

TOPICS IN NEWS

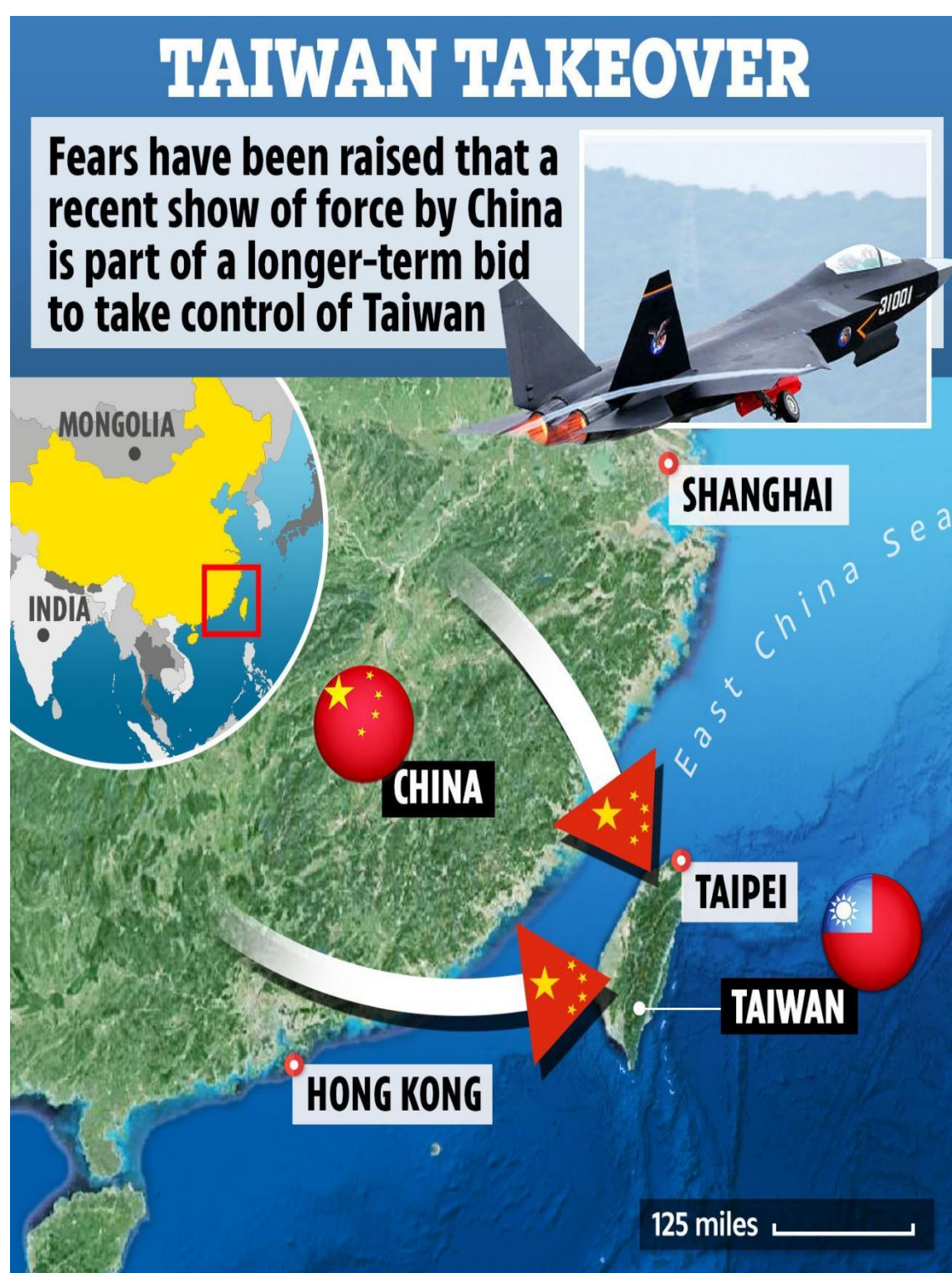
- ☑ China-Taiwan Relations and One-China Policy
- ☑ Retrospective Taxation and Taxation Laws (Amendment) Bill, 2021
- ☑ Hydrogen from Agricultural Residue
- ☑ Indian Astronomical Observatory (IAO), Hanle
- ☑ Tiger Rallies across 51 Tiger Reserves
- ☑ Uronema africanum borge - Microalga that digest/degrade low density plastic sheets
- ☑ World's largest khadi national flag unveiled
- ☑ Langa-Manganiyar Communities

CHINA-TAIWAN RELATIONS

Recently **Chinese Warplanes** made record number of incursions in **Taiwan's Air Defense Identification Zone (AIDZ)** in display of their military might and show of force for reaffirming the **One-China Policy**, after Taiwan announced it had requested to join the **Comprehensive and Progressive Agreement for Trans-Pacific Partnership**.

ONE-CHINA POLICY

- ☑ The One-China Policy is the acknowledgement that **there is only one Chinese Government**. Under the policy, **Taiwan is treated as a part of China that will reunite with the mainland eventually**.
- ☑ Any nation that wishes to build diplomatic relations with China must **stop acknowledging Taiwan as a separate entity** and **sever all formal ties with Taiwan**.
- ☑ China has claimed Taiwan through its **One-China Policy** since **Chinese Civil War** in **1949**, when the defeated **Kuomintang Party** was forced to flee to the island and vowed to bring it under Beijing's rule, by force if necessary.
- ☑ Though **Taiwanese leaders** state that **Taiwan is a self-governed, de facto independent and sovereign state**, they have **never formally declared independence from the mainland**.
- ☑ Taiwan has the **autonomy to run its own affairs** under the Chinese **"one country, two systems" formula**, an arrangement similar to that in Hong Kong.
- ☑ **Therefore, Taiwan is not recognised as an independent country by much of the world, nor even the United Nations**.
- ☑ It undergoes **extraordinary naming contortions** just for participation in events like the **Olympic Games** and membership of institutions like the **World Trade Organization (WTO)**, **Asia-Pacific Economic Cooperation (APEC)** and **Asian Development Bank (ADB)**.
- ☑ The One-China Policy has resulted in Taiwan's **diplomatic isolation from the international community**. But even in its isolation Taiwan has not entirely lost out. **Recently, Taiwan tried for membership of the World Health Organization, but failed**.
- ☑ However, Taiwan maintains vibrant economic and cultural ties with its neighbours and **leverages on its emotional relationship with the United States to extract concessions**.



- ✓ As a part of the policy, **the United States** maintains a robust, **non-official relationship** with Taiwan, including **continued arms sales to the island**.
- ✓ More often than not, Taiwan gets caught in **US-China diplomatic crossfire**.
- ✓ Whenever the **United States** has questioned the **validity of One-China Policy**, China has more often than not, let the whole relationship with the United States deteriorate, **in order to show its resolve on the Taiwan issue**.



Diplomatic ties with Taiwan

Just 17 nations still have official relations with Taipei



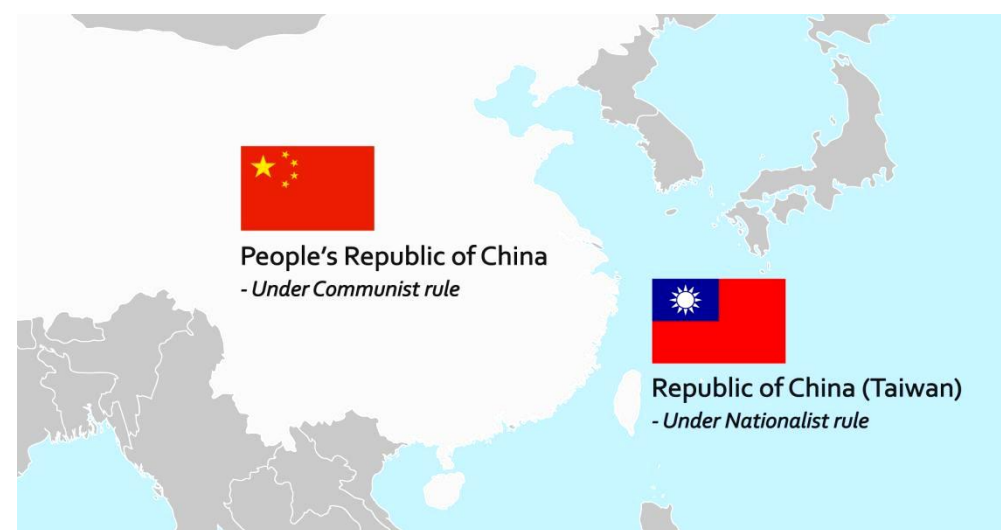
Source: Taiwanese foreign ministry

ONE-CHINA PRINCIPLE

- ✓ The One-China policy is also different from the "One-China principle", which is the principle that insists **both Taiwan and mainland China are inalienable parts of a single "China"**.
- ✓ The One-China principle faces opposition from supporters of the Taiwan independence movement, which pushes to establish the **"Republic of Taiwan"** and **cultivate a separate identity apart from China** called **"Taiwanization"**.

ONE COUNTRY, TWO SYSTEMS FORMULA

- ✓ **One country, two systems formula** is a **constitutional principle** formulated by **Deng Xiaoping**, the paramount leader of the People's Republic of China for the **reunification of China** during the **early 1980s**.
- ✓ He suggested that there would be only one China, but **distinct Chinese regions such as Hong Kong and Taiwan could retain their own capitalist economic and political systems**.
- ✓ **Mainland China** would use **socialistic principles under communist rule**.
- ✓ Under one country, two systems formula, each of these regions could continue to have its **own political system, legal, economic and financial affairs**, including **independent foreign relations**.



INDIA'S STAND ON ONE-CHINA POLICY

- ✓ Although there are **no formal diplomatic ties**, Taiwan and India have been cooperating in various fields.
- ✓ India has **refused to endorse the One-China policy since 2010**, because India believes that **China should first reaffirm One-India Policy** to make India agree to a One-China Policy.

RETROSPECTIVE TAXATION AND TAXATION LAWS (AMENDMENT) BILL, 2021

The **Government of India** has recently introduced the **Taxation Laws (Amendment) Bill, 2021** in Parliament. The bill seeks to **nullify the contentious retrospective tax law** by amending the **Income Tax (IT) Act of 1961** and the **Finance Act of 2012**.

It is in line with the Government's commitment of **creating a non-adversarial tax environment** and a **welcome move for foreign investors**, which will **directly result in attracting more foreign investments to India**.

WHAT IS RETROSPECTIVE TAXATION ?

Retrospective taxation allows a country to pass a rule on taxing certain products, items, or services. This taxation is applied to the companies from a previous date, i.e. **before the date on which the law is passed**.

- ☑ Usually, countries apply retrospective tax to correct anomalies in their taxation policies, that have, in the past, allowed companies to take advantage of such loopholes.
- ☑ In 2012, the Indian government retrospectively amended the tax code, **permitting itself to tax entities retrospectively** and giving itself the power to go after **mergers and acquisitions(M&A) deals all the way back to 1962**, if the underlying asset was in India.
- ☑ The 2012 Amendment to the Income Tax Act aimed to **tackle complex transactions that manage to escape taxation in India involving a capital gains tax liability here.**
- ☑ It included the **Dutch arm of Vodafone Group buying a Cayman Islands-based company in 2007**, which indirectly held a majority stake in Indian firm Hutchison Essar Ltd. (later renamed Vodafone India) for \$11 billion.
- ☑ It also covered the **gas major Cairn Energy's internal restructuring of its India unit in 2006-07** before it went public.
- ☑ This resulted in the companies making appeals against this decision in the **international arbitration.**
- ☑ **Indian Government has lost various retrospective taxation cases within India and abroad also.**

THE VODAFONE AND CAIRN CASE

2007
Notice issued to Vodafone for failure to keep aside tax on payments made to Hutchison.

2008
Writ petition filed by Vodafone against the notice, dismissed by Bombay High Court.

2010
Vodafone moves SC against HC decision.

2012
SC verdict says tax can't be levied upon the deal, government comes out with retrospective amendments allowing such deals to be taxed.

2013
Vodafone gets 14,200 crore tax demand. Cabinet approves non binding conciliation.

2014
Vodafone serves arbitration notice under India Netherlands BIPA after IT department withdraws conciliation offer.

2016 to 2020
In 2016, Vodafone received Rs 22,100 crore tax demand (including interest) and in 2020 Vodafone wins the arbitration case.

Retrospective Taxation

- Retrospective Corporate Tax allows government to tax a corporate according to a law even before the law was passed.
- The Vodafone v/s The Indian Government and The Cairn arbitration case are the recent case examples of retrospective corporate tax.

Subject Matter

- In 2007, Vodafone bought 67% stake in Hutchison Whampoa.
- In September 2007, government of India raised a demand of Rs 7,990 crore in capital gains from Vodafone claiming over their suspicious tax deduction.



The Vodafone v/s The Indian Government

- The International Court of Justice (ICJ) gave a judgement in favour of the Vodafone.
- ICJ said, "the Indian tax department's conduct of imposing a tax liability along with interest and penalties was in breach of guarantee of fair and equitable treatment of the terms laid out in the bilateral investment treaty between Netherland and India."

Subject Matter

- The Cairn Energy case is similar to the Vodafone case in respect to the retrospective taxation and the alleged capital gain.
- In 2006-07 as a part of internal rearrangement, Cairn UK transferred shares of Cairn India Holdings to Cairn India. The Income Tax Department then demanded Rs.20,400 Cr. from Cairn UK.



The Cairn Arbitration

- The government of India has been directed to stump up as much as \$1.4 Billion to Cairn enregy PLC of the UK following the ruling of the Permanent Court of Arbitration at the Hague.
- The Hague tribunal ordered the Indian government to return the total value of shares seized along with dividend and tax rebates withheld.

January 2014
Income Tax department seeks information about the reorganisation done in 2006 from Cairn Energy

March 2015
Cairn Energy received draft assessment order from IT department citing retrospective legislation to seek Rs10,247 crore in taxes. Cairn reacts by filing a notice of dispute

May 2018
Pending arbitration proceedings, IT Department start selling Cairn share to recover tax dues.

2018
Three member international arbitration tribunal concludes hearings in tax dispute.

December 23 2020
Cairn Energy wins arbitration

IMPLICATIONS OF RETROSPECTIVE TAXATION LAWS

- ☑ Retrospective amendments **militate against the principle of tax certainty** and **damage India's reputation as an attractive investment destination.**
- ☑ **India has recently suffered various humiliations in international arbitration** while challenging tax demands made under the retrospective clause.
- ☑ **Cairn Energy** was awarded damages of more than **\$1.2 billion** in December, 2020 by the **Permanent Court of Arbitration at The Hague** in the retrospective taxation case. In July 2021, a **French tribunal ordered a freeze on some 20 properties belonging to the Indian Government** as part of a guarantee of the amount owed to Cairn.
- ☑ **Devas Multimedia has won a case against Antrix Corporation (a subsidiary of the ISRO)** for arbitrary and unlawful termination of the **Devas-Antrix deal**. Following Cairn's lawsuit in the US, Devas Multimedia is also seeking a \$1.3 billion award to seize Air India's assets abroad.

OBJECTIVES OF THE TAXATION LAWS (AMENDMENT) BILL, 2021



SALIENT FEATURES OF THE TAXATION LAWS (AMENDMENT) BILL, 2021

- ☑ Tax claims made on offshore transactions, executed before 28 May 2012, when the amendment to the Income Tax Act was brought out, will be nullified.
- ☑ The Government has also proposed to refund the amount paid in litigation by companies, without any interest on those amounts.
- ☑ The demands raised by the Indian government will be nullified based on specific conditions, such as withdrawal of pending litigation and furnishing of an undertaking by the companies to the effect that no claim for cost, damages, interest etc. shall be claimed by them.

CONDITIONS APPLY

The new bill says tax claims made on offshore transactions executed prior to 28 May 2012 will be nullified, subject to riders. The status of such demands at a glance:

Status of retrospective tax demands



Arbitration awards (in ₹ crore)

Tax demanded	Arbitration
Cairn Energy Plc 10,400*	12,600 including interest
Vodafone Group Plc 19,000*	40 in costs**

*plus an equal amount in penalty, accrued interest
* updated demand in 2017
** plus ₹45 crore tax refund if award is not contested. India has appealed the award.

LEGISLATIVE CHANGE

MOVE will help close past disputes, avoid future litigation costs

THE govt proposes to refund only the principal, not interest

- ☑ However, it remains to be seen whether entities like Vodafone and Cairn, which have received large arbitration awards in their favour for "total harm" to their investment caused by the Government of India, would be willing to settle for less by giving up on damages and interest components.
- ☑ Since the bill does not provide for the payment of any interest, the companies may not be interested in entering into a settlement and would prefer to continue with the arbitration and litigation proceedings where they are likely to get the refund with interest at the market rate.



COS SAY

Undertaking from all stakeholders difficult to obtain, puts onus only on companies

Undertaking of prospective stakeholders improbable

Want to settle in open and transparent manner

GOVT OFFERS

Nullification of all tax demands prior to May 28, 2012

Full refund of tax paid without interest

PRE-CONDITIONS

Withdrawal of all litigation, arbitration in all fora

Undertaking of withdrawal by company

Undertaking of waiver of future claims by co & all interested parties

KEY BENEFITS OF THE TAXATION LAWS (AMENDMENT) BILL, 2021

- 1 Will instill foreign as well as domestic investors with confidence in the Indian Economy.
- 2 Will spur companies which are at the cusp of deciding their investments into investing in India.
- 3 Will avoid unnecessary litigation and saves time and costs of the government.
- 4 Will boost the policy of the government to have a predictable tax regime.
- 5 Will provide impetus to country's goal of 5 becoming a \$5 trillion economy.



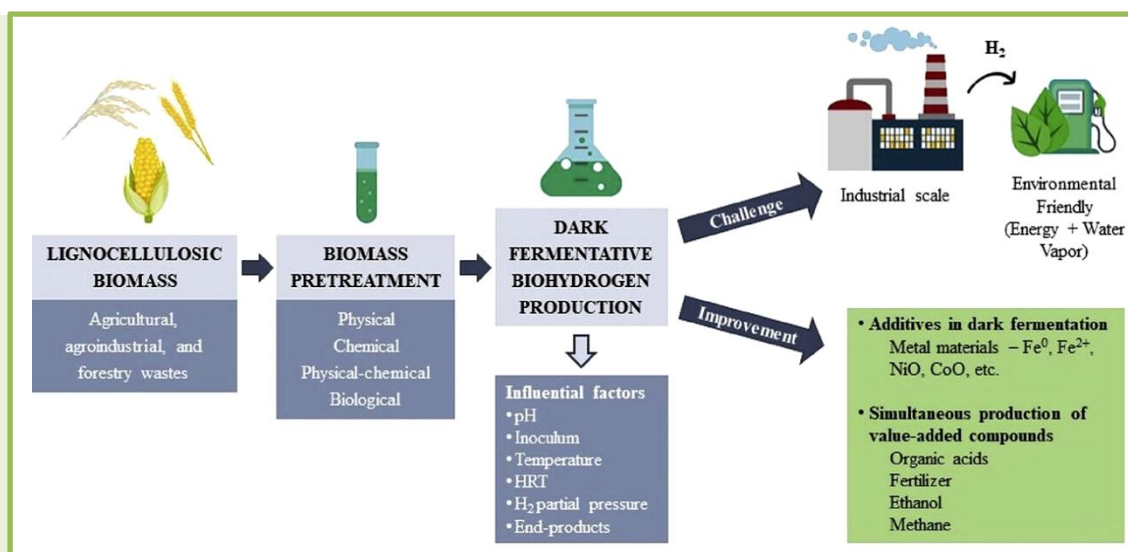
HYDROGEN FROM AGRICULTURAL RESIDUE

Indian researchers have developed a unique technology for **direct generation of Hydrogen from agricultural residue.**

A team of researchers from **Agharkar Research Institute, Pune**, an autonomous institute of the Department of Science and Technology (DST), GOI, in collaboration with **Sentient labs of KPIT Technologies**, have developed this technology at **lab-scale** to **extract hydrogen from agricultural residues.**

SALIENT FEATURES OF THIS TECHNOLOGY

- ☑ The technology is **25% more efficient** as compared to the currently used **conventional anaerobic digestion processes.**
- ☑ The two-stage process **eliminates the pre-treatment of biomass**, thus making the process **economical and environment friendly.**
- ☑ The process generates **hydrogen in the first stage** and **methane in the second stage.**
- ☑ The **methane** generated in the process can also be used to **generate additional hydrogen.**
- ☑ This process also generates a **digestate** that is **rich in nutrients** and can be used as an **organic fertilizer.**



ADVANTAGES OF GENERATING HYDROGEN FROM AGRICULTURAL RESIDUE

- ☑ India has set a target of **60% renewable energy** of about **450 GW by 2030.** One of the most economical ways to achieve this is to **produce hydrogen from a cheap, abundant, and renewable source.**
- ☑ **Agricultural waste**, which faces a **great challenge for disposal**, can be one of the sources of hydrogen production.

- ☑ It would also solve the dual problem of **energy generation** and **waste disposal**.
- ☑ This innovation will **promote adoption of eco-friendly hydrogen fuel-cell electric vehicles** by overcoming the challenge of hydrogen availability.
- ☑ Generating hydrogen from **unutilized agricultural residue** will also **help India to become self-reliant in energy resources**, while adding a **major stream of revenue to the farmer community**.

INDIAN ASTRONOMICAL OBSERVATORY (IAO), HANLE

A new study shows that the **Indian Astronomical Observatory (IAO)** located in **Hanle, near Leh in Ladakh** is one of the emerging sites for **infrared and submillimetre optical astronomy**.

Hanle, in Ladakh, is a low-key village with unparalleled tranquility is home to one of the world's highest Astronomical Observatories.

Indian Astronomical Observatory (IAO)

- ☑ **IAO, Hanle** is becoming one of the **globally promising observatory site** because it **offers a clear view of space among all observatories globally**, due to the advantages of **more clear nights, minimal light pollution, background aerosol concentration**, extremely dry atmospheric condition and uninterrupted monsoon.
- ☑ **Established in 2001**, it is operated by the **Indian Institute of Astrophysics, Bangalore**.
- ☑ It is currently the **9th highest optical telescope in the world**, situated at an elevation of **4,500 meters**.
- ☑ **University of Tokyo Atacama Observatory (TAO)** located in the **Atacama desert of Chile** is **world's highest optical telescope at an elevation of 5,640 m**.
- ☑ Hanle site is **as dry as Atacama Desert in Chile** and has **around 270 clear nights in a year**.



IAO, Hanle has the following major optical, infrared and gamma-ray telescopes :

- ☑ **Himalayan Chandra Telescope** - Optical-infrared telescope named after India-born Nobel laureate Subrahmanyam Chandrasekhar)
- ☑ **GROWTH-India Telescope** - India's first fully robotic research telescope
- ☑ **High Altitude Gamma Ray Telescope (HAGAR)** - an array of seven telescopes to study very high energy gamma ray emission from celestial objects

TIGER RALLIES ACROSS 51 TIGER RESERVES

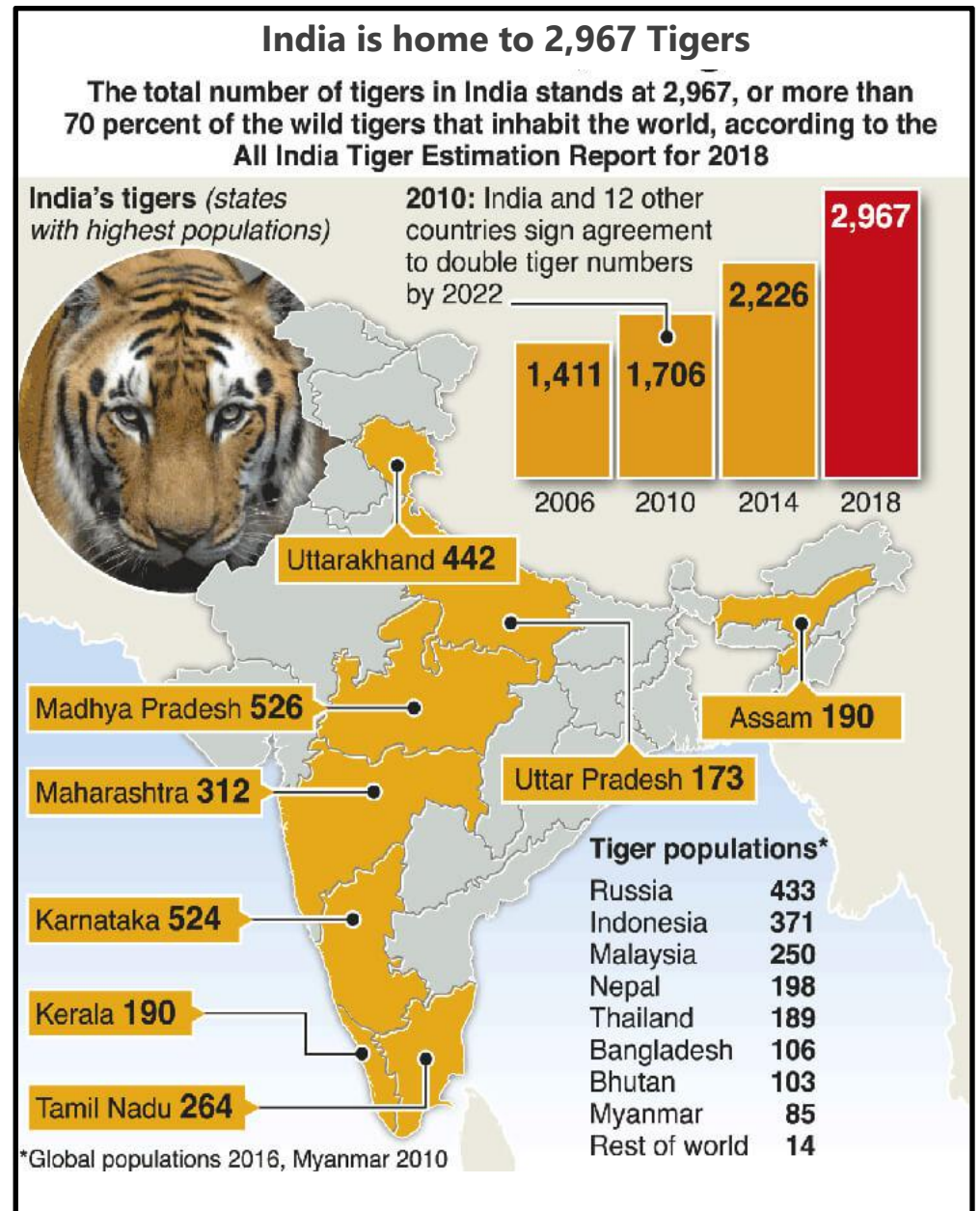
On **October 2, 2021**, Union Environment Minister started off **tiger rallies** in **18 tiger range States** in India. Tiger rallies were started across **51 Tiger Reserves** as a part of **"Wildlife Week Celebration"** and **"Azadi ka Amrit Mahotsav"**.

KEY HIGHLIGHTS

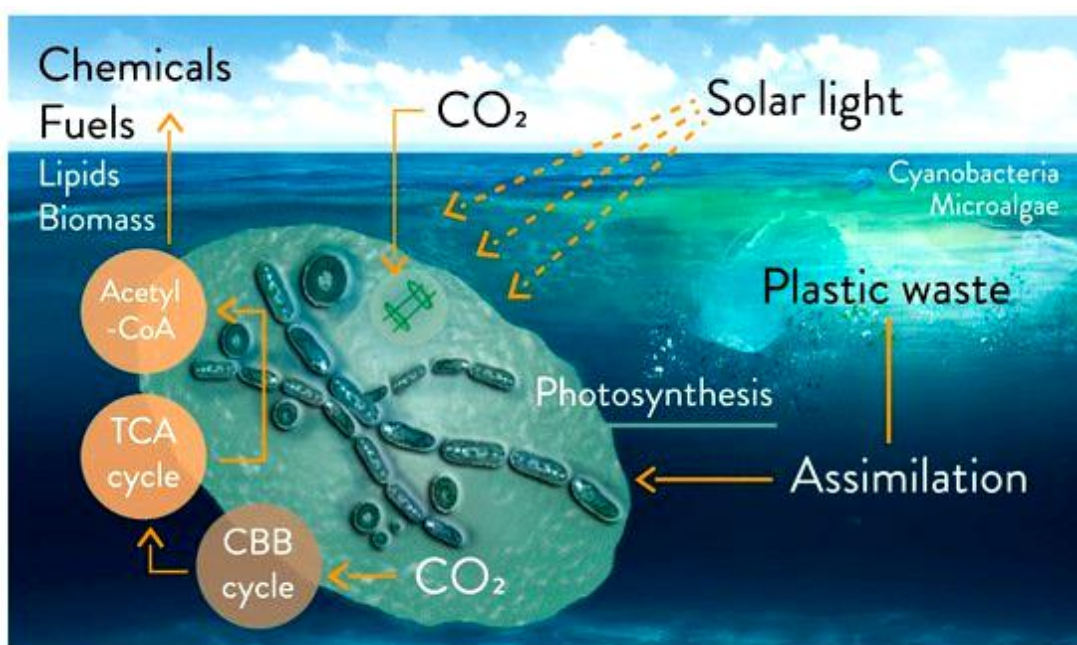
- ☑ In **seven days**, from **October 2 to October 8**, these rallies would cover a distance of about **7,500 km**.
- ☑ Rallies would be traversing the diverse and picturesque landscapes across the country.
- ☑ **Objective** - The rallies were started with the aim of **raising awareness regarding the importance of tiger conservation**. It will bring together people from different areas.
- ☑ **Theme** - **"India for Tigers- A Rally on Wheels"**.

- ☑ The rally will journey across 51 tiger reserves in 18 tiger range States, where field directors, deputy directors and associated staff of the tiger reserves will **follow an assigned routes and unite at a designated focal point of celebration.**
- ☑ **Starting points** - The rallies were virtually kicked off in three tiger reserves - **Biligiri Ranganathaswamy Temple (BRT) Tiger Reserve, Karnataka, Navegaon-Nagzira Tiger Reserve, Maharashtra and Sanjay Tiger Reserve, Madhya Pradesh.**
- ☑ Focal point of the celebration is the **first nine tiger reserves** that were designated during the launch of **Project Tiger in 1973.** These 9 tiger reserves are :

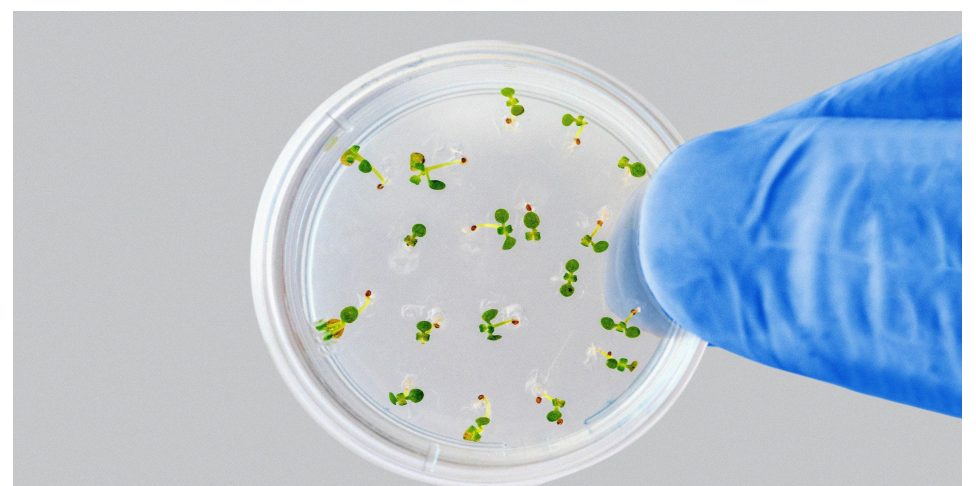
1	Corbett (1973–74)	Uttarakhand
2	Bandipur (1973–74)	Karnataka
3	Kanha (1973–74)	Madhya Pradesh
4	Manas (1973–74)	Assam
5	Melghat (1973–74)	Maharashtra
6	Palamau (1973–74)	Jharkhand
7	Ranthambore (1973–74)	Rajasthan
8	Similipal (1973–74)	Odisha
9	Sunderbans (1973–74)	West Bengal



A TINY PLANT THAT CAN DIGEST LOW DENSITY PLASTIC SHEETS



Microalga Uronema as a chassis for polyethylene terephthalate (PET)



Uronema africanum borge - Plastic eating plant found in Chennai

Researchers from **University of Madras and Presidency College, Chennai**, have isolated an **alga that breaks down low density polyethylene.**

- ☑ The alga identified is microalga **Uronema africanum Borge.**
- ☑ This species of microalga is **commonly found in Africa, Asia and Europe.**
- ☑ The alga used for the study was **harvested from a lake in Chennai.**
- ☑ It was found to **produce enzymes, hormones, toxins such as cyanotoxins and some polysaccharides**, which were able to **slowly degrade polyethylene into monomers** which will not have harmful effect in the atmosphere.
- ☑ **Low-density polyethylene is highly resistant to degradation.**
- ☑ The researchers are planning to collaborate with industry to take up this technology in to a pilot scale and finally large-scale study.

- ☑ The development gains significance given that the identified algae could be used as an agent of **biodegradation of plastic sheets and thus it offers a solution to Plastic pollution in India.**

PLASTIC POLLUTION IN INDIA

- ☑ **Around 5.6 million metric tonnes of plastic waste is generated each year in India.** Worryingly, **only 60% of the plastic used in India is collected and recycled.**
- ☑ The usual means of disposal of plastic waste involves **incineration, land-filling** and recycling. These methods have limitations and also sometimes produce **side-effects that are hazardous to the environment.**
- ☑ Hence, there has been growing **emphasis on biodegradation methods** that are safe and environment friendly.

LANGA-MANGANİYAR HERITAGE

- ☑ Considered the **repository of the Thar region's rich history**, the Langas and Manganiyars are **hereditary communities of Muslim musicians** residing mostly in **western Rajasthan's Jaisalmer and Barmer districts** and in **Pakistan's Tharparkar and Sanghar districts in Sindh.**
- ☑ The music of the two marginalised communities, who were **supported by wealthy landlords and merchants before independence**, forms a vital part of Thar desert's cultural landscape.
- ☑ **Traditional knowledge, ballads, folklore and songs** of the Langa-Manganiyar artistes are being preserved through an **initiative for documentation and digitisation.** The project is aimed at saving the **rapidly disappearing traditions** of these communities.
- ☑ These **internationally acclaimed folk artistes** have also been **hit hard by the COVID-19 pandemic** that stopped their performances in India and abroad.

LANGA-MANGANİYARS



Previous Year Question (PYQ)

[UPSC-CSP 2014] A community of people called Manganiyars is well-known for their

- A. martial arts in North-East India
- B. musical tradition in North-West India**
- C. classical vocal music in South India
- D. pietra dura tradition in Central India

WORLD'S LARGEST KHADI NATIONAL FLAG UNVEILED

- ☑ **World's largest national flag made of Khadi** was inaugurated in **Leh in the Union Territory of Ladakh** on **2nd October, 2021.**
- ☑ **Khadi and Village Industries Commission (KVIC)** prepared the "Monumental Khadi National Flag", which marked the **152nd birth anniversary of Mahatma Gandhi**, who gifted Khadi to the world.
- ☑ This flag is about **225 feet long and 150 feet wide.** It weighs around **1400 kg.**
- ☑ It took about **3500-man hours of work by 70 khadi artisans** and allied workers.
- ☑ It was made using **4600 meters of hand-spun and hand-woven Khadi cotton bunting.** The bunting covers a total area of 33,750 sq ft.
- ☑ National flag has **Ashok Chakra**, measuring **30 ft in diameter.**
- ☑ The concept to make world's largest khadi national flag was put forward by KVIC to celebrate "**Azadi ka Amrit Mahotsav**", marking **75 years of India's Independence.**

