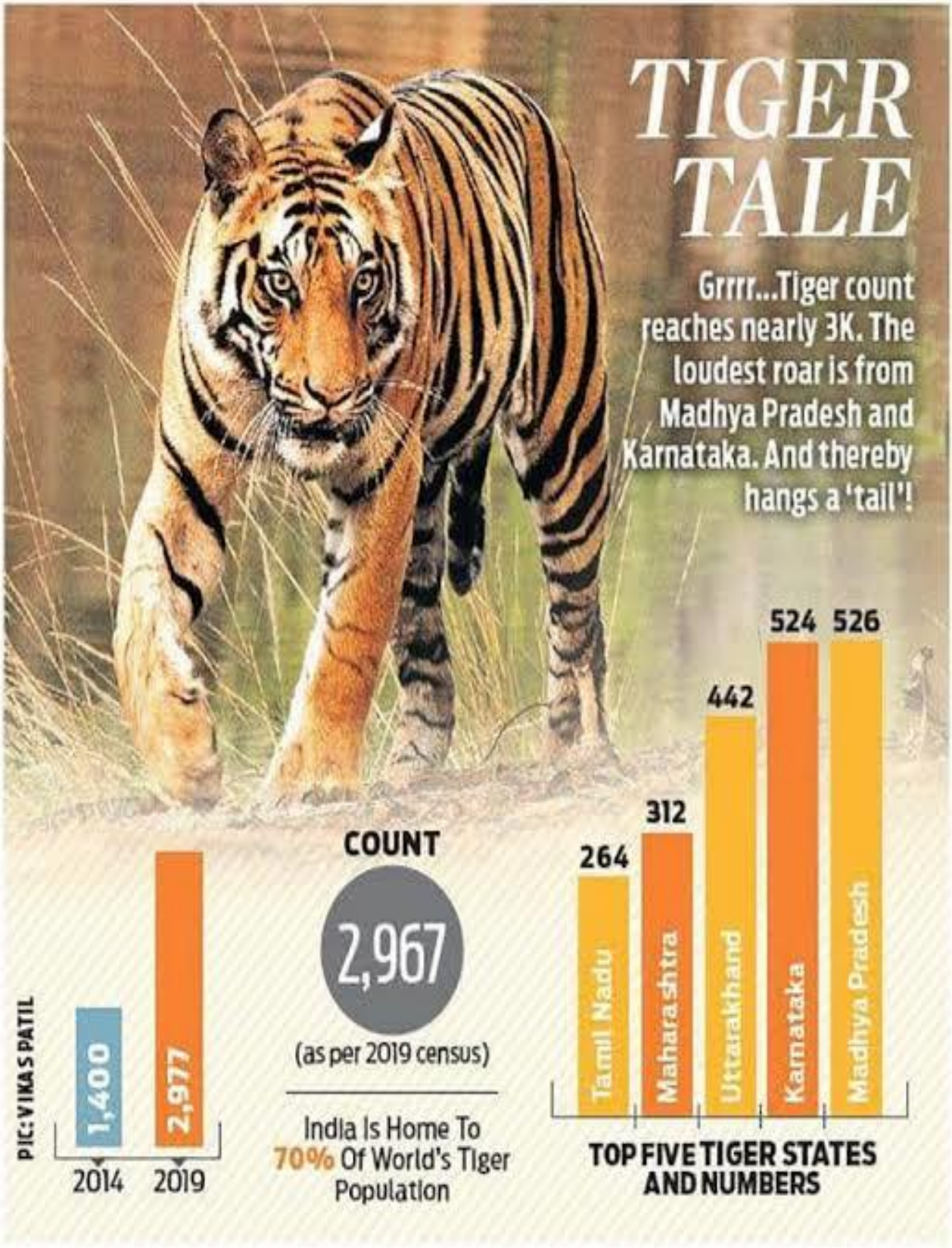



## STATES WITH THE MOST TIGERS



# TIGER POPULATION ACROSS INDIA




TIGER TALE
Grrrr...Tiger count reaches nearly 3K. The loudest roar is from Madhya Pradesh and Karnataka. And thereby hangs a 'tail'!
PIC: VIKAS PATIL
1,400
2,977
2014
2019
COUNT
2,967
(as per 2019 census)
India Is Home To 70% Of World's Tiger Population
264
312
442
524
526
Tamil Nadu
Maharashtra
Uttarakhand
Karnataka
Madhya Pradesh
TOP FIVE TIGER STATES AND NUMBERS

# MAN ANIMAL CONFLICT

Man-animal conflict is a major factor that affects the big cats. As humans move deeper into the

territory of tigers, chances of conflict between both sides increase many fold.

Tiger stray out of their natural habitat in the adjoining human habitations, attack domestic

animals and sometimes people. On the other hand, tigers are also killed by angry villagers in

retaliation.

Possibly Most of the tiger attacks on people occur in Sundarbans, where collecting honey,

fuel wood, timber or other raw materials or white fishing.

The main growth in tiger numbers between the last two census exercises (1411 tigers in 2006 and

1706 in 2010) has taken place around well-protected tiger reserves which are close to their

holding limit for the large predators. This means striped cats are increasingly moving closer to human populations, increasing the chances of conflict and harm to all concerned—the tigers,

humans and the livestock.

# PROBLEMS RELATED TO CONSERVATION

Though the tiger conservation had great impacts and was mostly successful, certain things in the

conservation that caused problems and turned out to be a challenge for the plan wereat least 50% of the Tiger Reserves were facing threat from infrastructure like highways,

railway lines, etc. Other threats in the report were poaching, biotic pressure, human interference,

lack of forest staff, hunting, mining, pollution, climate change and improper disposal of garbage.

The growth rate of poaching is at pace with the growth rate of the tiger population. Between

2007 and 2016, 342 tigers were killed; between 2007 and 2011, 118 tigers were killed; between

2011 and 2014, 88 tigers were killed; 9 between 2014 and 2017 and around 130 between 2014

and 2018More than 400 tigers have been killed by poachers between 2008 and 2018 alone.

Around 100 tigers were killed in 2018 due to poisoning, electrocution and other human

interventions.

The state government relies on the central government for its fund which has led to a rise in

the dismissal of management.Tiger conservation plan is a centrally sponsored scheme and so

even though the guidelines issued by the central government seem like the ground reality, it mostly depends on the state government and how they handle the same.

# HOW ENDANGERED ARE TIGERS:

Conservation efforts in recent years mean that tiger numbers are on the rise, but they are certainly not out of the woods yet. Current tiger populations are extremely difficult to calculate as their habitat is so fragmented, but the cats are classified as endangered.

The conservation of tigers is not just about increasing their numbers as more tigers require more habitat, which is becoming less and less available each day. It is important that tiger populations stop dwindling, and habitat stops being lost.

# REASONS WHY TIGER ARE ENDANGERED:

Did you know that tigers are currently critically endangered? In the last 100 years the number of tigers in the wild has decreased by over 97%, and today there are fewer than 3,000 tigers that remain.

## Poaching and Illegal Trade of Tiger Parts

The main reason behind the decimation of the tiger population is poaching. Throughout the world, tigers are endangered because they are hunted down for their pelts, meat, and body parts.

Unfortunately there is a large consumer demand for tiger products and it comes in many forms. Some of the most common are tiger bone wine, tiger penis soup, tiger bone powder, and other traditional remedies.
Over the years many captive breeding tiger farms have been established to cater to that demand, especially in Asia. However these farms have not reduced the number of wild tigers that are poached. Instead, they have fueled consumer demand for tiger products, and increased poaching rates.
Although many countries have declared the trade of tiger parts illegal, not all have done so. In fact legal tiger farms often end up being the perfect guise for illegally poached tiger parts to be sold.

With the way things are now, there is no way for the tiger population to sustain the losses from poaching and continue to exist in the wild.

## Habitat Loss

Out of the nine tiger sub-species across the world, almost all are endangered – and many are critically endangered. In fact, the Caspian Tiger, Bengal Tiger, and Bali Tiger are already extinct. Similarly, the Sumatran Tiger, Malayan Tiger, and South China Tiger are critically endangered, and will probably not survive for much longer.
Scientists have extrapolated that if the tiger population continues to diminish at its current rate, it is unlikely to survive the next ten years. To change that drastic action will be needed to stem poaching and the destruction of their natural habitat.

If unsuccessful, we may very well end up seeing the last known tiger in our lifetime before they disappear from our planet completely.


# TIGER PROJECT

As the number of tigers is decreasing day by day, we need to take preventive measures to save them from getting extinct. Numerous efforts are being carried out to save their species, and Project Tiger is an important movement aimed at the Wildlife conservation of tiger in India. Many conservation areas were created to make sure that no human could enter the area and do any harm to the tiger or its habitat. Project Tiger was first initiated in the year April 1, 1973, and is still going on.

This project was started to save tigers. The much-needed project was launched in Jim Corbett National Park, Uttrakhand under the leadership of Indira Gandhi. The objectives of the Project Tiger was clear- saving Royal Bengal Tigers from getting extinct.

There are around fifty national parks and sanctuaries that are involved in this project.

Jim Corbett, Bandipur, Ranthambore, Nagarhole, Nazgira, Dudhwa, Gir, Kanha, Sunderbans, Bandhavgarh, Manas, Panna, Melghat, Palamau, Similipal, Periyar, Sariska, Buxa, Indravati, Namdapha, Mundanthurai, Valmiki, Pench, Tadoba Andhari, Dampa, Bhadra, Pench (Maharashtra), Pakke, Nameri, Satpura, Anamalai, Udanti- Sitanadi, Satkosia, Kaziranga, Achanakmar, Dandeli Anshi, Sanjay- Dubri, Mudumalai, Nagarhole (Karnataka), Parambikulam, Sahyadri, Bilgiri, Kawal, Sathyamangalam, Mukandra, Srisailam, Amrabad, Pilibhit, Bor, Rajaji, Orang and Kamlang are the national parks in India involved in the Project Tiger.

## The success of project tiger :

The journey of increasing tiger population has not been easy. Around the 1970s the tiger count was only one thousand and two hundred, but according to the recent census, it has increased to five thousand. In fact, there has been a thirty per cent rise in the population in the last eight years. This says a lot about the efforts put in by the government and the national parks. From turning hunting grounds to tiger reserves, India has shown its magic of conserving wildlife in general. They have also updated the acts regarding forest and wildlife. Any kind of illegal trading of animals has been banned.

Human interference in any of the reserves and forests is not allowed. A proper habitat has been created for the Tigers to hunt, live and survive. The world has recognised this project as the ‘Most successful project’.

## Controversis and problem of tiger project :

Project Tiger's efforts were hampered by poaching, as well as debacles and irregularities in Sariska and Namdapha, both of which were reported extensively in the Indian media. The Forest Rights Act passed by the Indian government in 2006 recognizes the rights of some forest dwelling communities in forest areas. This has led to controversy over implications of such recognition for tiger conservation. Some have argued that this is problematic as it will increase conflict and opportunities for poaching; some also assert that "tigers and humans cannot co-exist".[9][10] Others argue that this is a limited perspective that overlooks the reality of human-tiger coexistence and the role of abuse of power by authorities, rather than local people, in the tiger crisis. This position was supported by the Government of India's Tiger Task Force, and is also taken by some forest dwellers' organizations.

# TIGER PROTECTION

Multiple thriving populations of tigers across their range and in all the habitats in which they are found. To ensure a world with healthy populations of wild tigers, we strive to stop the killing and trafficking of tigers. Key strategies:

- Protect tigers and their habitat.
- Build capacity in range states.
- Reduce human-tiger conflict.
- Conduct scientific research on tigers to help inform conservation strategies.
- Promote tiger-friendly policies.
- Monitor tiger numbers, population trends, and threats to tigers and their habitats.

## PROTECTING TIGERS AND THEIR HABITAT

WCS provides key technical support to local governments regarding tigers that assists in the creation and expansion of dozens of protected areas (PAs) across Asia, thereby protecting thousands of square kilometers of tiger habitat. In addition, WCS provides technical support and intelligence to park rangers and local enforcement agencies that enables the capture of hundreds of illegal poachers and traffickers of tigers and their prey.

## CONDUCTING SCIENTIFIC RESEARCH ON TIGERS TO HELP INFORM CONSERVATION STRATEGIES

WCS scientists collaborate with both the world's leading wildlife statisticians and local governments to create incisive, impactful tiger science, such as writing the manual on tiger and prey population monitoring that is used across all tiger range states in Asia.

## HUMAN-TIGER CONFLICT MITIGATION

Tigers are dangerous animals that can kill domestic livestock and even humans. Furthermore, such conflict can erode public support for tigers. Wherever tigers become embroiled in serious conflict with humans, WCS operates human-tiger conflict mitigation teams that demonstrably and dramatically reduce damages to both tigers and humans

# FUTURE PROSPECT

# ON TIGER CONSERVATION

# IN INDIA:

Tiger population in India in 2019 stands at 2967 individuals.

That is an increase of 33% from the last tiger Census which declared India's tiger population at 2226 individuals.

For better future of the tiger in India, Awareness, Funding, Methodology, Staffing, and Technology advancements have resulted in a wider area covered, and a more precise count than in previous estimates.

Wildlife protection and crime risk management in the present scenario requires a widely distributed 'Information Network', using state-of-the-art information and communication technology. This becomes all the more important to ensure the desired level of protection in field formations to safeguard the impressive gains of a focused project like 'Project Tiger'. The important elements in Wildlife protection and control are: Mapping/Plot (graphics)plotting the relative spatial abundance of wild animals, identification of risk factors, proximity to risk factors, 'sensitivity categorization', 'crime mapping' and immediate action for apprehending the offenders based on effective networking and communication.

Mapping , data acquisition and GIS modeling

Field data collection and validation

Data Maintenance , Dissemination and Use

The following potential tiger habitats in the country are being covered:

Shivalik-Terai Conservation Unit (Uttaranchal, UP, Bihar, West Bengal, Nepal)

North east Conservation Unit

Sundarbans Conservation Unit

Central Indian Conservation Unit

Eastern Ghat Conservation Unit

Western Ghat Conservation Unit

WWF [World Wildlife Fund] has set a goal to double the global tiger population as follows.

Feasibility studies have shown that the world population of 6000 tiger across various subspecies is possible and that this is a goal that can be achieved.

• It aims to drive political momentum to get governments on board to continue supporting the aims to protect the tiger.

• Aims at increasing professionalism in in Wildlife Protection through training Rangers, Developing Conservation Standards and Improve Technology to achieve Zero Poaching

• Efforts of education, research and implementation in key tiger landscapes is key – with the increasing human pressures around critical tiger habitat and key corridors.

• Mitigating human-animal conflict and ensuring enough space for both, man and animal

India plans to add ten more tiger reserves:

With a 30 per cent increase in its tiger population as a result of its conservation efforts, India plans to add ten more tiger reserves to the existing 49, a senior Indian official has said.

Future activities Conservation of tigers and their prey species faces challenges from the need for income, lack of awareness, and lack of land use policy in landscapes having Tiger Reserves.

These landscapes should be viewed as a mosaic of different land use patterns, viz, tiger conservation and preservation, forestry, sustainable use and development, besides socio economic growth.


BECAUSE
OUR
NATIONAL
ANIMAL
DESERVES
ITS NATION'S
SUPPORT
WANTED ALIVE!
HELP SAVE OUR BIG CATS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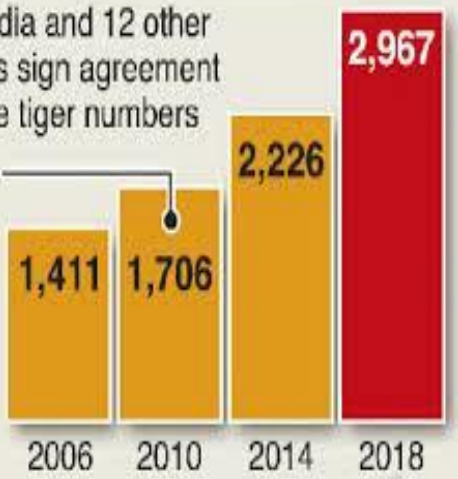
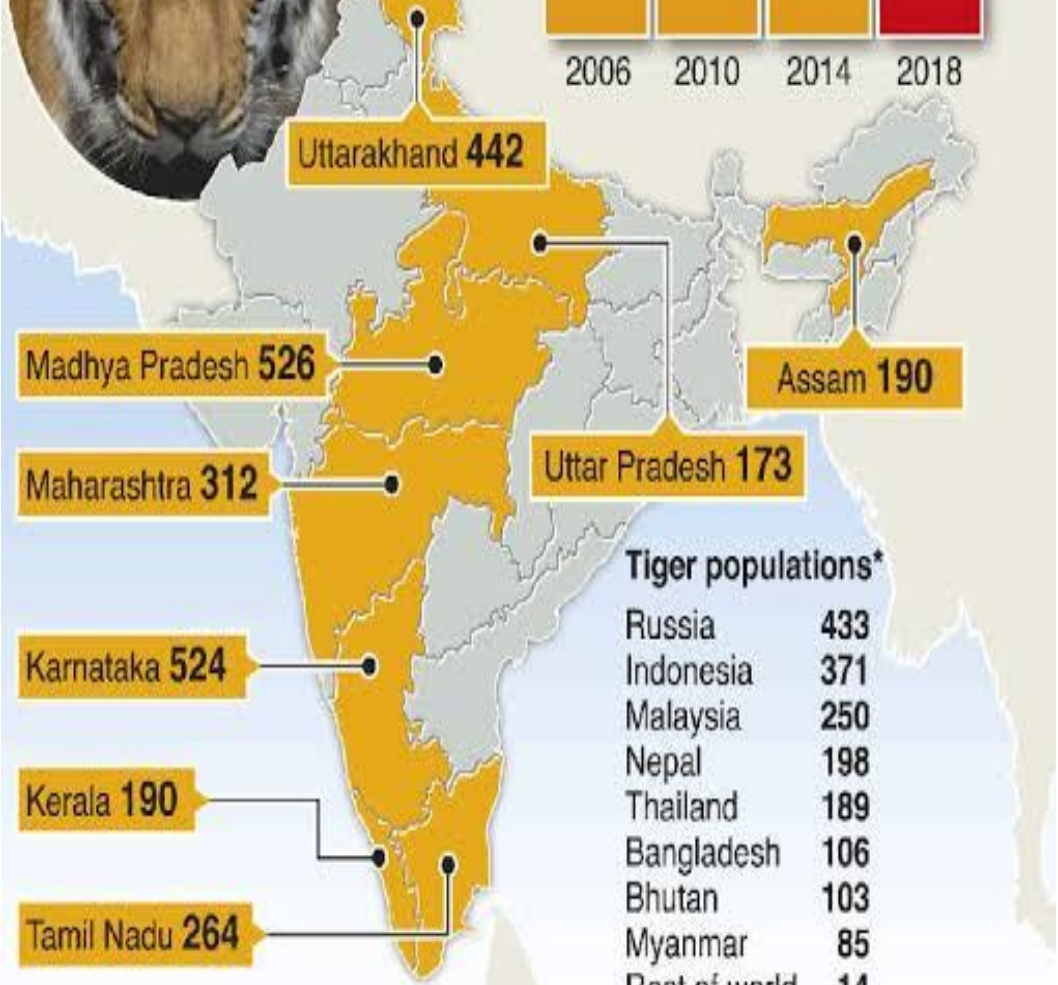
# India is home to 2,967 tigers

**The total number of tigers in India stands at 2,967, or more than 70 percent of the wild tigers that inhabit the world, according to the All India Tiger Estimation Report for 2018**

**India's tigers** *(states with highest populations)*

**2010:** India and 12 other countries sign agreement to double tiger numbers by 2022




**Tiger populations***

| | |
|---|---|
| Russia | 433 |
| Indonesia | 371 |
| Malaysia | 250 |
| Nepal | 198 |
| Thailand | 189 |
| Bangladesh | 106 |
| Bhutan | 103 |
| Myanmar | 85 |
| Rest of world | 14 |

*Global populations 2016, Myanmar 2010

Source: All India Tiger Estimation Report

Picture: Getty Images

# CONCLUSIONS

In spite of all odds, Project Tiger was a pioneering effort of a unique kind and is undoubted1y one of the most successful initiatives to conserve the dwindling tiger population of this country. This is basically an ecosystem based conservation project, where optimum presence of tiger indicates that the complex ecosystem is in its prime health. Tiger is an apex predator. So, population of all wild herbivores will also have to be increased in the project areas to sustain a healthy population of tigers. A Viable tiger population in a habitat, indicates the presence of a good prey base, which in turn will only sustain if‘ there is healthy and undisturbed forest vegetation. Project Tiger thus had shown how a mega species could be used to create support for conservation of diverse and representative ecosystems, along with its faunal anti floral diversity water, soil and wilderness.

# REFERENCE

**have gathered information from different books and websites from google like**

**search engines to do my project work. Those are given below:**


**----**

**----https://www.insideindianjungles.com/project-tiger**

**----www.worldwildlife.org**

**----https://www.ourbeautifulplanet.org/animals/reasons-why-tigers-are-endangered**

**----www.conservationindia.org**

**----www.savewildtigers.org**

**----www.sanctuarynaturefoundation.**

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