

# Current Affairs

## UPSC Prelims 2024

**LECTURE-16**

**By Kinshuk Sir**





**Most Trusted Learning Platform**

**CURRENT AFFAIRS  
DISCUSSION**

## ❖ India Nepal Territorial Issue

- **Context:** Nepal's cabinet last week decided to put a map on its Rs 100 currency note showing certain areas administered by India in Uttarakhand as part of its territory
- **What is the issue all about?**
- **The territorial dispute is about a 372-sq-km area that includes Limpiadhura, Lipulekh, and Kalapani at the India-Nepal-China trijunction in Uttarakhand's Pithoragarh district.**
- **Nepal has claimed for long that these areas belong to it both historically and evidently.**







*Trijunction  
of India-Nepal-China*

*2020*

*3725 km*

*1962*

*Indo-china*

### ❖ India Nepal Territorial Issue

- **The Treaty of Sugauli at the end of the Anglo-Nepalese War of 1814-16 resulted in Nepal losing a chunk of territory to the East India Company.**
- **Article 5 of the treaty took away the jurisdiction of Nepal's rulers over the land to the east of the Kali River.**
- **The last map issued by the British before they left India in 1947 showed the initial position of the Kali River originating in Limpiadhura**
- **The map was adopted by consensus in Nepal's Parliament four years ago**



→ Smuggling

2022-23  
\$9 bn

⇒ Trade imbalance

\$8.65 bn  
Export from  
India.

→ Investment in Nepal.

India  $\frac{1}{3}$ rd of total Investment ⇒ China has more investment than India.

# Ind Nep

Old

vs

New

- Transit for a  
Almost all trade
- Essential supplies

China is investing  
in infra dev for  
Connectivity with china

- deal with china  
for supply of essential  
goods.

Soft power

Old

vs

New

→ Civilizational ties

→ Cultural similarity

→ Family relations across border

→ They are viewing India as having "Big Brother" attitude.  
→ quite much Interference in domestic politics.

# Significance

→ Managing China

→ Strategic location

→ Regional Integration. in South Asia

## ❖ India Nepal Territorial Issue

- Nepal's Boundary Dispute with China
- Nepal sorted out its boundary issues with China in the early 1960s through bilateral meetings of the boundary commission.
- Nepal's former Prime Minister Kirtinidhi Bista had once quoted his Chinese counterpart Chou En-lai as saying that border issues, if left unresolved, turn into problems for the future generations that are difficult to address.

→ 1962 → gifted to India

→ 1998 ↔ 2020

→ 2019-20 ⇒ Nepal included 3 areas in their map

→ 2024 → Currency Note.

## ❖ **India Nepal Territorial Issue**

- **Glimpse of India-Nepal Relations**
- **India remains Nepal's largest trade partner, with bilateral trade crossing US\$ 7 billion in FY 2019-20. India provides transit for almost the entire third country trade of Nepal.**
- **Indian firms are among the largest investors in Nepal, accounting for more than 33% of the total FDI stock in Nepal, worth nearly US\$ 500 million**
- **India has been assisting the modernisation of Nepal Army (NA) by supplying equipment and providing training.**

## ❖ **India Nepal Territorial Issue**

- **Glimpse of India-Nepal Relations**
- **The 'Indo-Nepal Battalion-level Joint Military Exercise SURYA KIRAN' is conducted alternately in India and in Nepal**
- **Indians account for about 30% of foreign tourists in Nepal**

## ❖ India Nepal Territorial Issue

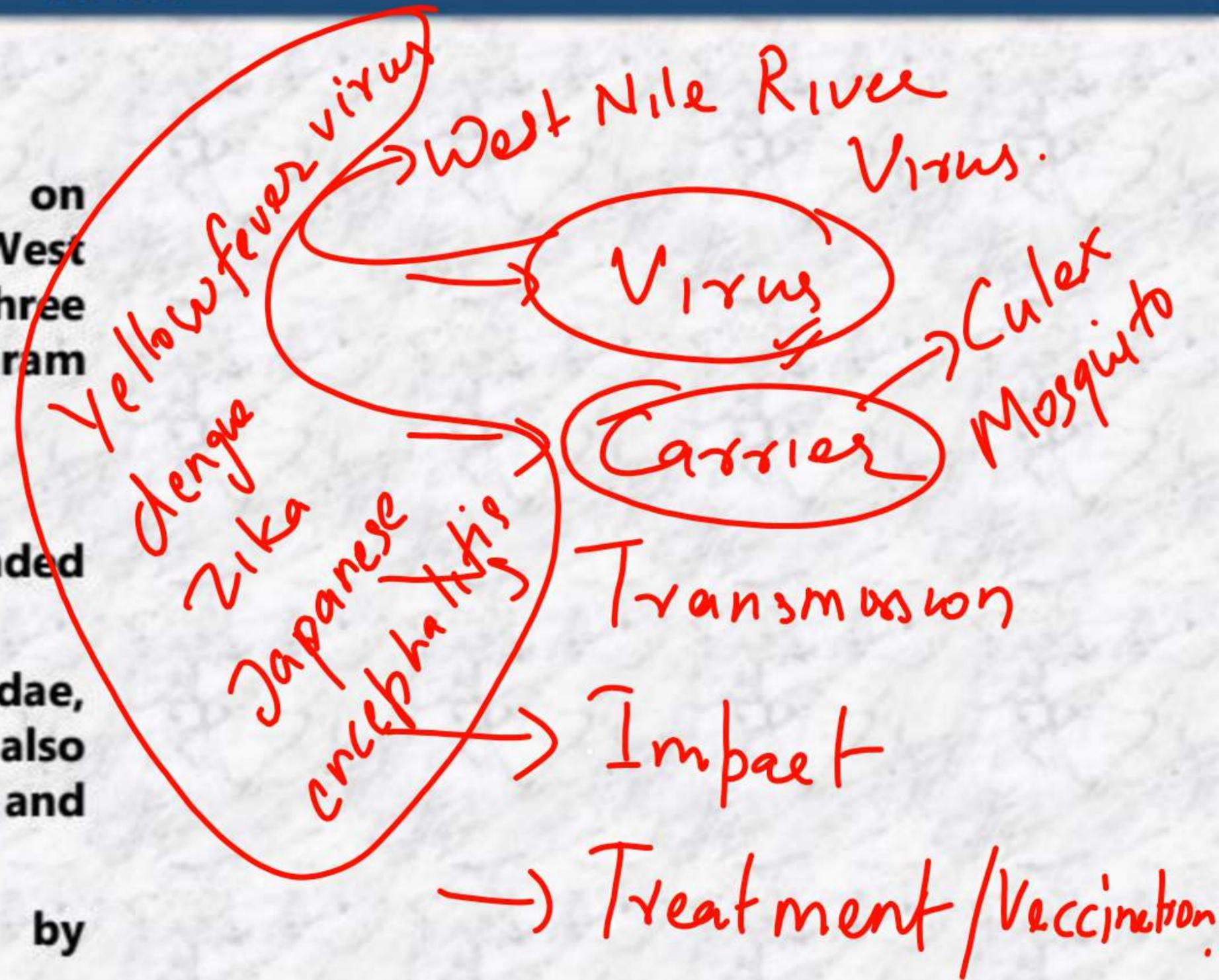
- **Issues:**
- **Decline in Indian Investments:** Chinese investments are replacing Indian investments. In 2019, for instance, China accounted for approximately 40% of new FDIs against India's 30%.
- **While 98% of the India-Nepal boundary was demarcated, two areas, Susta and Kalapani remained in limbo. In 2019, Nepal released a new political map claiming Kalapani, Limpiyadhura and Lipulekh of Uttarakhand and the area of Susta (West Champaran district, Bihar) as part of Nepal's territory.**
- **China plans to invest in Nepal's infrastructure as part of its ambitious BRI (Belt and Road Initiative) to increase global trade.**

## ❖ **India Nepal Territorial Issue**

- **The trust gap between India and Nepal has grown over time due to India's notoriously slow pace of project implementation.**
- **Some Nepalese ethnic groups dislike India because they think that India meddles too much in Nepal's politics and interferes with their political sovereignty.**

## ❖ West Nile River Virus

- **Context:** The Kerala government on Tuesday (May 7) said that cases of West Nile fever have been reported from three districts in the state – Thrissur, Malappuram and Kozhikode.
- **What is West Nile Virus?**
- West Nile virus (WNV) is a single-stranded RNA virus that causes West Nile fever. |
- It is a member of the family Flaviviridae, from the genus Flavivirus, which also contains the Zika virus, dengue virus, and yellow fever virus.
- The virus is primarily transmitted by mosquitoes, mostly species of Culex. T





**❖ West Nile River**

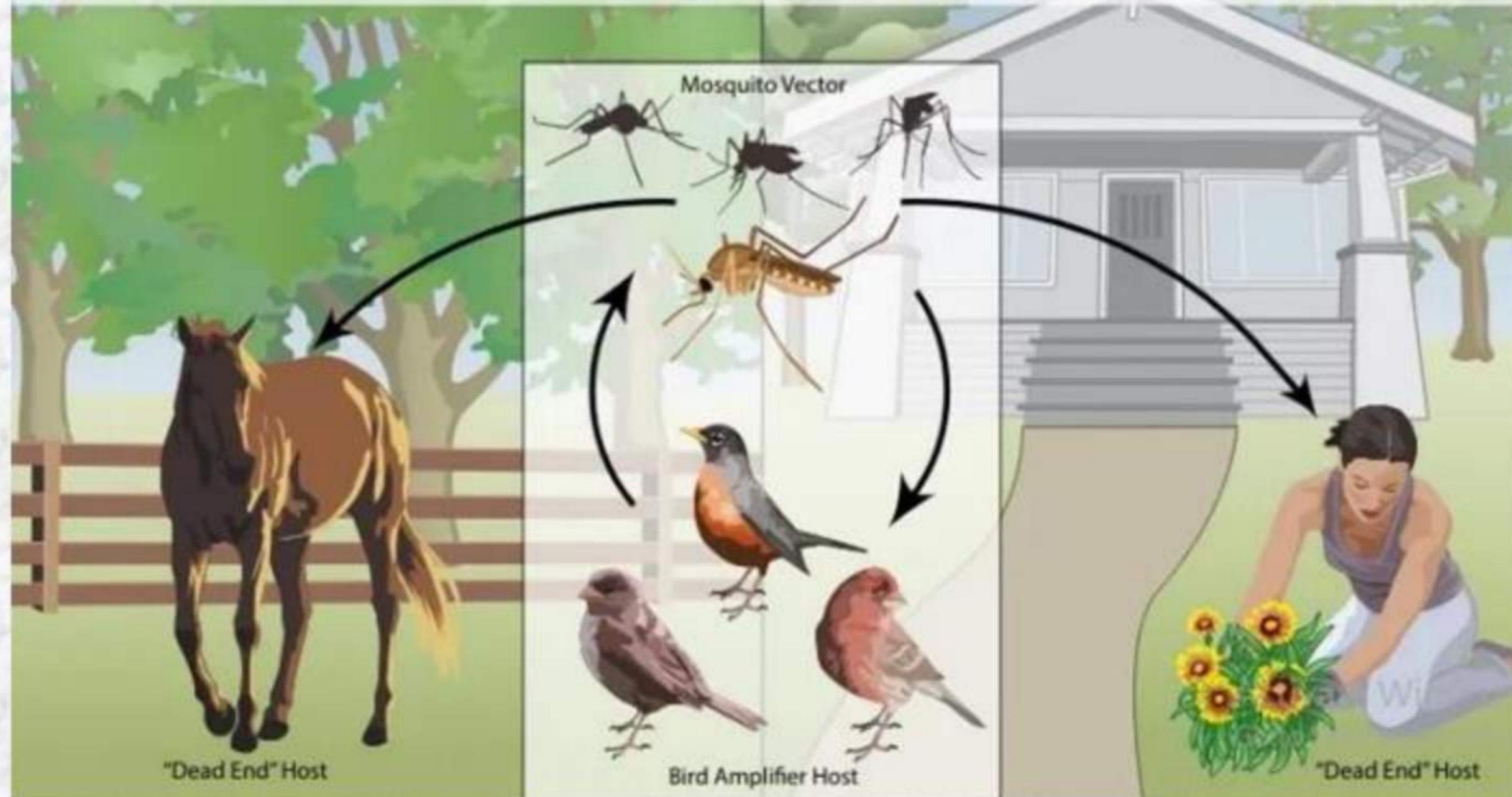
- **The primary hosts of WNV are birds, so that the virus remains within a "bird-mosquito-bird" transmission cycle.**
- **The virus is genetically related to the Japanese encephalitis family of viruses.**

**❖ West Nile River**

- **Transmission**
- **Human infection is most often the result of bites from infected mosquitoes.**
- **Mosquitoes become infected when they feed on infected birds, which circulate the virus in their blood for a few days.**
- **The virus may also be transmitted through contact with other infected animals, their blood, or other tissues.**

In nature, West Nile virus cycles between mosquitoes (especially *Culex* species) and birds. Some infected birds, can develop high levels of the virus in their bloodstream and mosquitoes can become infected by biting these infected birds. After about a week, infected mosquitoes can pass the virus to more birds when they bite.

Mosquitoes with West Nile virus also bite and infect people, horses and other mammals. However, humans, horses and other mammals are 'dead end' hosts. This means that they do not develop high levels of virus in their bloodstream, and cannot pass the virus on to other biting mosquitoes.



**❖ West Nile River**

- **A very small proportion of human infections have occurred through organ transplants, blood transfusions and breast milk.**
- **To date, no human-to-human transmission of WNV through casual contact has been documented,**
- **Most people who are infected by the West Nile virus do not develop any symptoms or may experience mild to moderate illness**
- **About 1 in 5 develop a fever, along with other symptoms like headaches, body aches, joint pains, diarrhoea, vomiting or a rash,**

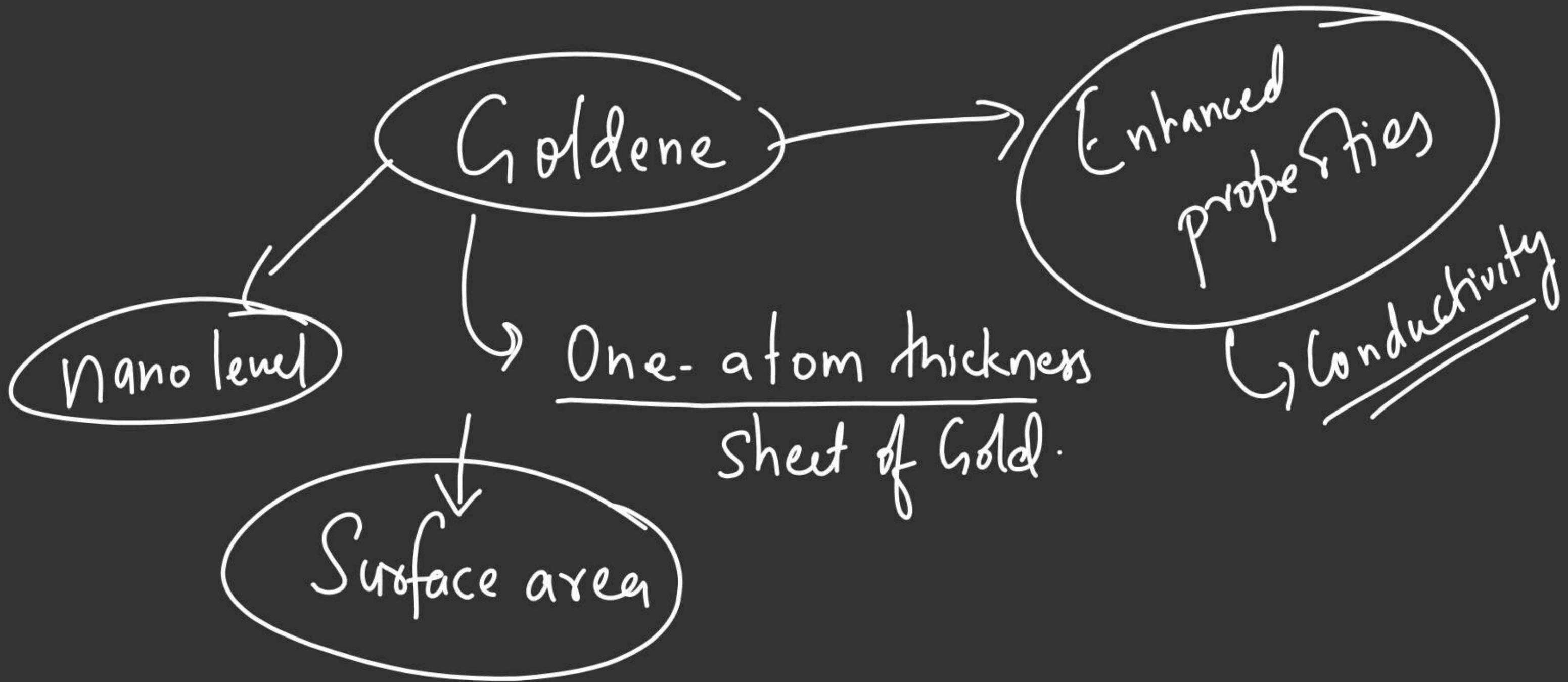
**❖ West Nile River**

- **And about 1 in 150 people infected develop severe illness affecting the central nervous system. Symptoms include high fever, headaches, neck stiffness, disorientation, coma, vision loss or paralysis.**
- **Those older than 60 are at the highest risk for severe illness**
- **Diagnosis & Treatment**
- **A blood test can be conducted to determine a West Nile infection.**
- **There are no vaccines or medicines that specifically treat West Nile virus infections. Over-the-counter pain relievers can be used to help with some symptoms and hospitalization may be necessary for more severe cases.**

**❖ Goldene**

- **Context:** For the first time, researchers have created a free-standing sheet of gold that is only one atom thick. This makes gold the first metal to be formulated into (freestanding) 2D sheets.
- **Scientists have created the world's thinnest gold leaf, which is just a single atom thick.**
- **The extremely high surface area of these substances relative to their volume means they behave very differently than chemically identical bulk solids,**





**❖ Goldene**

- **Most of these materials are prepared from nonmetals or mixed compounds, and creating single-atom sheets of pure metals is much more challenging.**
- **Metals do not like to be lonely**
- **Because the bonding in metals is delocalized, they readily will bond into themselves and agglomerate. Preparing a single layer is quite a feat because you are fighting against the metal's desire to bond with not only itself but with other sheets.**



## ❖ **Sahyadri Tiger Reserve (STR)**

- **Context:** To revive the population of tigers in Sahyadri Tiger Reserve (STR) — the lone tiger reserve in the Maharashtra western region — the state's forest department will soon translocate tigers from Tadoba-Andhari Tiger Reserve (TATR) in Chandrapur district.
- **About the STR:**
- It is located in northern Western Ghats, was established in January 2010 and straddles Kolhapur, Satara, Sangli, and Ratnagiri districts in western Maharashtra.
- It comprises Chandoli National Park and Koyna Wildlife Sanctuary.
- The tiger population in the region has been historically low due to poaching, poor prey base, and changing habitat.

# WLS

Both can declare

WLP-1972

- generally there is focus on conservation of a specific species.
- boundaries are not well defined.
- lesser degree of Restriction.

# NP do

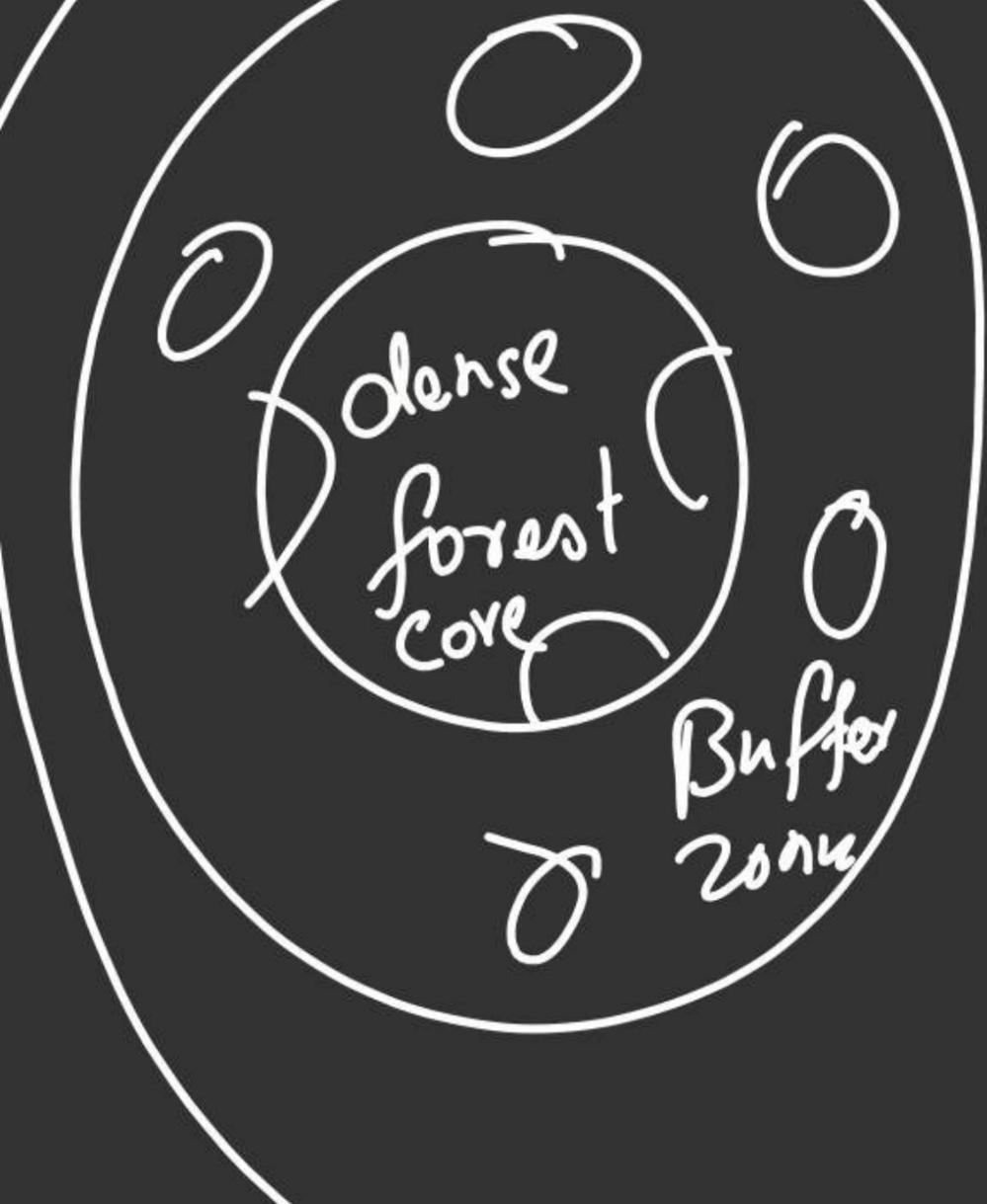
- do -

- higher degree of protection
- Overall protection of the entire area.
- Comprehensive protection of all elements of forest
- well. defined boundaries.

# Tiger Reserve

- do -

- State govt with approval
- A tag for already existing protected areas. <sup>from NTCA</sup>
- Related to Project Tiger.



# Biosphere Reserve

- No act
- both by union and state

⇒ 18 Biosphere Reserve

## → Core, buffer, Transition

→ 12 MAB of UNESCO

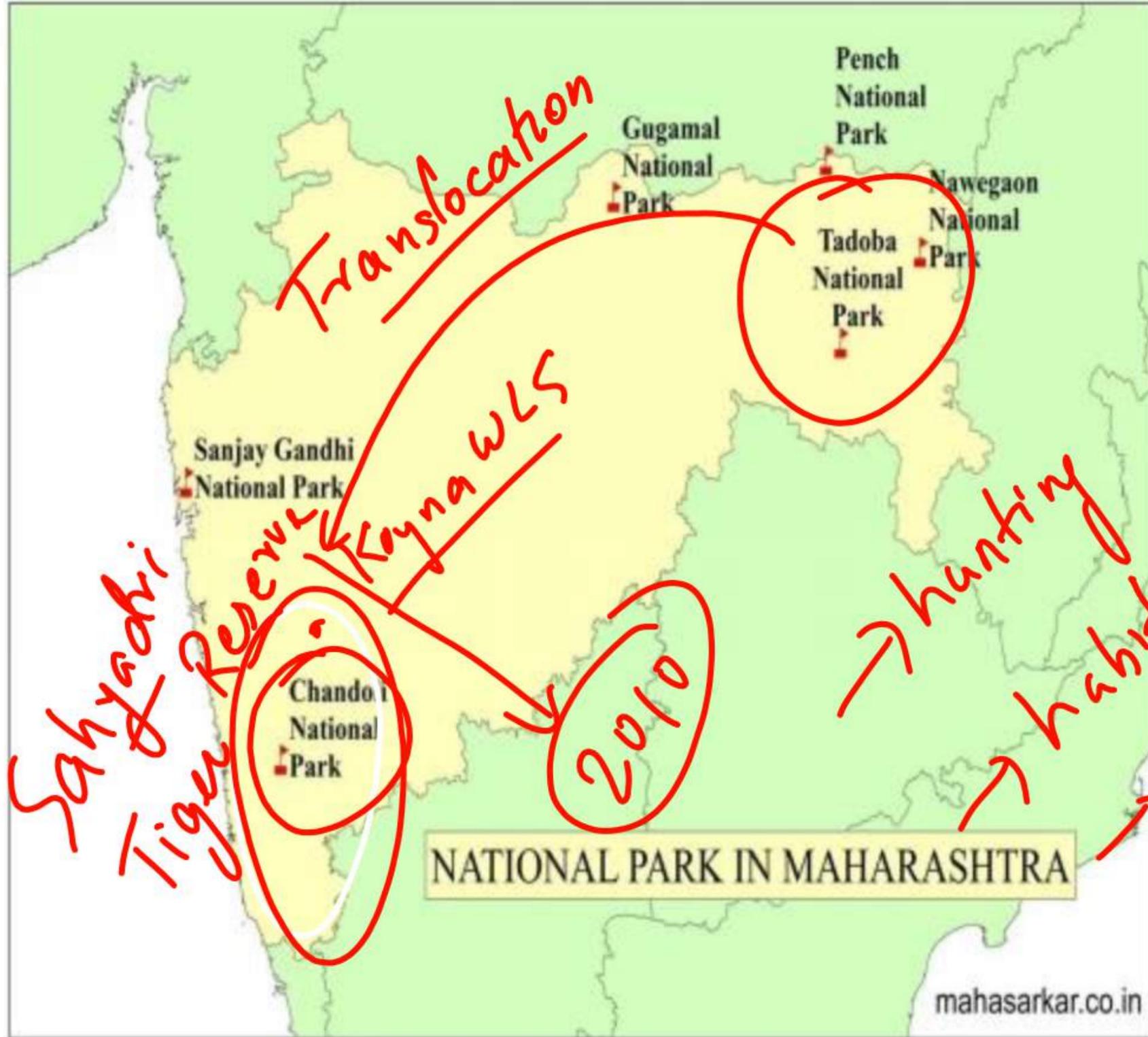
only Research and monitoring

primary activities will be allowed

↳ Alternate livelihood opportunities will be allowed  
↳ hotel/resorts etc

UNESCO

MAB — Man and Biosphere



## Sahyadri TR

→ Spread over 4 districts

- Present in MH
- In Western Ghats
- Krishna River is passing through it
- Evergreen to Moist deciduous.

→ Chandoli NP

→ Koyna WLS

# Tadoba Andheri Tiger Reserve

- Tadoba National Park → biggest & oldest NP in MH
- Andhari River
- Vegetation ⇒ Moist / dry deciduous vegetation

## ❖ **Sahyadri Tiger Reserve (STR)**

- **Tadoba Andhari tiger reserve**
- **It is located in Chandrapur district of Maharashtra and is also Maharashtra's oldest and largest National Park.**
- **Rivers: Andhari river Forests: Southern Tropical Dry Decidious Teak Forests**
- **Fauna: Leopard, cheetal, chinkara, langoors, nilgai, barking dear, blue bull, spotted dear, flying squirrel, sloth bears, gaur, dhole, etc.**

## ❖ Artificial General Intelligence

- **AGI refers to a machine or a software that can perform any intellectual task that a human can do.**
- **This includes reasoning, common sense, abstract thinking, background knowledge, transfer learning, ability to differentiate between cause and effect, etc.**
- **In simple words, AGI aims to emulate human cognitive abilities such that it allows it to do unfamiliar tasks, learn from new experiences, and apply its knowledge in new ways.**

## Artificial General Intelligence

- It acquires the human intelligence
- ⇒ It starts thinking like human.

## Artificial Intelligence

- It will try to do what it has been instructed
- It is processing the data.

## Advantage

⇒ Care economy

→ It can find solutions easily and quickly using the human intelligence without outside influence.

→ health sector, Agriculture, Environment

Challenge



## ❖ Artificial General Intelligence

- **With AGI, researchers aim to build a software or computer that can do all this — everything that a human computer does.**
- **It is like a super-intelligent robot friend who can understand everything you say, learn new things just the way you do, and even think of problems to find solutions.**

## ❖ Artificial General Intelligence

- **How is AGI different from AI we already use?**
- **The main difference between AGI and the more common form of AI, also known as narrow AI, lies in their scope and capabilities.**
- **Narrow AI is designed to perform specific tasks such as image recognition, translation, or even playing games like chess—at which it can outdo humans, but it remains limited to its set parameters.**
- **On the other hand, AGI envisions a broader, more generalised form of intelligence, not confined to any particular task (like humans).**

## ❖ Artificial General Intelligence

- **Advantages:**
- **In theory, AGI has innumerable positive implications. For instance, in healthcare, it can redefine diagnostics, treatment planning, and personalised medicine by integrating and analysing vast datasets, far beyond the capabilities of humans.**
- **In finance and business, AGI could automate various processes and enhance the overall decision-making, offering real-time analytics and market predictions with accuracy.**
- **When it comes to education, AGI could transform adaptive learning systems that work towards the unique needs of students. This could potentially democratise access to personalised education worldwide.**

## ❖ Artificial General Intelligence

- **Challenges**
- **The humongous amount of computational power required to develop AGI systems raises concerns about its impact on the environment, both due to the energy consumption and generation of e-waste.**
- **AGI could also lead to a significant loss of employment, and widespread socio-economic disparity, where power would be concentrated in the hands of those who control the AGI.**
- **And if humans were to become dependent on AGI, it might even lead to the loss of basic human skills and capabilities.**

## ❖ Artificial General Intelligence

- It could introduce new security vulnerabilities, the kind we have not even thought about yet, and its development could outrun the ability of governments and international bodies to come up with suitable regulations.
- But the most serious fear regarding AGI is that its abilities can outpace human beings', making its actions difficult to understand and predict. This might even lead to a situation where it becomes 'too' independent, so much so that humans simply lose control.

## ❖ Artificial General Intelligence

- "In a 2014 interview to the BBC, the late professor Stephen Hawking said, **"The development of full artificial intelligence could spell the end of the human race."**

→ loss of Jobs.

→ bias could magnify

→ Sentient AI → Humans  
will loose control over  
machine.

Turing Test



## ❖ **Online shopping is very dangerous for the earth!**

- **Transportation required for online shopping increases greenhouse emissions**
- **A report published in the New York Times says that according to some estimates, three billion trees are cut every year for packaging of all kinds of things, including e-commerce.**
- **The data centers needed to store and retrieve orders consume about 10 times the amount of energy of a typical home and gobble up precious groundwater.**

❖ **Online shopping is very dangerous for the earth!**

- **A 2015 study found that the use of household goods and services is responsible for 60 percent of greenhouse gas emissions worldwide.**
- **According to researchers at the University of Michigan, online shopping is directly responsible for more than 20 percent of emissions from household consumption in the United States.**

# Online Shopping – Changing Nature

- Amazon.com has promised to have **1,00,000 electric delivery vehicles on the road by 2030**. The company says this step will prevent millions of metric tons of carbon from being emitted into the atmosphere
- FedEx plans to purchase **half of its pickup and delivery fleet EVs by next year and fully electrify the fleet by 2040**.
- Some companies are also experimenting with **robot and drone delivery but there are other things to consider** Like packaging and waste are also important.
- Climate organizations around the world encourage buying **second-hand items or fixing broken items you already have**.

# **There is more ice on the moon than expected**

- **In a new research conducted on the Moon, scientists have found many times more ice than expected. **This ice is present beneath the surface of the moon.** This means that there may be more water on the Moon than estimated.**
- **This discovery has been made by scientists associated with the Space Applications Center (SAC) of the Indian Space Research Organization (ISRO), in which they have been supported by researchers associated with IIT Kanpur, University of Southern California, Jet Propulsion Laboratory and IIT (ISM) Dhanbad.**



## **There is more ice on the moon than expected**

- **A large amount of ice is present a few meters below the moon's surface. The amount of this ice is about five to eight times more than the ice present on the surface of both the North and South poles of the Moon.**
- **According to the study, this ice is buried one to three meters below the surface. This discovery by scientists has increased the possibility of finding water-rich ice in the polar craters of the Moon.**

# **There is more ice on the moon than expected**

- **Research has also shown that the northern polar region of the Moon has twice as much ice as the southern polar region.**
- **It is estimated that in the northern polar region the extent of ice is 1,100 square kilometers.**
- **Whereas in the southern polar region this figure is about 562 square kilometers.**

# There is more ice on the moon than expected

- Where did this ice come from on the moon?
- ISRO has informed that **this ice is related to the volcanic activities that took place during the Imbrian period. (3800 Mn Years ago)**
- The gas released from these volcanic activities gradually accumulated in the form of ice beneath the surface over millions of years.
- Data obtained from Chandrayaan-2's Dual Frequency Synthetic Aperture Radar and Polarimetric Radar indicated **that the polar craters on the Moon's surface may contain water ice.**



# KHAN GLOBAL STUDIES

Most Trusted Learning Platform

**THANKS FOR WATCHING**

