



# Target4IAS

Together We Can

Weekly Current Affairs

Sources: The Hindu+IndianExpress+PIB

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## Hydrogen Blending with Natural Gas

### In news

National Thermal Power Corporation Ltd. has invited a global 'expression of interest' to set up a pilot project on hydrogen blending with natural gas.

### Key takeaways:

- NTPC Ltd. Is India's largest power producer and a central PSU under the Ministry of Power.
- This pilot will be the first of its kind in India and would explore the viability of decarbonising India's natural gas grid. It would be later taken up at a commercial scale across India.

### About Hydrogen Blending

- Hydrogen energy is a viable solution to reduce dependence on fossil fuels and decarbonizing a number of energy sectors.
- Natural gas/hydrogen (NG/H<sub>2</sub>) blending integrates concentrations of hydrogen into existing natural gas pipelines in order to reduce the carbon intensity of the methane.
- This blending carries the hydrogen and natural gas mix to the intended location.
- The blending of natural gas and hydrogen is currently in its early stages of development.
- The blending of hydrogen with CNG provides a blended gas termed as HCNG (Hydrogen-enriched Compressed Natural Gas) and it combines the advantages of both hydrogen and methane.
- The Ministry of Road Transport and Highways has allowed the use of H-CNG (18% mix of hydrogen) in CNG engines.

Source: [The Hindu](#)

## Gati Shakti

### In news

The PM has announced that the Centre will soon launch the 'PM Gati Shakti Master Plan'. He also set a target of making India energy independent by 2047 by replacing petroleum with other forms of energy and announced a National Hydrogen Mission, noting the country spends Rs 12 trillion on energy imports every year.

### About PM Gati Shakti Master Plan:

- It is a 100 lakh crore national infrastructure master plan.
- It aims to make a foundation for holistic infrastructure and give an integrated pathway to our economy.
- The project will be a source of employment opportunities for the youth in future.
- Infrastructure development has the ability to create a multiplier effect with every rupee invested, yielding much higher returns.
- It will help raise the global profile of local manufacturers and help them compete with their counterparts worldwide.
- It also raises possibilities of new future economic zones.
- It is also help to increase both manufacturing and exports.

Source: [IE](#), [Times of India](#) and [Livemint](#)

## Ramsar wetland sites

### In news

Four more wetlands from India – two from Haryana and two from Gujarat – have been recognised as Ramsar sites of international importance. With this, the number of Ramsar sites in India are 46.

### Key takeaways:

- **Sultanpur National Park in Gurgaon** and **Bhindawas Wildlife Sanctuary in Jhajjar** -- have been included in the Ramsar list.
- Haryana's Bhindawas Wildlife Sanctuary is a human-made freshwater wetland. It is also the largest in Haryana.
- **The Thol Lake Wildlife Sanctuary in Gujarat** lies on the Central Asian Flyway and more than 320 bird species can be found here such as the critically endangered White-rumped Vulture and Sociable Lapwing; and the vulnerable Sarus Crane and Common Pochard.
- Thol Lake was initially built in 1912 as a tank by the Gaekwad regime to provide irrigation facilities to farmers.
- **The Wadhvana Wetland in Gujarat** is internationally important for its birdlife as it provides wintering ground to migratory waterbirds, including over 80 species that migrate on the Central Asian Flyway.

### Note:

- The world's first Site was the **Cobourg Peninsula in Australia**, designated in 1974.
- The countries with the most Sites are the **United Kingdom with 175** and Mexico with 142.
- It is important to note that the Ramsar Convention is **not legally binding** i.e. it has no punitive sanctions for violations upon treaty commitments. It is also not part of the United Nations and UNESCO system of environmental conventions and agreements.

Source: [PIB](#)

## SEACAT military exercise

### In news

The Indian Navy demonstrated its maritime manoeuvres in U.S. Navy-led **Southeast Asia Cooperation and Training (SEACAT)** military exercise in Singapore.

### About the exercise –

- The military exercise also included navies of 20 other partner nations as well.
- It aimed to foster enhanced cooperation between Southeast Asian countries by incorporating tactics, standardised training, and procedures to combat contingencies or illegal activities in the maritime domain.
- SEACAT began in 2002 as “Southeast Asia Cooperation Against Terrorism” and this is the 20th iteration of the exercise. In 2020, the event was conducted as part of a virtual symposium amid the COVID-19 pandemic.

## **Nano robots**

### **In news**

Recently, a group of scientists has found a way to tackle issues pertaining to root canal treatments (dental procedures) using nanosized robots.

### **Key takeaways:**

- A significant percentage of root canal treatments fail, because the procedure leaves out some bacteria that are located deep within the dentinal tubules.
- In the research the scientist has found a way to tackle this using nanosized robots that will travel through the tubules and target the bacteria.
- Under this method, spiral silica nanobots with a bit of iron embedded in them are injected in the central canal of the tooth. Then a rotating magnetic field is applied. This causes the nanorobot to move - like screws move into a wall.
- Once the bacterial colony is reached, the nanorobot can deploy various antibacterial strategies one of which is localised heating.

### **Nanorobots:**

- Nanorobotics describes the technology of producing machines or robots at the nanoscale. 'Nanobot' is an informal term to refer to engineered nano machines.
- Nanobots are robots that carry out a very specific function and are ~50–100 nm wide.

**Source: The Hindu**

## **TAPAS (Training for Augmenting Productivity and Services)**

### **In news**

The Union Minister for Social Justice and Empowerment has launched an online portal named TAPAS (Training for Augmenting Productivity and Services).

### **About TAPAS Portal:**

- Developed by: **National Institute of Social Defence**, Ministry of Social Justice and Empowerment.
- It is a **MOOC (Massive Open Online Course) platform** that offers various courses in the field of social defence.
- The main objective of introducing courses on social defence is to impart training and enhance the knowledge and skills for the capacity building of the participants
- It will **provide five basic courses**
  - Drug (Substance) Abuse Prevention,
  - Geriatric/Elderly Care,
  - Care and Management of Dementia,
  - Transgender Issues
  - Comprehensive course on Social Defence Issues.
- Eligibility: The courses can be taken up by anyone who wishes to enhance his or her knowledge on the topics and there is no fee for joining.

**Source: [PIB](#)**

## Cave lion cub

### In news

Scientists have found two perfectly frozen cave lion cubs which lived 28,000 years ago. The lion cubs were found in **Siberia's Permafrost in Russia and have been nicknamed Boris and Sparta.**



### About Cave Lion:

- **Cave Lions (Pantheraspelaea)** are also known as European cave lions and Eurasian cave lions. They are an ancient big cat species that have been extinct for thousands of years.
- They belong to the **genus of the prehistoric lions that originated during the Pleistocene epoch** in what is now Europe.
- Furthermore, they are thought to be one of the largest species of the lion to have ever lived. Scientists believe that cave lions were as much as 10% larger than modern lions.
- The Cave Lions were major predators, hunting ice age deer, bison, and other animals.
- Findings like these in Russia's vast Siberian region have started happening more and more.
- This is because climate change is warming the Arctic at a faster pace than the rest of the world and has defrosted the ground in some areas long locked in permafrost.

Source: [The Hindu](#)

## High Court on new IT rules

### In news

The **Bombay High Court has stayed part of the new IT rules** which aim to control the news media along with social media and OTT platforms.

### Key takeaways:

- The court identified the threat to free expression and argued that the rules are subordinate legislation that go beyond the remit of the IT Act itself.
- Digital news and current affairs publishers had challenged these rules citing the right to equality, free expression and the right to profession.
- Rule 9 (observance and adherence to the code) prima facie seems to be against the freedom of speech-> stayed Rule 9 (1) and (3).
- Rule 9 (1)- which calls for digital media publishers to adhere to the code of ethics,

### 'DISSENT IN DEMOCRACY IS VITAL'

> **Rule 9(1) of IT rules says:** A publisher shall observe and adhere to the code of ethics and norms of conduct for journalists under the Press Council guidelines and Cable TV Code

> **Rule 9(3)** set out a 3-tier structure to deal with complaints against publishers. Level I is self-regulation by publishers, level II is self-regulation by self-regulating bodies of publishers, and level III is an oversight mechanism by Centre



Dissent in democracy is vital. It is... the checks and balances that make a democracy work. There can be no two opinions that a healthy democracy is one which has developed on criticism and acceptance of contra views

— HC

and offers subjective meaning of 'half-truths', 'decency' and 'good taste' which is beyond the section 66 of the IT Act

- Rule 9 (3) – aimed to set up a **three-tier grievance redressal committee**, which empowers the governments to minutely regulate all media content.

Source: [Times of India](#) , The Hindu

## **SAMVAD (Support, Advocacy & Mental health interventions for children in Vulnerable circumstances And Distress)**

### **In News**

The Union **Minister of Women and Child Development** has launched the 2nd phase of SAMVAD programme.

### **About SAMVAD Programme:**

- It is a **National Initiative and Integrated Resource that works in child protection, mental health and psychosocial care.**
- Aim: To provide mental health outreach for children **who are abandoned and orphaned, child survivors of trafficking, or in conflict with law.**
- The programme is led **by National Institute of Mental Health and NeuroSciences (NIMHANS).** It is **funded by Ministry of Women and Child Development.**
- Under the Programme, training is being provided to Child Protection Functionaries, tele-counsellors, educators, law professionals among others. The training will be provided to cope mechanisms for children in distress.
- In the second phase, SAMVAD is slated to begin work with **Panchayati Raj institutions** to integrate child protection and mental health **in aspirational districts** across the country. This will help facilitate awareness generation and improve service delivery at the grassroot level.

**Note:** NIMHANS is the apex centre of mental health and neuroscience education. It operates autonomously under the Ministry of Health and Family Welfare.

Source: [PIB](#)

## **Sainik schools**

### **In news**

The PM has announced that all Sainik Schools in the country **will now be open for girls also.** The move to admit girls at Sainik Schools all across India comes as part of the government's push to increase the participation of women in the Indian armed forces.

### **About Sainik Schools:**

- Run by the Sainik Schools Society which is under the administrative control of the **Ministry of Defence.**
- The aim of establishing Sainik schools was to prepare the students from an early age for their entry into the Indian armed forces.
- These schools are the **brainchild of VK Krishna Menon** who conceived this idea in 1961.
- Students are selected for Sainik Schools through an annual entrance examination. They are inducted at the middle-school level.



- At present, 33 Sainik schools are operating in the country. A provision for setting up 100 new Sainik Schools in partnership with NGOs, private schools and states was announced in the Union Budget for 2021-22.

Source: [Indian Express](#)

## Defence Testing Infrastructure Scheme

### In news

In order to boost domestic defence and aerospace manufacturing, the Ministry of Defence (MoD) has launched the Defence Testing Infrastructure Scheme (DTIS).

### About Defence Testing Infrastructure Scheme (DTIS)

- Launched by: **Ministry of Defence in 2020.**
- Aim: To create a **state-of-the-art testing infrastructure in partnership with the private industry.**

### Key takeaways:

- The scheme aims to set up 6-8 Greenfield Defence Testing Infrastructure facilities that are required for defence and aerospace-related production.
- The projects under the scheme will be provided with up to **75% Government funding** in the form of 'Grant-in-Aid'.
- The remaining **25% of the project cost will have to be borne by the Special Purpose Vehicle (SPV)**. The SPV constituents will be the Indian private entities and state governments.
- Duration of the Scheme: **Five Years.**

**Note:** A greenfield project is one that is not constrained by prior work. It is constructed on unused land where there is no need to remodel or demolish an existing structure.

Source: [PIB](#)

## National Gene Bank

### In news

The Union Minister for Agriculture and Farmers Welfare has inaugurated the **world's second-largest refurbished state-of-the-art National Gene Bank** at the National Bureau of Plant Genetic Resources (NBPGR), Pusa, New Delhi.

### About National Gene Bank:

- Established in 1996.
- It aims to **preserve the seeds of Plant Genetic Resources (PGR) for future generations** in the form of seeds, genomic resources, pollen etc.
- Hosted By: **National Bureau of Plant Genetic Resources (NBPGR), New Delhi.**
- Presently, the Gene Bank is protecting 4.52 lakh accessions, of which 2.7 lakh are Indian germplasm and the rest have been imported from other countries.

### About NBPGR

- Established in 1977 by renaming the National Bureau of Plant Introduction as NBPGR.
- It is **one of the Indian Council of Agricultural Research (ICAR) Institutes.**
- Mandate: To act as the nodal institute at the national level for acquisition, management and genomics-based profiling of indigenous and exotic plant genetic resources (PGR).

The PGR is collected for food and agriculture and to carry out related research and human resources development for sustainable growth of agriculture.

- **Headquarters: New Delhi.**

**Note:** Germplasm is a live information source for all the genes present in the respective plant. It can be conserved for long periods and regenerated whenever it is required in the future.

**Source:** [PIB](#)

## **Visceral leishmaniasis therapy**

### **In news**

Indian researchers have developed a non-invasive, easy to administer, cost-effective, and patient compliant potential therapeutic strategy against Visceral Leishmaniasis.

### **About Visceral Leishmaniasis(VL)**

- Also known as **kala-azar**. The disease is characterized by irregular bouts of fever, substantial weight loss, swelling of the spleen and liver, and anaemia.
- It is a **neglected tropical disease** that affects millions annually, making it the second most common parasitic killer after malaria.
- If the disease is not treated, the fatality rate in developing countries can be as high as 100% within 2 years.
- The conventional treatment therapy of VL mainly involves painful intravenous administration. This imposes many treatment complications, including prolonged hospitalization, high cost, and high risk of infection.
- On the other hand, Oral drug delivery brings forth massive advantages that can help overcome these barriers. But with oral routes have potential high renal toxic side effects.
- To overcome this, **scientists have developed a method based on nano carrier-based oral drugs coated with Vitamin B12**. This method can mitigate challenges and drug-associated toxicity.

**Source:** [PIB](#)

## **Rice fortification**

### **In news**

The Prime Minister has announced that rice distributed under various government schemes such as the public distribution system (PDS) and mid-day meal (MDM) will be **fortified by 2024**.

### **About Rice Fortification:**

- According to the WHO, **fortification is the process of increasing the content of an essential micronutrient, such as vitamins or minerals**, in a food item to improve its nutritional value and provide public health benefits at minimal cost.
- It has minimal effects on taste and cooking properties while at the same time adding multiple nutrients to cure multiple deficiencies.
- **Rice is the fifth item to get the government's fortification push after salt, edible oil, milk and wheat.**
- Rice can be fortified by adding a micronutrient powder containing **iron, folic acid and other B-complex vitamins, vitamin A and zinc**, which then sticks to the grains.



- According to the norms of the Food and Safety Standards Authority of India, 1 kg of fortified rice must contain iron (28 mg-42.5 mg), folic acid (75-125 mg) and vitamin B-12 (0.75-1.25 mg). In addition, rice may also be fortified with micronutrients singly or in combination.

#### **Need for Rice Fortification**

- India is one of the largest producers of rice. **India also accounts for 22 percent of the world's rice production.** Further, India is also a leading consumer. However, in India, every second woman is anaemic, and every third child is stunted.
- India ranks **94 out of 107 countries and is in the 'serious hunger' category on the Global Hunger Index (GHI).**
- Hence, rice fortification has been found as a cost-effective strategy to tackle the problem of micronutrient malnutrition (shortage of essential vitamins or minerals) especially among women and children.

Source: [Indian Express](#) , [TOI](#)

#### **Remission of Duties and Taxes on Exported Products (RoDTEP) scheme.**

##### **In news**

The government of India has notified the rates and norms for the Remission of Duties and Taxes on Exported Products (RoDTEP) scheme.

##### **About RoDTEP Scheme:**

- Launched by: **Ministry of Commerce & Industry**
- The RoDTEP scheme is **replacing the earlier Merchandise and Services Export Incentive Schemes (MEIS and SEIS) that were in violation of WTO norms.**
- Aim: To reimburse all the taxes/duties/levies being charged at the Central/State/Local level which are not currently refunded under any of the existing schemes but are incurred at the manufacturing and distribution process.
- The refund under the scheme shall not be available in respect of duties and taxes already exempted or remitted or credited.
- The refund under the scheme will be credited in an exporter's ledger account with the customs. It will be used to pay basic duty on imported goods. The credits can also be transferred to other importers.
- **Sectors Included:** The scheme covers sectors such as marine, agriculture, leather, gems and jewellery automobile, plastics, textiles, electronics among others.
- **Sectors Excluded:** **Pharmaceutical, steel and chemicals** have been kept out of the purview of the scheme. Products manufactured at export-oriented units and special economic zones have also been excluded from the scheme for the time being.
- The tax refund rates will vary between 0.5% and 4.3% of the export value of goods. The lowest rate is offered on items like chocolates, toffees and sugar confectionery. Yarns and fibres have been granted the highest rate.

Source: [Livemint](#) and [The Hindu](#)

## Financial Inclusion Index (FI-Index)

### In news

The RBI has released **India's First composite Financial Inclusion Index (FI-Index)**.

### About Financial Inclusion Index(FI-Index)

- Released by: **Reserve Bank of India(RBI)**
- Aim: To capture the extent of financial inclusion across the country.
- The index comprises **three broad parameters** —
  - access (35% weightage),
  - usage (45%) and
  - quality (20%).
- Each of these parameters will consist of various dimensions, which are computed based on 97 indicators.
- These are **also the G20 Financial Inclusion Indicators**.
- A unique feature of the index is the parameter related to the quality of financial inclusion. It captures information related to financial literacy, consumer protection and inequalities and deficiencies in services,
- The index will be **published in July every year**.
- The index has been constructed **without any "base year"**. It reflects the cumulative efforts of all stakeholders.
- It will also facilitate researchers to study the impact of financial inclusion and other macro-economic variables.
- The FI-Index for the financial year ended March 2021 crossed the halfway mark to 53.9, as compared to 43.4 for the year ended March 2017.
- This indicates that 46.1% of the parameters considered are still financially excluded, despite the launch of several initiatives by the Government.

Source: [Livemint](#) and [Business Standard](#) , [The Hindu](#)

## Plastic Waste Management Amendment Rules, 2021

### In News:

Recently, the **Ministry of Environment, Forest and Climate Change**, Government of India, has notified the Plastic Waste Management Amendment Rules, 2021.

### Key takeaways:

- These rules **prohibit identified single use plastic items which have low utility and high littering potential by 2022**.
- The manufacture, import, stocking, distribution, sale and use of single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited



with effect from the 1st July, 2022.

- **The thickness of plastic carry bags has been increased from 50 microns to 75 microns and to 120 microns with effect from the 31st December, 2022.**
- The plastic packaging waste shall be collected and managed in an environmentally sustainable way through the **Extended Producer Responsibility (EPR) of the Producer, importer and Brand owner.**
- The **CPCB, along with state pollution bodies**, will monitor the ban, identify violations, and impose penalties already prescribed under the Environmental Protection Act.
- States/UTs have been requested to constitute a **Special Task Force** for elimination of single use plastics and effective implementation of the rules. A National Level Taskforce has also been constituted for coordination efforts.

**Note:** Currently the **Plastic Waste Management Rules, 2016**, prohibits manufacture, import, stocking, distribution, sale and use of carry bags and plastic sheets **less than 50 microns** in thickness in the country.

Source: [PIB](#)

### National Mission on Edible Oils-Oil Palm

#### In news

The Union Cabinet has given its approval to launch a new Mission on Oil palm, to be known as the National Mission on Edible Oils – Oil Palm (NMEO-OP).

#### About National Mission on Edible Oils – Oil Palm (NMEO-OP):

- **Centrally Sponsored Scheme** that aims to boost domestic production of Palm Oil and reduce its dependence on imports.
- The mission has a **special focus on the North-eastern region and the Andaman and Nicobar Islands.**
- The mission hopes to **increase the area under oil palm by an additional 6.5 lakh hectares by 2025-26.** It also has a target to increase the production of crude palm oil to 11.2 lakh tonnes by 2025-26 and up to 28 lakh tonnes by 2029-30.
- Aim: **To reduce import dependence from 60% to 45% by 2024-25**, by increasing domestic edible oil production from 10.5 million tonnes to 18 million tonnes which is a 70% growth target.
- Farmers will get all needed facilities, from quality seeds to technology.
- Price assurance will be given in the form of viability gap funding, and the industry will be mandated to pay 14.3% of crude palm oil prices.
- Moreover, in a bid to encourage oil palm cultivation in northeastern India and in the Andaman and Nicobar Islands, the Centre will bear an additional cost of 2% of the crude palm oil prices in these States.
- Along with promoting the cultivation of oil palm, this mission will also expand the cultivation of our other traditional oilseed crops.

Source: [PIB](#), [The Hindu](#)

## UNITE AWARE platform

### In news

India's External Affairs Minister has announced the launch of the UNITE AWARE platform.

### About UNITE AWARE Platform:

- Launched by **India in partnership with the UN Department of Peacekeeping Operations and the Department of Operational Support.**
- UNITE Aware is a **technology platform that utilises modern surveillance technology for real-time threat assessments to UN peacekeepers** and helps them enhance their security.
- It will initially be rolled out in four UN Peacekeeping Missions: MINUSMA (Mali), UNMISS (South Sudan), UNFICYP (Cyprus) and AMISOM (Somalia).

### About Partnership for Technology in Peacekeeping initiative:

- Established in 2014 by the United Nations (UN) Department of Operational Support (DOS).
- Aim: To bring greater involvement to peacekeeping through innovative approaches and technologies that have the potential to empower UN global operations.

Source: [The Hindu](#)

## Indo-Swiss medical research agreements

### In news

The Union Cabinet has approved agreements between ICMR and Swiss research agencies to promote collaboration on diagnostics and antimicrobial resistance.

### Key takeaways:

- MoU between **ICMR and Foundation for Innovative New Diagnostics (FIND), Switzerland**: aims to strengthen the relations within the framework of the international scientific and technological collaboration .
- MoU between **ICMR and GARDP Foundation on Antimicrobial Resistance Research and Innovation**: aims to develop and deliver new or improved antibiotic treatments, and also ensure their sustainable access.

### About FIND:

- It is a **global health non-profit organization** that facilitates the development, evaluation, and implementation of diagnostic tests for poverty-related diseases.
- Headquarters: **Geneva, Switzerland**
- In India, FIND is registered as a non-profit organisation created under Section 8 of the (Indian) Companies Act, 2013.

### About GARDP (Global Antibiotic Research and Development Partnership):

- It is a **not-for-profit organization created by the WHO and Drugs for Neglected Diseases Initiative(DNDi).**
- It works with partners to develop new treatments for drug-resistant infections that pose the greatest threat to health.

Source: [The Hindu](#)

## Advanced Chaff Technology

### In news

DRDO has developed an Advanced Chaff Technology to safeguard fighter aircraft of the IAF against hostile radar threats.

### About Advanced Chaff Technology

- **Developed by DRDO units Defence Laboratory Jodhpur and High Energy Materials Research Laboratory (HEMRL).**
- Chaff is an **electronic countermeasure technology**. It is used by militaries worldwide to protect their assets like naval vessels and aircraft from radar and radio frequency(RF) guiding mechanisms of the enemy missile.
- A very little quantity of chaff material deployed in the air acts as a decoy.
- The chaff deployed in the air reflects multiple targets for the missile guidance systems, thus misleading the enemy radars or deflecting adversary missiles.

### Note:

- **Chaff and Flares are both used as defensive countermeasures to confuse the radar from detecting a vessel or deflect the missiles from the target.**
- Major difference between the two.
  - While flares, when fired, generate a strong infrared source to attract heat-seeking missiles, chaff is used to misguide radar-tracking weapons.
  - Chaff is composed of many small aluminium or zinc coated fibres. It will be stored on-board the aircraft as cartridges.

Source: [PIB](#)

## Zyklus Cadila vaccine

### In news

Drugs Controller General of India's (DCGI's) has granted emergency approval for Zycov-D vaccine.

### About Zycov-D:

- It is a **DNA plasmid-based Covid-19 vaccine developed by Zycov Cadilla Group in partnership with the Department of Biotechnology under the 'Mission COVID Suraksha'**.
- It is the **world's first and India's indigenously developed DNA based vaccine** for COVID-19.
- The vaccine is an **intra-dermal** -> applied using a 'needle-free injector'.
- The vaccine is to be administered in humans, including Children and adults 12 years and above.
- Unlike other Covid-19 vaccines which are given in two doses, Zycov-D will be given in **three**



**VACCINE:** ZyCoV-D is a plasmid DNA vaccine, which when injected produces the spike protein of the SARS-CoV-2 virus and elicits an immune response

**DOSES:** Three (Day 0, 28, 56)

2-dose regimen trial data shows equivalent immune response

**Administration of vaccine:** Through needle-free injection system

**STORAGE:** At 2-8 degrees C, but stable at 25 degrees C for at least 3 months

**INVESTMENT:** Zydus invested ₹400-500 crore on developing ZyCoV-D

**CAPACITY:** To make 10 mn doses per month from August



doses with an interval of 28 days between each dose.

- The vaccine development has been supported under COVID-19 Research Consortia through National Biopharma Mission for Preclinical studies.

**About the National Biopharma Mission:**

- It is an **industry-academia collaborative mission for accelerating biopharmaceutical development in the country.**
- Launched in **2017 by the Department of Biotechnology(DBT) with 50% co-funding by World Bank loan.**
- Implementation: **Biotechnology Research Assistance Council (BIRAC)-** a Public Sector Undertaking of DBT.
- Under this Mission, Government has launched **Innovate in India(i3) programme** to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the biopharma sector.

Source: [Livemint](#), [The Hindu](#), [PIB](#), [Business Standard](#)



**Fostering a custom:** Tiwa tribesmen performing a traditional dance as they take part in the Wanchuwa festival in which they pray for a bountiful harvest in Morten village in Karbi Anglong district of Assam on Wednesday. -RITURAJ KONWAR

**Tiwa Tribe – Assam – Wanchuwa festival**

**Terms in news**

**Plasmid:** a small, often circular DNA molecule found in bacteria and other cells. Plasmids are separate from the bacterial chromosome and replicate independently of it. They generally carry only a small number of genes, notably some associated with antibiotic resistance. Plasmids may be passed between different bacterial cells.



**August 14** :- will be observed as 'Partition Horrors Remembrance Day' to acknowledge the pain undergone by Indians due to the Partition of India in 1947.

**Biju Swasthya KalyanYojana (BSKY):** Launched by **Odisha government**. Under this, Odisha would provide smart health cards to 3.5 crore people in the State. **Each family** can avail treatment cost **up to ₹5 lakh per annum** while **women members can avail this benefit up to ₹10 lakh every year**.

**Deepor Beel:-Freshwater lake** on the southwestern edge of Guwahati". Designated a **Ramsar Site in 2002** and an Important Bird Area for sustaining a range of aquatic life forms.

**Facts:**

- India has contributed less than **5% of global cumulative emissions** to date, with per capita annual emissions a third of the global average.
- India is also the only nation among the G20 with commitments under the Paris Agreement that are even 2 degree Celsius warming compatible.
- **According to the latest World Drug Report of the United Nations Office on Drugs and Crime:-**Afghanistan reported a 37% increase in the extent of land used for illicit cultivation of opium poppy during 2020 compared with the previous year.



The advertisement is a purple-themed graphic for Target4IAS. It features the Target4IAS logo at the top left. The main text reads 'Current Affairs Test Series for UPSC CSE Prelims 2021'. A key feature is 'Starting August 10th, 2021'. A blue box with a green checkmark states 'Month wise Current Affairs revision Plan through questions.' Below this, there is a list of key features: 'Coverage of more than 15 months current affairs.', 'Questions are framed directly from authentic sources like The Hindu, IE, PIB, Yojana etc and in-line with the pattern of UPSC.', '8 Full Length Tests of 100 Questions.', 'To the point and simple explanations.', 'Practice is the key to boost your marks in CSE Prelims 2021.', and 'It helps you to follow the 'READ, REVISION, PRACTICE AND IMPROVEMENT STRATEGY''. At the bottom, there is an owl illustration, the website 'www.target4IAS.in', and contact information: '+91-8791290201' and '@Target4\_IAS'.

Current affairs test series for UPSC CSE Prelims 2021 for streamlined revision and practice.

Click here for more details : <https://target4ias.in/us6c>