

# CURRENT AFFAIRS

## WEEKLY

WEEK - 4  
JUNE, 2020

MAINS

PRELIMS

- Direct contribution to National Disaster Relief Fund (NDRF)

### DISASTER MANAGEMENT

- France to levy digital tax despite US decision to walk out of talks
- India's first gas exchange

### ECONOMY

- China removes Pangolin scales from the list of 'approved ingredients'

### ECOLOGY & ENVIRONMENT

- Khelo India State Centres of Excellence
- Rule of Law Index

### GOVERNANCE

- India to deploy naval liaisons at Madagascar, Abu Dhabi for information exchange

### INTERNATIONAL ORGANIZATION

- China and India clash on freezing battlefield
- SIPRI Report
- USTR probe for taxing digital service companies

### INTERNATIONAL RELATIONS

- India joins the Global Partnership on Artificial Intelligence

### INTERNATIONAL INSTITUTION

- Amoebiasis
- China publishes Genome Sequencing Data
- ICMR Recommend Standard Q-covid-19 Ag detection kit
- The Fifth State of Matter

### SCIENCE & TECHNOLOGY

- Desertification and Drought Day

### CONSERVATION

- Will India limit China's access to its Market? Assessing the impacts

### ECONOMY

- IAEA voices serious concern over Iran's nuclear activities

- Vaccine Nationalism

### INTERNATIONAL RELATIONS

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The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

# CURRENT AFFAIRS ANALYST

WEEK- 4 (JUNE, 2020)

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# **SECTION: A**

## **(MAINS)**

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**CURRENT AFFAIRS**

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# DESERTIFICATION AND DROUGHT DAY

## CONTEXT

**Desertification and Drought Day – until this year known as The World Day to Combat Desertification and Drought – is observed every year on June 17 to promote public awareness of international efforts to combat desertification.**

### ◎ BACKGROUND

- Desertification and drought are issues of a global dimension. They affect almost all regions of the world.
- Dryland ecosystems, which cover over one third of the world's land area, are extremely vulnerable to overexploitation and inappropriate land use.
- Desertification is caused primarily by human activities and climatic variations, and affects the world's poorest.
- Desertification and Drought Day is observed every year to promote public awareness. The day is a unique moment to remind everyone that land degradation neutrality (LDN) is achievable.
- The commemoration of the day is led by the Secretariat of the United Nations Convention to Combat Desertification.

those countries experiencing serious drought and/or desertification, particularly in Africa.

- This year's celebrations
  - In order to celebrate the World Day to Combat Desertification and Drought 2020, the main aim is to observe and create awareness of this day.
  - World Day to Combat Desertification and Drought 2020 Theme is "Food. Feed. Fibre"; which speaks the links between consumption and land.
  - This year's observance is focused on changing public attitudes to the prominent driver of desertification and land degradation. As these issues are humanity's unyielding production and consumption.

### ◎ ANALYSIS

#### What is World Day to Combat Desertification and Drought?

- United Nations General Assembly acknowledged June 17 as the World Day to Combat Desertification and Drought.
- The day was officially declared by the UN General Assembly in the year December 1994 as "World Day to Combat Desertification and Drought".
- On October 14, 1994, India signed the United Nations Convention on the Elimination of All Forms of Desertification (UNCCD). After which this day started to be celebrated from the year 1995 to combat desertification.
- The objectives of Desertification and Drought Day as per UN General Assembly comprises of following points-
  - To promote public awareness of the issue
  - To let people know that desertification and drought can be effectively tackled, that solutions are possible, and that key tools to this aim lay in strengthened community participation and cooperation at all levels.
  - To strengthen implementation of the United Nations Convention to Combat Desertification in

#### What is Desertification?

- In 1994, the UN established the United Nations Convention to Combat Desertification (UNCCD) as the "sole legally binding international agreement linking environment and development to sustainable land management".
- The Convention itself was a response to a call at the UN Earth Summit in Rio de Janeiro in 1992 to hold negotiations for an international legal agreement on desertification.
  - India is signatory to the United Nations Convention on Combating Desertification (UNCCD). The country is committed to combat desertification and land degradation and intends to achieve land degradation neutral status by 2030.
  - MoEF&CC is the nodal Ministry for the implementation of the UNCCD.
  - The status of India's desertification and land degradation is an important contribution to India's report to the UNCCD.
- The UNCCD set out a definition of desertification in a treaty adopted by parties in 1994. It states that desertification means

***"land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities".***



**Drylands**

- Arid, semi-arid and dry sub-humid areas are known collectively as "drylands".
- Technically, they are defined by the UNCCD as "areas other than polar and sub-polar regions, in which the ratio of annual precipitation to potential evapotranspiration falls within the range from 0.05 to 0.65".

- Desertification occurs on all continents except Antarctica and affects the livelihoods of millions of people, including a large proportion of the poor in drylands.
- Desertification takes place worldwide in drylands, and its effects are experienced locally, nationally, regionally, and globally.

**Mapping the desertified land**

- The world loses 24 billion tons of fertile land every year. Notably, 29.3 percent of land in India is affected by erosion.
- In India, about 30 percent of the land has been turned into a desert. Notably, 82 percent of this is in the eight states of Rajasthan, Maharashtra, Gujarat, Jammu and Kashmir, Karnataka, Jharkhand, Odisha, Madhya Pradesh, and Telangana.
- Land degradation alone cost India over 2 percent of its gross domestic product.
- The United Nations estimates that by 2025, two-thirds of the world's population will be living in water crisis conditions.
- As a result of desertification, displacement is likely to increase and by 2045, more than 130 million people may have to leave their homes.

**What leads to Desertification?**

- Land degradation is mainly driven by both by changes in climate or human activities. There are numerous ways in which the land can degrade.
- The direct causes of desertification can be broadly divided between those relating to how the land is – or isn't – managed and those relating to the climate.
  - The former includes factors such as deforestation, overgrazing of livestock, over-cultivation of crops and inappropriate irrigation.
  - The latter includes natural fluctuations in climate and global warming as a result of human-caused greenhouse gas emissions.

- Then there are underlying causes as well including "economic, demographic, technological, institutional and cultural drivers".

**Impact of land degradation**

- **Loss of soil fertility:** A loss of soil fertility is another form of degradation. This can be through a loss of nutrients, such as nitrogen, phosphorus and potassium, or a decline in the amount of organic matter in the soil. Soils can also suffer from salinisation – an increase in salt content – and acidification from overuse of fertilisers.
- **Erosion:** One of the main processes is erosion – the gradual breaking down and removal of rock and soil. This is typically through some force of nature – such as wind, rain and/or waves – but can be exacerbated by activities including ploughing, grazing or deforestation.
- **Impacting vegetation, soil quality & water table:** It can also lead to a loss or shift in vegetation type and cover, the compaction and hardening of the soil, an increase in wildfires, and a declining water table through excessive extraction of groundwater.
- **Destructing the ecosystems:** Desertification not only ensures the existing expansion of desert systems around the world, rather it destructs the vital dryland ecosystems, including those of deserts, drylands, and scrublands.
- **Economic loss:** The poor quality of land could lead to a decline in national GDP by up to eight percent every year.
- **Leading to climate crisis:** Land erosion and its adverse effects further deepen the climate crisis looming over humanity.

**CONCLUSION**

Desertification or land degradation is not new to the world. In an age governed by steep population growth, industrialisation and the global rise in temperatures, one of nature's precious bounties, land, is threatened severely. The resource, considered to be the ever-nourishing mother-figure in many cultures, is gradually ripped off its fertility across the globe. June 17 comes as a reminder to practice land degradation neutrality and influence policy changes to have a sustainable future.

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# WILL INDIA LIMIT CHINA'S ACCESS TO ITS MARKET? ASSESSING THE IMPACTS

## CONTEXT

India is now mulling economic measures, including limiting China's access to its vast market, following the significant escalation of the border conflict with China after 20 Indian soldiers were martyred in a brutal clash with Chinese soldiers on June 15.

## ◎ BACKGROUND

- As border tensions between India and China flared up with the deadliest clash in more than four decades, leaving at least 20 Indian soldiers dead, there have been calls for boycotting goods imported from the neighbouring nation.
- Following the incident, Indian armed forces went into a state of high alert to deal with any threat to national security.
- The army has strengthened its posture across the length of the Line of Actual Control (LAC) where reinforcements have been sent, the Indian Air Force is keeping its contingency plans ready and the navy is also on an operational alert in the Indian Ocean region where scores of warships are ready for any task.
- The forces are doing their work efficiently, but on the economic front, the demands are on sudden rise that Chinese products should be banned in India.

## ◎ ANALYSIS

### What is happening at the economic front?

- Ministry of Finance and Ministry of Commerce:** Both ministries of finance and commerce are already taking action against the influx of Chinese goods that is injuring domestic industry.
  - Imports of more than 100 goods are under various stages of anti-dumping action.
- Anti-dumping duties:** India could extend anti-dumping duties and safeguards on more than two dozen Chinese goods this year that range from calculators and USB drives to steel, solar cells and Vitamin E amid concern that a flood of imports would kill domestic manufacturers who will lose duty protection soon against such products.
  - Anti-dumping duties on these products were imposed five years ago and are expiring this year.
- Indian traders:** Traders are also against China. The Confederation of All India Traders (CAIT), a powerful lobby of 70 million local traders, has

decided to step up its nationwide movement against the boycott of Chinese goods.

- CAIT has released a list of over 450 commodities that can be sourced locally: fast moving consumer goods, toys, textiles, builder hardware, footwear, apparel, kitchenware, luggage, hand bags, cosmetics, gift items, electrical and electronics.

### Imports from China

- China is Asia's largest economy and the world's second-biggest with a GDP of about \$13.6 trillion. India is No. 3 in Asia at \$2.7 trillion.
- From supplying industrial components and raw materials to investments in India's startups and technology firms, China is India's biggest trading partner after the U.S.
- China accounts for about 14 per cent of India's imports and is a major supplier for sectors like cell phones, telecom, power, plastic toys and critical pharma ingredients.
- Chinese exports to India comprise smartphones, electrical appliances, power plant inputs, fertilisers, auto components, finished steel products, capital goods like power plants, telecom equipment, metro rail coaches, iron and steel products, pharmaceutical ingredients, chemicals and plastics and engineering goods, among other things, according to the Ministry of Commerce.
- India's imports from China jumped 45 times since 2000 to reach over \$70 billion in 2018-19.

### Chinese Investments in India

- Foreign direct investments from China come to metallurgical industries, renewable energy (solar panels), electrical equipment, automotive and chemicals.
- There are roughly 800 Chinese companies in the domestic market.
- They have roughly 75 manufacturing facilities for smartphones, consumer appliances, construction equipment, power gear, automobiles, optical fibre, and chemicals.

**Will trade-deficit make China weaker?**

- Trade deficits surpluses are just accounting exercises and having a trade deficit against a country doesn't make the domestic economy weaker or worse off.
- For instance, the top 25 countries with whom India trades, it has a trade surplus with the US, the UK and the Netherlands. But that does not mean the Indian economy is stronger or better off than any of these three.
- Similarly, it has a trade deficit with the other 22 of them (including China) — regardless of their size and geographic location.
  - This list includes France, Germany, Nigeria, South Africa, UAE, Qatar, Russia, South Korea, Japan, Vietnam, Indonesia among others.
- Yet, a trade deficit doesn't necessarily mean that the Indian economy is worse off than South Africa's.
- A trade deficit with China only means that Indians buy more Chinese products than what Chinese buy from India. But per se that is not a bad thing.

**Who will suffer the most?**

- Poorest consumer:** More often than not, the poorest consumers are the worst-hit in a trade ban of this kind because they are the most price-sensitive.
  - For instance, if Chinese ACs were replaced by either costlier Japanese ACs or less efficient Indian ones, richer Indians may still survive this ban — by buying the costlier option — but a number of poor, who could have otherwise afforded an AC, would either have to forgo buying one because it is now too costly (say a Japanese or European firm) or suffer (as a consumer) by buying a less efficient Indian one.

**Is India equally important for China?**

- On one hand, China accounts for about 14 per cent of India's imports, India accounts for over 5 percent of China's imports in financial year 2019-20.

- Meaning, India runs a huge trade deficit with China, the biggest exporter to India.
- While the absolute value of imports from our neighbour may have fallen, their share in the overall pie rose from 13.68% in the previous fiscal.
- India is the seventh largest export destination for Chinese products.
- India is as dependent on China in its telecom sector as the defence sector is dependent on Russia. In particular, Huawei and ZTE have a monopoly over the back end of mobile networks, while Chinese brands dominate the cellphone instrument market.
- Chinese internet offerings generate vast amounts of meta data from India that go to feed its relentless drive to secure a comfortable lead over the US in Artificial Intelligence.
- If China too decides to abruptly ban all trade and forbid all private investment via any route into India, it would lead to-
  - India would survive, but at a huge cost to common Indians while depriving many Indian businesses (the start-ups with billion-dollar valuations) of Chinese funding.
  - In the short to medium term, it would be both difficult and costly to replace Chinese products.
  - India will only increase its total trade deficit.
  - If on the other hand, only Indian products are used, that too would cost the country more — albeit just internally.

**◎ CONCLUSION**

Amid Indo-Chinese tensions, the clamour for boycotting Chinese products, is unrealistic and is completely not in the economic interest of the country. Rather the call should be to develop our own domestic industry.

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# IAEA VOICES SERIOUS CONCERN OVER IRAN'S NUCLEAR ACTIVITIES

## CONTEXT

The International Atomic Energy Association raised its serious concern over Iran's Nuclear sites and country's failure to cooperate with agency probe into undeclared nuclear material in the country.

### ◎ BACKGROUND

- Iran's interest in nuclear technology dates to the 1950s, when the country received technical assistance under the **U.S. Atoms for Peace program**.
- While this assistance ended with the **1979 Iranian Revolution**, Iran remained interested in nuclear technology and developed an extensive nuclear fuel cycle, including sophisticated enrichment capabilities, which became the subject of intense international negotiations and sanctions between 2002 and 2015.
- Negotiations between the P5+1 and Iran yielded the **Joint Comprehensive Plan of Action (JCPOA)** in July 2015, a comprehensive 25-year nuclear agreement limiting Iran's nuclear capacity in exchange for sanctions relief.
- Under the 2015 Iran nuclear agreement, formally known as the Joint Comprehensive Plan of Action (**JCPOA**), Iran dismantled much of its nuclear program and gave international inspectors extensive access to its facilities in exchange for relief from economic sanctions.
- The United States withdrew itself from the agreement in May 2018, saying it failed to address Iran's ballistic missile program and its role in regional wars.
- The United States reimposed sanctions and moved to wipe out Iran's oil exports, prompting Iran to resume some of its nuclear activities.
- US's withdrawal from the arms control agreement heightened tensions and left the remaining signatories scrambling to keep the deal alive.
- Following the U.S. killing of Iranian military commander Qasem Soleimani in January 2020, Iran announced plans to halt most of its commitments to the deal.
- China, France, Russia, the United Kingdom, and the United States—the five permanent members of the UN Security Council—negotiated the agreement alongside Germany; together they were known as the P5+1.
- Initially, US's intention was to set back Iran's nuclear program so that if Iran were to pursue a nuclear weapon, the amount of time it would need to produce enough fissile material—an indicator known as "breakout time"—would be at least a year, up from just a few weeks.
- To extend that breakout time, the agreement requires that uranium enrichment at Fordow and Natanz be restricted and a heavy-water reactor, at Arak, have its core rendered inoperable; its plutonium byproduct, the P5+1 countries feared, could have been reprocessed into weapons-grade material.
- These facilities are now being repurposed for research, industrial, or medical purposes, and they are subjected to inspections by monitors from the UN nuclear watchdog, the International Atomic Energy Agency (IAEA).

### What's the matter now?

- The agency has expressed "serious concern" about Iran's failure to cooperate with its investigation of possible undeclared nuclear material and past activity at three sites.
  - Iran refused to allow IAEA access to two sites where it seeks to detect any past nuclear activity by taking environmental samples.
  - The third site has been so thoroughly cleansed that sampling would not be useful.
- In addition, for almost a year Iran has refused to engage substantively with the IAEA over its questions concerning the use of possible undeclared nuclear material in the early 2000s and what had happened to it since.
- The most serious questions concern suspected work on an undeclared uranium metal disk that might have been used in the production of uranium deuteride as a component for nuclear weapons.
- Other issues include the unreported processing and conversion of uranium ore and the possible use and storage of nuclear material at a location where explosive testing may have taken place.

### ◎ ANALYSIS

#### What is the JCPOA deal?

- The JCPOA, which was signed in July 2015 and went into effect the following January, imposes restrictions on Iran's civilian nuclear enrichment program.

- As per the report
  - ▶ Iran has been enriching uranium hexafluoride gas to 4.5% of the fissile isotope uranium-235 (U-235) over the past year.
  - ▶ By 20 May, it had stockpiled 1572 kilograms of enriched uranium, ostensibly for use in civilian reactors.
  - ▶ Nuclear bombs require enrichment levels exceeding 90% of U-235.
- This is just the latest in a long list of Iranian violations of the terms of the Joint Comprehensive Plan of Action (JCPOA), or the nuclear deal.

#### **About IAEA**

- Widely known as the world's "Atoms for Peace and Development" organization within the United Nations family, the IAEA is the international centre for cooperation in the nuclear field.
- The IAEA was created in 1957 in response to the deep fears and expectations generated by the discoveries and diverse uses of nuclear technology.
- The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.
- India is a founding member of IAEA.

#### **Iran's Stockpile amount**

- Iran began last year to exceed the 202.8 kg limit on low enriched uranium (commonly expressed as 300 kg of uranium hexafluoride, UF<sub>6</sub>).
- It has now accumulated 1,571.6 kg, although 483 kg of that amount is enriched only up to 2 percent or less, far from the 90 percent needed for a bomb.
- Subtracting the latter leaves 1,085 of useful material, which if further enriched to weapons grade, a process that would take several months, is theoretically enough for one nuclear weapon.
- It is to be noted that before the JCPOA was negotiated, Iran had about 9,000 kg of UF<sub>6</sub>, enough for several bombs.
- Iran is not racing to reach that level, which at the current pace of accumulation would take another three years.

#### **◎ CONCLUSION**

If Iran continues to ignore the IAEA's questions about the use, storage and location of nuclear materials, the issue could be raised with the United Nations Security Council (UNSC). The recent report show Iran has significantly failed to meet its commitments and that fact will bear on the UNSC's decision to extend the arms embargo on Iran.

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# VACCINE NATIONALISM

## CONTEXT

Hundreds of COVID-19 vaccine candidates are currently being developed. The United States has now twice indicated that it would like to secure priority access to doses of COVID-19 vaccine. Other countries, including India and Russia, have taken similar stances. This prioritization of domestic markets has become known as vaccine nationalism.

## ◎ BACKGROUND

- Vaccine nationalism is not new. During the early stages of the 2009 H1N1 flu pandemic, some of the wealthiest countries entered into pre-purchase agreements with several pharmaceutical companies working on H1N1 vaccines.
- At that time, it was estimated that, in the best-case scenario, the maximum number of vaccine doses that could be produced globally was 2 billion.
- The U.S. alone negotiated and obtained the right to buy 600,000 doses.
- All the countries that negotiated pre-purchase orders were developed economies.
- Only when the 2009 pandemic began to unwind and demand for a vaccine dropped did developed countries offer to donate vaccine doses to poorer economies.

## ◎ ANALYSIS

### What is Vaccine nationalism?

- Vaccine nationalism occurs when a country manages to secure doses of vaccine for its own citizens or residents before they are made available in other countries.
- This is done through **pre-purchase agreements** between a government and a vaccine manufacturer.
- This "vaccine nationalism" is not only morally reprehensible, it is the wrong way to reduce transmission globally.
- If countries with a large number of cases lag in obtaining the vaccine and other medicines, the disease will continue to disrupt global supply chains and, as a result, economies around the world.

### Vaccine nationalism during COVID-19

- In March, the White House met with representatives from CureVac, a German biotech company developing a COVID-19 vaccine.

- The U.S. government is reported to have inquired about the possibility of securing exclusive rights over the vaccine.
- This prompted the German government to comment that "Germany is not for sale."
- On June 15, the German government announced it would be investing 300 million euros (nearly US\$340 million) in CureVac for a 23% stake in the company.
- In April, the CEO of Sanofi, a French company whose COVID-19 vaccine work has received partial funding from the U.S. Biomedical Advanced Research and Development Authority, announced that the U.S. had the "right to the largest pre-order" of vaccine.
- Following public outcry and pressure from the French government, Sanofi altered its stance and said that it would not negotiate priority rights with any country.
- In India, the privately held Serum Institute is developing one of the leading COVID-19 vaccine candidates.
- The Serum Institute signaled that, if development of the vaccine succeeds, most of the initial batches of vaccine will be distributed within India.
- At the same time, India, alongside the U.S. and Russia, chose not to join the **Access to COVID-19 Tools Accelerator**, which was launched by the World Health Organization to promote collaboration among countries in the development and distribution of COVID-19 vaccines and treatments.

### Access to COVID-19 Tools Accelerator

- It is a Global Collaboration to Accelerate the Development, Production and Equitable Access to New COVID-19 diagnostics, therapeutics and vaccines.
- This initiative aims to mobilise the significant resources needed to advance work towards protecting the world from COVID-19.

### The problems posed by nationalism

Nationalism is at odds with global public health principles. Yet, there are no provisions in international

laws that prevent pre-purchase agreements. The problems posed by nationalism are as below:

- **Issue for countries with fewer resources:** The most immediate effect of vaccine nationalism is that it further disadvantages countries with fewer resources and bargaining power.
- **Deprives access to public health:** It deprives populations from timely access to vital public health goods.
- **Injustice with needy countries:** Taken to its extreme, it allocates vaccines to moderately at-risk populations in wealthy countries over populations at higher risk in developing economies.
- **Against fundamental principles:** Vaccine nationalism also runs against the fundamental principles of vaccine development and global public health. Most vaccine development projects involve several parties from multiple countries.

#### What needs to be done?

- **Pledge to refrain from reserving vaccines:** At such a time, developed countries should play a major role, they should pledge to refrain from reserving vaccines for their populations during public health crises.
- **Coordinated efforts:** Countries need a global coordinated effort to estimate and account for the available global workforce of vaccinators,

operationalize mass vaccination programs, implement plans for equitably allocating vaccines on a prioritized basis, and verify the delivery of vaccines.

- **Global framework for equitable access:** International institutions – including the WHO – should coordinate negotiations ahead of the next pandemic to produce a framework for equitable access to vaccines during public health crises.
- **Ensuring equity:** Equitable distribution and access should be ensured. Equity entails both affordability of vaccines and access opportunities for populations across the world, irrespective of geography and geopolitics.

#### ◎ CONCLUSION

With modern vaccines, there are very few instances in which a single country can claim to be the sole developer of a vaccine. And even if that were possible, global public health is borderless. As COVID-19 is illustrating, pathogens can travel the globe. Public health responses to outbreaks, which include the deployment of vaccines, have to acknowledge that reality. Countries around the world should stop engaging in overly nationalistic behaviors. Failure to do so will harm patient populations across the globe. Ultimately, it may harm everyone, and perpetuate structural inequalities in our health care system.

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## DIRECT CONTRIBUTION TO NATIONAL DISASTER RELIEF FUND (NDRF)'

- ◎ **CONTEXT:** The Ministry of Finance has allowed individuals and institutions to contribute directly to the National Disaster Relief Fund (NDRF).
- ◎ **ABOUT:**
- The National Disaster Response Fund (NDRF), is constituted under Section 46 of the Disaster Management Act, 2005.
  - It acts as a fund managed by the Central Government for meeting the expenses for emergency response, relief and rehabilitation due to any threatening disaster situation or disaster.
  - NDRF is located in the **"Public Accounts"** of Government of India under **"Reserve Funds not bearing interest"**.
  - **Comptroller and Auditor General of India (CAG)** audits the accounts of NDRF.
  - **Source of finance:** The NDRF is financed through the levy of a cess on certain items, chargeable to excise and customs duty, and approved annually through the Finance Bill.
    - The requirement for funds beyond what is available under the NDRF is met through general budgetary resources.
    - **NCCD:** The NDRF also draws a part of its fund through direct transfer of the National Calamity Contingent Duty (NCCD) levied by the Centre on certain goods such as tobacco, tobacco products and petroleum products.
  - In 2020/21, the government has budgeted Rs 2,930 for transfer to the NDRF through the NCCD.

### What is Disaster?

- The DM Act defines **"disaster"** to mean **'a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.'**
- NDRF is meant to "meet the expenses for emergency response, relief and rehabilitation" for any threatening disaster situation.
- Although Section 46 includes a clause regarding grants made by any person or institution, provisions for such donations had not been made.

### Significance of the decision

- This is a significant development at a time when many have expressed concerns about donations sent to the PM CARES Fund or the Prime Minister's National Relief Fund, as both claim they are not public authorities subject to questions under the Right to Information Act.

## FRANCE TO LEVY DIGITAL TAX DESPITE US DECISION TO WALK OUT OF TALKS'

- ◎ **CONTEXT:** In a latest development, France has decided to go ahead with plans to tax big digital companies this year and criticized the United States' decision to walk away from talks on the issue as a 'provocation'.

◎ **ABOUT:**

- The French government's "GAFA" tax" named after **Google, Apple, Facebook, Amazon**, is being introduced to combat attempts by the firms to avoid paying what is considered a "fair share" of taxes in the country.
- **The purpose of this tax is to achieve a fairer and more efficient tax system**, which taxes value where it exists, i.e. in the data, in order to finance public services, schools, nurseries and hospitals.
- It is a proposed digital tax to be levied on large technology and internet companies. France has decided to introduce the tax (3% tax on revenues from digital activities).
- France, Britain, Italy and Spain have already sent a reply expressing their desire to agree on "a fair digital tax at the level of the OECD as quickly as possible."

**US's stand**

- In January this year, 137 countries, including India, agreed to negotiate tax on tech firms but since tech gains during lockdown, US has backtracked.
- The United States has regularly accused the French plan--called the Gafa tax--of unfairly targeting American firms such as Google, Apple, Facebook and Amazon.

**How strong is GAFA?**

- The four tech giants Google, Amazon, Facebook, and Apple have transformed the media industry, the internet, business models, and society.
- They capture an ever-growing portion of consumer's spending by shifting consumers away from traditional brick-and-mortar businesses and even displacing them.
- On one hand, Google and Facebook led the digital and display market while Amazon and Apple dominated online retailing.
- Despite their seeming differences, all four have similar capabilities such as-
  - Search
  - Social
  - Retail
  - Advertising
- In this race, **Google is slightly better positioned than others** due to its search-engine and display advertising.
- Facebook comes in second with strong profit margins but provides a 'fashionable' core entertaining business which is more vulnerable to market changes and newcomers.
- Apple and Amazon remain strong in their segments but facing increasing challenges.

**Digital Taxation in India**

- India has the second-largest online users in the world. Thus, from the viewpoint of its tax revenue base, digital businesses cannot be ignored.
- In a recent development, two significant amendments were introduced in Indian taxation laws to properly tax the value created digitally.
- **Equalization Levy:** It is a tax aimed at foreign digital companies. It has been in place since 2016 and levied a 6% tax payable on gross revenues from online advertising services.
  - The new amendment, effective from April 1, 2020, essentially expands the its scope from online advertising to nearly all online commerce activities done in India by businesses that do not have taxable presence in India through applicability of 2% on its revenues.
- India also introduced the concept of "Significant Economic Presence" (SEP) for the purposes of corporate income tax, which expanded to include the following:
  - Advertisement which targets a customer residing in India or who accesses advertisement through internet protocol (IP) address located in India.

- Sale of data collected from a person residing in India or who uses an IP address located in India.
- Sale of goods/services using data collected from a person residing in India or who uses IP address located in India.

## INDIA'S FIRST GAS EXCHANGE

### ◎ **CONTEXT:**

The government has launched the Indian Gas Exchange (IGX), India's first gas exchange.

### ◎ **ABOUT:**

- The Indian Gas Exchange is a digital trading platform that will allow buyers and sellers of natural gas to trade both in the spot market and in the forward market for imported natural gas across three hubs:
  - Dahej and Hazira in Gujarat
  - Kakinada in Andhra Pradesh
- Imported Liquefied Natural Gas (LNG) will be regassified and sold to buyers through the exchange, removing the requirement for buyers and sellers to find each other.
- Indian Energy Exchange, the country's largest electricity trading platform, is the parent of the gas exchange.

#### Quick facts on Natural gas

- Natural gas is the earth's cleanest burning hydrocarbon.
- **Residue:** It's combustion does not produce ash residues, sulphur oxides, and only negligible nitrogen.
- **Formation:** Natural gas forms organically over millions of years from decomposing plant and animal matter that is buried in sedimentary rock layers.
  - Once formed the gas tends to migrate through the pore spaces, fractures, and fissures in the sediment and rocks.
- **Component:** Methane, or CH<sub>4</sub>, is the primary component of natural gas.
- When it is found in nature, raw natural gas may also contain some mixture of butane, propane, and pentane gasses, as well as some nitrogen, carbon dioxide, and water vapour.
- India is the biggest emitter of greenhouse gases after the US and China.

#### What about domestically produced natural gas?

- The price of domestically produced natural gas is decided by the government.
- It will not be sold on the gas exchange.

#### How is domestic production of gas?

- Domestic production of gas has been falling over the past two fiscals as current sources of natural gas have become less productive.
- Domestically produced natural gas currently accounts for less than half the country's natural gas consumption; imported LNG accounts for the other half.
- LNG imports are set to become a larger proportion of domestic gas consumption as India moves to increase the proportion of natural gas in the energy basket from 6.2% in 2018 to 15% by 2030.

### Significance of the initiative

- **Transparency & growth:** The exchange is expected to facilitate transparent price discovery in natural gas, and facilitate the growth of the share of natural gas in India's energy basket.
- **Fair price:** Buyers do not have to contact multiple dealers to ensure they find a fair price.
- **Boosting usage:** The exchange will help bring down the price of natural gas through competitive trade, boosting usage in the country that relies heavily on cheaper coal for its energy needs.
- **Greater flexibility:** The exchange also allows much shorter contracts – for delivery on the next day, and up to a month – while ordinarily contracts for natural gas supply are as long as six months to a year. This will allow buyers and sellers greater flexibility.

## CHINA REMOVES PANGOLIN SCALES FROM THE LIST OF 'APPROVED INGREDIENTS'

### ◎ CONTEXT:

China has officially removed pangolin scales from the list of 'approved ingredients' from traditional medicine, a move aimed at protecting the most trafficked species in the world.

### ◎ ABOUT:

- Pangolins are a group of Asian and African mammals that are covered in hard scales, curl up into a ball to defend themselves, and are sadly the most heavily trafficked animal in the world.
- They have got small heads but long snouts and even longer tongues for slurping up ants from inside ant nests, leading some people to call them scaly anteaters.
- **Species:** There are eight pangolin species, four Asian and four African-
  - Chinese pangolin, *Manis pentadactyla*
  - Indian pangolin (also known as thick-tailed pangolin), *M. crassicaudata*
  - Sunda pangolin (all known as Malayan pangolin), *M.*
  - Philippine pangolin, *M. culionensis*
  - Tree pangolin (also known as white-bellied pangolin), *Phataginus tricuspis*
  - Long-tailed pangolin (also known as black-bellied pangolin), *P. tetradactyla*
  - Giant pangolin (also known as giant ground pangolin), *Smutsia gigantea*
  - Cape pangolin (also known as ground pangolin, Temminck's ground pangolin, South African pangolin or steppe pangolin), *S. temminckii*

**Status:** All eight species are threatened with extinction, and are listed on the IUCN Red List as either Vulnerable, Endangered or Critically Endangered.

Species	Status
Chinese pangolin	Critically Endangered
Indian pangolin	Endangered
Sunda pangolin	Critically Endangered
Philippine pangolin	Critically Endangered

Tree pangolin	Endangered
Long-tailed pangolin	Vulnerable
Giant pangolin	Endangered
Cape pangolin	Vulnerable

### Why has COVID-19 put Pangolins in the spotlight?

- Pangolins, which are notoriously difficult to breed in captivity – have been in the spotlight since the start of the Covid-19 outbreak, due to studies suggesting they may have been the intermediate host that transmitted the virus to humans.
- Of the two animals known to naturally carry the Sars-CoV-2 virus – bats and pangolins – the latter is the most problematic, both for its meat and for the scales that protect its body.
- Neither has been positively identified as the intermediate source that transferred the virus to humans, though a 100% identification may prove elusive.

### The current status

- China accorded the highest level of protection to pangolins, which is believed to be the intermediate host of the novel coronavirus, on par with the endangered species.
- The Chinese Pangolin is listed under critically endangered species in the IUCN Red List, primarily threatened by indiscriminate hunting and poaching.
- The step of the delisting from the traditional Chinese medicine (TCM) pharmacopoeia comes after the country's State Forestry and Grassland Administration (SFGA) raised the protected status of pangolins to the highest level, with immediate effect.
- China's National Forestry and Grasslands Administration (NFGA) recently announced that pangolins have been upgraded to the new Class I Protected Species classification.

### The world's most trafficked mammal

- As many as 200,000 pangolins are consumed each year in Asia for their scales and meat and more than 130 tonnes of scales, live and dead animals were seized in cross-border trafficking busts last year, a figure estimated to represent up to 400,000 animals.
- Trade in all eight species of pangolin are protected under international law and three of the four native to Asia are included on the red list of the International Union for Conservation of Nature as critically endangered species, including the functionally extinct Chinese pangolin.

### Why Pangolin's scales matter?

- Pangolins have large, protective keratin scales covering their skin who live in hollow trees or burrows.
- Pangolin scales are made of keratin, the same material as human nails, and make up 20% of their body weight.
- Pangolin tails are also covered in the same scale armour as the rest of their bodies, but their tails are strong too – some pangolins live in the trees and can use their tail as a fifth limb that's easily strong enough to support their full bodyweight.
- Though Pangolin scales are made up of keratin, traditional Chinese medicine believes it improves blood circulation and reduces inflammation.

## KHELO INDIA STATE CENTRES OF EXCELLENCE

### ◎ CONTEXT:

The Ministry of Sports is all set to establish Khelo India State Centres of Excellence under the Khelo India Scheme to bring former sporting champions to help budding athletes at grassroot-level and also to ensure a sustained source of income for them in the sports ecosystem.

### ◎ ABOUT:

- The Sports Ministry will establish 1000 Khelo India Centres (KIC) at the district level across the country.
- One such centre will be identified in each State and Union Territory with an aim to create a robust sporting ecosystem in the entire country.
- In the first leg, the Ministry has identified state-owned sports facilities in eight states including Karnataka, Odisha, Kerala, Telengana, Arunachal Pradesh, Manipur, Mizoram and Nagaland which will be upgraded into Khelo India State Centre of Excellence.
- The State and Union Territory will run the centre and build capacity to turn it into the world-class sporting facility.
- They will be responsible for all aspects of management of the centre including, boarding, lodging and maintenance, while funds for expert coaches, supporting staff, equipments, infrastructure will be extended through the Khelo India Scheme.

#### **Khelo India Programme**

- Launched in 2018, Khelo India Programme is a national yojana/scheme for the development of sports in India.
- The program strives to promote “Sports for Excellence” as well as “Sports for All”.

#### **Eligibility under the scheme**

- The first category of athletes who will be considered are those who have represented India at recognised international competitions under a recognised NSF or association.
- The second category is of medal winners in Senior National Championship conducted by a recognised NSF or a medal winner at the Khelo India Games.
- The third category of past champions include those who have won medals in the National All India University Games.
- The fourth category will include those who have represented the state in a Senior National Championship conducted by recognised NSFs or participated in Khelo India Games.
- *An exception has been made in the case of Jammu and Kashmir, Andaman and Nicobar Islands and Ladakh, where coaches trained with NIS certification will also be eligible to apply.*

#### **Significance of the initiative**

- These centres will help to strengthen India’s pursuit for excellence in Olympics.
- The effort will scale up the best sporting facilities available in each state into academies of world-class standard.

## RULE OF LAW INDEX

### ◎ CONTEXT:

The Supreme Court refused to entertain a plea seeking a direction to the Centre, states and UTs to set up expert committees to improve India’s “pathetic” 69<sup>th</sup> global ranking on the Rule of Law Index (RLI).



◎ **ABOUT:**

- The World Justice Project Rule of Law Index is the world's leading source for original, independent data on the rule of law.
- Covering 128 countries and jurisdictions, the Index relies on national surveys of more than 130,000 households and 4,000 legal practitioners and experts to measure how the rule of law is experienced and perceived worldwide.
- It is based on a nations' performance on factors such as government openness, fundamental rights, civil and criminal justice and containing corruption.
- The World Justice Project defines the 'rule of law' system as **one in which the following four** universal principles are upheld:
  - The government and its officials and agents are accountable under the law
  - The laws are clear, publicized, stable and fair, and protect fundamental rights, including the security of persons and property
  - The process by which the laws are enacted, administered, and enforced is **accessible, efficient, and fair**.
  - Justice is delivered by competent, ethical, and independent representatives and neutrals who are of sufficient number, have adequate resources and reflect the makeup of the communities they serve.

**Rule of law in India**

- The concept of Rule of law is of old origin and is an ancient ideal. It was discussed by ancient Greek philosophers such as Plato and Aristotle around 350 BC.
- The phrase 'Rule of Law' is derived from the French phrase 'la principe de legalite' (the principle of legality) which refers to a government based on principles of law and not of men.
- In India, the concept of Rule of law can be traced back to the Upanishads. Even today, the scheme of the Indian Constitution is based upon the concept of rule of law.
- The doctrine of Rule of Law as enunciated by Dicey has been adopted and very succinctly incorporated in the Indian Constitution. The ideals of the Constitution are enshrined in the Preamble itself (which is part of the Constitution)-
  - Justice
  - liberty
  - equality
- The Constitution of India has been made the supreme law of the country and other laws are required to be in conformity with it.
- Any law which is found in violation of any provision of the Constitution, particularly, the fundamental rights, is declared void.
- Rule of law in a plain language can be defined **as a situation in which the law of the land is superior than the government ruling the land.**

**The plea**

- The plea had sought constitution of expert panels "comprising at least one renowned jurist, people representative, public servant, economist, educationist, social activist and journalist," to suggest steps to improve India's pathetic 69<sup>th</sup> international ranking in Rule of Law Index".
- India has never been ranked even among top 50 in the Index, but successive governments did nothing to improve international ranking of India.



- The plea said: ***"Injury caused to the public is large because India ranked 69 in the Rule of Law Index. It confirms poor performance across eight factors: constraints on government powers, absence of corruption, open government, fundamental rights, public order and security, regulatory enforcement, civil justice and criminal justice."***
- "Poor Rule of Law has devastating effects on right to life and liberty. It also offends rights guaranteed under Articles 14 and 21".

#### Court's views

- As per the Supreme Court, this was not an "appropriate case" for the court and a representation to this effect can be made to the government for taking action.
- The government can take a decision on setting up of the panel to improve India's RLI ranking within six months.

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## INDIA TO DEPLOY NAVAL LIAISONS AT MADAGASCAR, ABU DHABI FOR INFORMATION EXCHANGE

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### ◎ CONTEXT

After joining the Indian Ocean Commission (IOC) as 'Observer', India is looking to post Navy Liaison Officers at the Regional Maritime Information Fusion Centre (RMIFC) in Madagascar and also at the European maritime surveillance initiative in the Strait of Hormuz for improved Maritime Domain Awareness (MDA).

### ◎ ABOUT:

- The Indian Ocean Commission is a regional forum in the southwest Indian Ocean.
- The IOC is particularly unique and is the only African regional organisation composed entirely of islands: **Comoros, France/Reunion, Madagascar, Mauritius and Seychelles.**
- These islands are of special interest from sustainable development and environmental point of view.
- They are particularly vulnerable to natural disasters (cyclones, tsunamis, drought and floods). They are at the frontline of climate change and are threatened by a rapid loss of marine and terrestrial biodiversity.
- China and the European Union (EU) have been Observers in the IOC since 2016 and 2017, respectively.
- India became an Observer in March 2020 along with Japan and the United Nations.

#### Regional Maritime Information Fusion Centre (RMIFC)

- The RMFIC functions under the aegis of the IOC.
- It is based in **Madagascar**. It is **designed to deepen maritime domain awareness** by monitoring maritime activities and promoting information sharing and exchange.

#### European maritime surveillance initiative in the Strait of Hormuz

- The EMASOH headquarters is composed of Belgium, Denmark, the Netherlands and French officers and based at the French naval base in Abu Dhabi.
- The aim is "to monitor maritime activity and guarantee freedom of navigation in the Persian Gulf and the Strait of Hormuz."
- EMASOH deploy air and naval units in the Strait of Hormuz and adjacent areas for peaceful surveillance of naval activity.

### Why LO?

- The Navy LO is expected to be posted at EMASOH by July and at the RMIFC by September or October.
- India has an LO at the IFC in Singapore for over four years now.
- This will be in the overall realm of improving linkages of the Navy's **Information Fusion Centre for Indian Ocean Region (IFC-IOR)** in **Gurugram** with other IFCs and become the repository for all maritime data in the IOR.
  - The Navy set up the IFC-IOR in December 2018 within the premises of the Information Management and Analysis Centre (IMAC) in Gurugram to track maritime movements in the region.
  - France became the first country to deploy a Liaison Officer at the IFC-IOR followed by the U.S. and several other countries including Australia, Japan and the United Kingdom have announced their intention to post LOs.
  - Currently, infrastructure is being built to house the foreign officers. Pre-fabricated structures are being built and are expected to be ready by the end of the year,

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## CHINA AND INDIA CLASH ON FREEZING BATTLEFIELD

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### ◎ CONTEXT:

The recent Galawn valley face-off between India and China has turned out to be a rare 'moment of embarrassment' for Beijing as it fears the incident may embolden other adversaries along its border.

### ◎ ABOUT:

- The site of the clash was on the de facto border - the Line of Actual Control or LAC - between the two countries.
- India and China share a border that is more than 3,440km (2,100 miles) long and have overlapping territorial claims.
- The Galwan river valley, with its harsh climate and high altitude terrain, lies along the western sector of the LAC and close to Aksai Chin, a disputed area claimed by India but controlled by China.
- The Galwan river is the highest ridgeline and it allows the Chinese to dominate the Shyok route passes, which is close to the river.
- The Galwan river is named after Ghulam Rassul Galwan, a Ladakhi adventurer who accompanied many European explorers in the region at the turn of the 19th century.
- According to Ladakhi history the Galwan Nullah was named so by British geologists after he discovered a passage through what seemed like an impenetrable set of gorges.
- The Galwan area has now become a hotspot because it is where the LAC is closest to the new road India has built along the most remote and vulnerable area along the LAC in Ladakh.
- The road which is several hundred kilometres long, was built in 2019 and connects to a high-altitude forward air base that India has reactivated at **Daulat Beg Oldi**, reputed to be the world's highest landing ground.
- China is suspicious of India's construction in the area. The road could boost Delhi's capability to move men and material rapidly in case of a conflict.

**About Ladakh**

- Ladakh, dotted with snow-capped peaks and arid valleys, is the highest plateau in India, located 3,000m (9,800ft) above sea level.
- It is a cold desert with temperatures touching -20C in winters.
- Vegetation is sparse in the loose, sandy soil, except along stream beds and wetlands, on some high slopes and some irrigated land.

**History of the dispute**

- India and China fought a war in 1962 over their contested border in the Himalayas.
- The war ended with a truce and the formation of a de facto boundary, known as the Line of Actual Control.
- There has been an uneasy and fragile peace since, punctuated by skirmishes on the border, including in 2013 and 2017.
- No official border has ever been negotiated, the region where the clashes occurred is hostile terrain, at high altitude and sparsely populated, running through the Ladakh region bordering Tibet, home to a Buddhist-majority population. It is a popular tourist destination.
- In May this year, dozens of Indian and Chinese soldiers exchanged physical blows on the border in the north-eastern state of Sikkim.

**What has happened?**

- At least 20 Indian soldiers have been martyred in clashes between Indian and Chinese troops along the disputed Himalayan border running along the Ladakh area of Kashmir.
- The LAC is poorly demarcated. The presence of rivers, lakes and snowcaps means the line can shift.
- The troops clashed on ridges at nearly 14,000 feet high along steep terrain with some soldiers even falling into the fast flowing, 80km (50-mile) long Galwan river in sub-zero temperatures.
- The Indian army confirmed that 17 of those who died "were critically injured in the line of duty at the stand-off location and exposed to sub-zero temperatures in the high altitude terrain".
- It is thought some of the soldiers succumbed to their wounds, unable to survive the freezing temperatures overnight.
- The main causes of death at the altitudes and temperatures found in Ladakh are frost bite, a condition called **high altitude pulmonary oedema** which occurs when lowlanders ascend rapidly to altitudes higher than 2,500m, and another medical condition called high altitude cerebral oedema, where the brain swells with fluid because of the physiological effects of travelling to a high altitude.
- Military experts say that the inhospitable region has traditionally been a peaceful area of the LAC.

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**SIPRI REPORT**

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**◎ CONTEXT:**

India stands seventh among the nine countries armed with nuclear weapons in terms of inventory of warheads, according to the SIPRI Year Book 2020.

**◎ ABOUT:**

- Nuclear bombs are weapons of mass destruction. They harness the forces that hold the nucleus of an atom together by using the energy released when the particles of the nucleus (neutrons and protons) are either split or merged.

- Nuclear weapons are made using fissile material which can be either **highly enriched uranium (HEU)** or separated plutonium.
- There are two ways that nuclear energy can be released from an atom:
  - **Nuclear fission** – the nucleus of an atom is split into two smaller fragments by a neutron. This method usually involves isotopes of uranium (uranium-235, uranium-233) or plutonium (plutonium-239).
  - **Nuclear fusion** – two smaller atoms are brought together, usually hydrogen or hydrogen isotopes (deuterium, tritium), to form a larger one (helium isotopes); this is how the sun produces energy.

### Key-highlights of the Report

- Both nuclear neighbours of India-China and Pakistan-have more warheads than its inventory.
  - **Pakistan:** Pakistan ranks sixth, with 160 nuclear warheads, just above India among the nuclear weapon countries. There is a significant development, according to SIPRI report, in Pakistan's nuclear weapon programme.
  - **China:** China's nuclear warhead count stands at 320 - that is, more than double the number that India has. SIPRI says China is in the middle of a significant modernisation and expansion of its arsenal.
- China and Pakistan have had more nuclear warheads than India in the past as well.
- Russia leads the world with 6,375 warheads, followed by the US with 5,800, and the UK with 215 warheads.
- Israel is believed to possess between 80 and 90 nuclear warheads.
- The nine nuclear-armed states—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and the Democratic People's Republic of Korea (North Korea)—together possessed an estimated 13,400 nuclear weapons at the start of 2020.

### What's used in the production?

- Pakistan has produced mainly HEU but is increasing its ability to produce plutonium.
- China, France, Russia, the UK and the USA have produced both HEU and plutonium for use in their nuclear weapons.
- India and Israel are the only countries to have produced mainly plutonium for their nuclear warheads.

### Is there any active deployment?

- There is no active deployment of nuclear warheads in South Asia.
  - Only four countries - the US, the UK, Russia and France, have deployed nuclear warheads.
- So, Indian borders are free of deployed nuclear weapons.

### The situation in India

- India has moved slowly to build its **nuclear-triad**. After developing land and air "vectors" (carriers of nuclear warheads - Agni series of missiles for the Army and Mirage-2000 and Jaguar fighters of the Air Force), India is boosting naval nuclear prowess.
- INS Arihant became n-capable in 2018. INS Arighat is on the course.
- India has become the third largest spender on military for the first time and is second biggest importer of arms in the world.
- But it still spends only a little over one-fourth of China's military spending.

### About SIPRI

- Based in Stockholm, SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.
- Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

## USTR PROBE FOR TAXING DIGITAL SERVICE COMPANIES

### ◎ CONTEXT:

The office of the United States Trade Representative (USTR) is initiating investigations into taxes adopted or under consideration by 10 nations, including India, on revenues of American digital service companies like Netflix, Airbnb, Uber, LinkedIn and Spotify.

### About Section 31 Report:

- The Special 301 Report is prepared annually by the Office of the United States Trade Representative (USTR).
- The USTR inquiry is under the US Trade Act of 1974 and Section 301 of this law, hence referred as '301 investigations'.
- The US law mandates consultations with trading partners as and when a Section 301 investigation is initiated.
- The Section 301 provision gives the USTR "broad authority" to investigate and respond to a foreign country's action which may be "unfair" or "discriminatory" as well as negatively affect US commerce.
- Adopted in 1974, it allows the US President to impose tariffs or other curbs on foreign nations.
- India will also be accorded an opportunity to negotiate with the US and prevent the imposition of tariffs by reaching a comprehensive outcome, one the line of similar negotiations that are currently underway with France.

### What is United States Trade Representative (USTR)?

- Founded in 1962, the Office of the United States Trade Representative (USTR) has lead responsibility for developing and coordinating U.S. international trade, commodity and direct investment policy.
- It is the lead trade negotiator for the United States in bilateral, regional and multilateral trade and investment agreements.
- USTR is responsible for developing and implementing trade policies which promote economic growth, support efforts to protect the environment, advance core labor standards, and create new opportunities for U.S. businesses, workers, and agricultural products.
- USTR also leads an interagency process to conduct reviews of the possible environmental effects of trade negotiations, sets and coordinates U.S. international trade, commodity, and direct investment policy.
- It also leads or directs U.S. negotiations with other countries through entities such as the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA).

### India's case

- **Equalisation levy:** India — in amendments to the Finance Act, 2020 in March-end — had expanded the ambit of the equalisation levy for non-resident e-commerce operators involved in supply of services, including online sale of goods and provision of services, with the levy at the rate of 2 per cent.

- Equalisation levy at 6 per cent has been in force since 2016 on payment exceeding Rs 1 lakh a year to a non-resident service provider for online advertisements.
- This is applicable for e-commerce companies that are sourcing revenue from Indian customers without having tangible presence here in the country.
- **Digital Service Tax:** The US is probing the 2 percent DST that India adopted in March and which went into effect on April 1.
  - Over the past two years, various jurisdictions have taken under consideration or adopted taxes on revenues that certain companies generate from providing certain digital services to, or aimed at, users in those jurisdictions.
  - They are referred to as Digital Services Taxes, or DSTs.
  - The tax applies only to non-resident companies with annual revenues over \$267,000, and covers online sales of goods & services to, or aimed at, persons in India.
  - The investigation has been initiated against other key trading partners of the US and is merely a first step.

### US's concern

- The United States is concerned that many of its trading partners are adopting tax schemes designed to unfairly target our companies.
- It wants take all appropriate action to defend its businesses and workers against any such discrimination.

### Impact on India

In the current economic environment, clearly, the 301 announcement is not good news for India.

- **Effect on trade:** In India's case, it could potentially affect the outcome of a bilateral trade deal that the NDA government has been looking to forge with the US.
- **Unilateral actions:** In the backdrop of an increasingly crippled World Trade Organization (WTO), the move could signal the start of more unilateral action by the Donald Trump administration, especially on the digital services front.
- **Tariff measures:** Though, it is essentially a domestic inquiry, the implications for countries being investigated can be ominous. An affirmative finding results in the US administration engaging with the country, resulting in tariff measures should a country fail to address USTR's findings.

## INDIA JOINS THE GLOBAL PARTNERSHIP ON ARTIFICIAL INTELLIGENCE

- ◎ **CONTEXT:** India joined the Global Partnership on Artificial Intelligence, as one of the founding members to jointly work towards an ethical, human centric development and use of AI.
- ◎ **ABOUT:**
  - This multi-stakeholder global coalition includes Australia, Canada, the European Union, France, Germany, Italy, Japan, Korea, Mexico, New Zealand, Singapore, Slovenia, the United Kingdom and the United States.
  - Born out of successive G7 summits in 2018 and 2019, GPAI has also been notable for China's absence.
  - While non G7 members like India, South Korea, Mexico, New Zealand have found a place at the high-tables for a joint development of AI standards, this new coalition is also being seen as a means to counter China's growing influence in the technology.



- GPAI will be supported by a Secretariat, to be hosted by Organisation for Economic Cooperation and Development (OECD) in Paris, as well as by two Centres of Expertise – one each in Montreal and Paris.
  - The OECD would also be a Permanent Observer to GPAI's governing bodies and its experts participate in the working groups and plenary meetings.
- This is also a first initiative of its type for evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries.
- In order to achieve this goal, the initiative will look to bridge the gap between theory and practice on AI by supporting cutting-edge research and applied activities on AI-related priorities.

### India's Role

- By joining GPAI as a founding member, India will actively participate in the global development of Artificial Intelligence, leveraging upon its experience around use of digital technologies for inclusive growth.
- India has been taking steps to adapt AI in day to day life. In January, deep-tech start-up CYRAN from the Delhi campus of IIT introduced a do-it-yourself kit to help young Indian techies learn how to build AI-enabled technologies.
- India has recently launched National AI Strategy and National AI Portal and has plans to leverage AI across sectors such as education, agriculture, healthcare, e-commerce, finance, telecommunications.
- Membership to the high tables of development of AI-related policies presents an opportunity for India, a country that has been keen to leverage the technology but has seen limited innovation in the field.
- In fact, a discussion paper titled "National Strategy for Artificial Intelligence" released by NITI Aayog in June, says:

"Adoption of AI in India has remained rather limited, less than a quarter of firms in India are using AI in any form for their business processes and startup ecosystem in AI is virtually non-existent."

- NITI Aayog, in its discussion paper, mentions five barriers that have to be negotiated in order to "truly reap the benefits of deploying AI at scale."

The COVID-19 outbreak however, has highlighted the importance of working on public health and technology together in order to fight the crisis. The development will be significant in such times.

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## AMOEBIASIS

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### ◎ CONTEXT:

**A team of researchers from the Jawaharlal Nehru University (JNU) has developed new drug molecules against the protozoa that cause amoebiasis.**

### ◎ ABOUT:

- Amoebiasis or amoebic dysentery is a common parasitic enteral infection. It is caused by the protozoan parasite *Entamoeba histolytica*.
- Amoebiasis is present all over the world. Each year, about 40000 to 110000 people die from amoebiasis infection.
- Amoebiasis may present with no symptoms or mild to severe symptoms including abdominal pain, diarrhea, or bloody diarrhea.
- Severe complications may include inflammation and perforation resulting in peritonitis. People affected may develop anemia.
- **Types:** The clinical spectrum ranges from asymptomatic infection, diarrhoea and dysentery to fulminant colitis and peritonitis as well as extraintestinal amoebiasis.

- Acute amoebiasis can present as diarrhoea or dysentery with frequent, small and often bloody stools.
- Chronic amoebiasis can present with gastrointestinal symptoms plus fatigue, weight loss and occasional fever.
- Extraintestinal amoebiasis can occur if the parasite spreads to other organs, most commonly the liver where it causes amoebic liver abscess.
  - Amoebic liver abscess presents with fever and right upper quadrant abdominal pain

#### What is Entamoeba histolytica?

- According to the World Health Organization (WHO), Entamoeba histolytica is the third-leading cause of morbidity and mortality due to parasitic disease in humans.
- E. histolytica is classified as a category B biodefense organism because of its environmental stability, ease of dissemination, resistance to chlorine, and it is easily spread through contaminated food products.
- Besides the GI tract, E. histolytica can affect many organ systems.

#### Treatment

- Prevention of amoebiasis is by improved sanitation. Two treatment options are possible, depending on the location.
- Amoebiasis in tissue is treated with metronidazole, tinidazole, nitazoxanide, dehydroemetine or chloroquine.
- A luminal infection is treated with diloxanide furoate or iodoquinoline. Effective treatment may require a combination of medications.
- Infections without symptoms require treatment, but infected individuals can spread the parasite to others.

#### The findings

- This protozoan is anaerobic or micro-aerophilic in nature such that it cannot survive high concentrations of oxygen.
- However, during infection, it faces a high surge of oxygen inside the human body. The organism synthesises large amounts of cysteine to counter oxidative stress.
- This pathogen deploys cysteine as one of the essential molecules in its defence mechanism against high oxygen levels.
- Entamoeba expresses two crucial enzymes for synthesising cysteine. Researchers from JNU have characterised and determined the molecular structures of both these crucial enzymes.

## CHINA PUBLISHES GENOME SEQUENCING DATA

### ◎ CONTEXT:

China has released genome sequencing data for the Coronavirus responsible for a recent outbreak in Beijing, with the WHO and the Global Influenza Data Initiative (GISAI).

### ◎ ABOUT:

- The Beijing genome data was based on three samples - two human and one environmental
- According to preliminary genomic and epidemiological study results, the virus is from Europe, but it is different from the virus currently spreading in Europe.
- It's older than the virus currently spreading in Europe.
- The first cluster of new coronavirus infections was traced to the Huanan seafood market in Wuhan in December.



- It has since infected almost 8.5 million people globally. On the origins of the strain that hit Beijing, China claimed it did not originate from the Chinese capital.

### What is genome sequencing?

- Genome sequencing is figuring out the order of DNA nucleotides, or bases, in a genome—the order of As, Cs, Gs, and Ts that make up an organism's DNA.
- The human genome is made up of over 3 billion of these genetic letters.

#### Genetic Sequencing of SARS-CoV-2 virus

- The SARS-CoV-2 virus is primarily made of three important elements-
  - spike proteins that help the virus bind to a living cell
  - ribonucleic acid (RNA) strands that start replicating inside a living cell
  - fatty envelop that holds all the components together
- The RNA strands can be thought of as a code that determines how the virus will behave. Coronaviruses have about 26,000 to 32,000 bases or RNA "letters" in their length.
- The virus multiplies inside living organisms' cells by creating copies for the RNA.
- However, the process it uses to make these copies is not perfect, and often introduces tiny errors in the sequence of 'letters' — much like a game of Chinese whispers.
- These errors are known as mutations, which can introduce slight variations in the behaviour of the virus.

### How will it help?

- Virus genome sequencing is a vital and rapidly-developing tool in the diagnosis of the disease COVID-19 and in understanding the spread and control of the new coronavirus.
- Genetic sequencing is important as it helps in finding drugs and vaccines, besides figuring out if there has been a mutation of the virus.
- It is also essential to finding ways to deal with the spread of the virus.

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## ICMR RECOMMEND STANDARD Q-COVID-19 AG DETECTION KIT

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◎ **CONTEXT:** The Indian Council of Medical Research (ICMR) recommended using rapid antigen test kits for diagnosis of Covid-19 in hotspots and healthcare settings in combination with the RT-PCR test.

- ◎ **ABOUT:**
- The Standard Q covid-19 Ag detection kit (rapid antigen test kits) is a rapid chromatographic immunoassay for qualitative detection of specific antigens to SARS-CoV-2.
  - It has been developed by SD Biosensor, a South Korea based company, having its manufacturing unit in Manesar, Gurugram, India.
  - The test can be interpreted as positive or negative after 15 minutes of putting the sample into the well by appearance of test and control lines, which can be read with a naked eye, requiring no specialized equipment.
  - Maximum duration for interpreting a positive or negative test is 30 minutes.

**What are Antigens?**

- Antigens are substances that cause an immune response in the body by identifying substances in or markers on cells.
- It is a toxin or other foreign substance which induces an immune response in the body, especially the production of antibodies.
  - ▶ Human body produces antibodies to fight antigens, or harmful substances, and tries to eliminate them.

**What is real time RT-PCR?**

- Real-Time-Polymerase Chain Reaction Test or Real time RT-PCR is a nuclear-derived method for detecting the presence of specific genetic material in any pathogen, including a virus.
- Originally, the method used radioactive isotope markers to detect targeted genetic materials, but subsequent refining has led to the replacement of isotopic labelling with special markers, most frequently fluorescent dyes.
- This technique allows to see the results almost immediately while the process is still ongoing, whereas conventional RT-PCR only provides results at the end of the process.
- Real time RT-PCR is one of the most widely used laboratory methods for detecting the COVID-19 virus.
- The causative agent for Covid19 is the SARS-CoV-2 virus. It is an RNA virus, that means it infiltrates a healthy cell to multiply and survive.
  - The SARS-CoV-2 RNA is generally detectable in respiratory specimens during the acute phase of infection.
  - For that upper and lower respiratory specimens (such as nasal, nasopharyngeal or oropharyngeal swabs, sputum, lower respiratory tract aspirates, bronchoalveolar lavage, and nasopharyngeal wash/aspirate or nasal aspirate) are collected.
  - This sample is treated with several chemical solutions that remove substances, such as proteins and fats, and extracts only the RNA present in the sample.
- Thus the RT-PCR test is for the identification of SARS-CoV-2 RNA.
- In this, the RNA is converted to DNA through a process called 'reverse transcription' for detecting viruses.

**Significance of the step**

- The rapid antigen kits allow faster diagnosis without laboratory examination.
- Antigen tests directly detect the presence of viral proteins using immunoassay techniques. They require successful swabs and since the tests do not amplify signal like NAATs, the sensitivity is lower.
- The advantage of antigen tests is that manufacturing such tests are easily scalable. In addition, tests can be run either in a laboratory setting with high throughput analyzers or in a point-of care low throughput setting with rapid lateral flow tests.

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**THE FIFTH STATE OF MATTER**

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**◎ CONTEXT:**

Scientists have generated an exotic fifth type of matter in one of the coldest places in the universe- the Cold Atom Laboratory—aboard the International Space Station and are using it to explore the quantum world.

◎ **ABOUT:**

- Matter, material substance that constitutes the observable universe and, together with energy, forms the basis of all objective phenomena.
- **Composition:** All matter is made up of atoms, which are in turn made up of protons, neutrons and electrons.
- **Energy utilised:** Atoms come together to form molecules, which are the building blocks for all types of matter.
  - Both atoms and molecules are held together by a form of potential energy called **chemical energy**.
- Unlike **kinetic energy**, which is the energy of an object in motion, potential energy is the energy stored in an object.
- There are four states of matter common in everyday life-
  - Gases
  - Liquids
  - Solids
  - Plasmas
- However, there is also a fifth state of matter — **Bose-Einstein condensates (BECs)**, which scientists first created in the lab 25 years ago.
- When a group of atoms is cooled to near absolute zero, the atoms begin to clump together, behaving as if they were one big “super-atom.”
- These are created when a gas of bosons is cooled down nearly to absolute zero. At these extreme temperatures, matter begins to behave oddly and atoms become a single entity showing quantum properties.
- Bose-Einstein condensates straddle the boundary between the everyday world, governed by classical physics, and the microscopic world, which follows the rules of quantum mechanics.
- In the world of quantum mechanics, a particle can behave as if it were spinning in two opposite directions at the same time, or as if it existed in two or more locations simultaneously.
- Because they follow some of these quantum behaviors, Bose-Einstein condensates may offer scientists key clues into the workings of quantum mechanics, potentially helping to solve mysteries such as how to create a “theory of everything” that could explain the workings of the cosmos from the smallest to largest scales.

**What’s limiting the research?**

- Scientists now routinely create Bose-Einstein condensates in hundreds of labs across the world.
- However, one limitation that stands in the way of this research is **gravity**.
- These “super-atoms” are extraordinarily fragile and the setups used to create them are incredibly delicate, so the pull of gravity felt on Earth can disrupt both, making it challenging to learn much about them.
- As such, researchers developed the Cold Atom Lab, which can generate Bose-Einstein condensates in the microgravity found in orbit aboard the space station.

**What is the Cold Atom Laboratory?**

- The Cold Atom Laboratory (CAL) was launched to the ISS in 2018 to investigate a strange kind of matter, known as a **Bose-Einstein condensate (BEC)**.
- This suitcase-sized device chills atoms of rubidium and potassium in a vacuum chamber, using laser light to slow their movement.
- Magnetic fields then contain the resulting cloud of atoms, which is cooled to nearly absolute zero at -273°C, producing a BEC.

- This chilly substance was initially theorised by **Albert Einstein** and **Satyendra Nath Bose** in the early 1920s as the fifth state of matter, following solids, liquids, gases and plasma.
- It is a supercooled gas that no longer behaves as individual atoms and particles, but rather an entity in a single quantum state.
- BECs have been produced in a variety of experiments on Earth since 1995, but these are hindered by gravity, which collapses the clouds in a split second.
- The microgravity environment of the ISS keeps them stable for multiple seconds, allowing them to be studied in more detail.

NASA scientists on Earth have collaborated with astronauts on the International Space Station (ISS) to corral the first ever Bose-Einstein condensate (BEC) outside of Earth's gravity.

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## miR-155

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Researchers at the Indian Institute of Technology Madras have identified a specific microRNA (miRNAs) called 'miR-155' that is over-expressed in tongue cancer.

### What is MiR-155?

- MiR-155 is a microRNA that in humans is encoded by the MIR155 host gene or MIR155HG.
- MiR-155 plays a role in various physiological and pathological processes.
- Exogenous molecular control in vivo of miR-155 expression may inhibit malignant growth, viral infections, and enhance the progression of cardiovascular diseases.

### About MicroRNAs

- MicroRNAs (miRNAs) are short non-coding RNAs containing 20–24 nucleotides that participate in virtually all biological pathways in animals.
- They have been found to play important roles in many cancers, in carcinogenesis (start of cancer), malignant transformation and metastasis — the development of secondary cancer.
- The miRNAs associated with cancer are called 'Oncomirs'."
- Many of the Oncomirs affect cancer by suppressing the performance of tumour-suppressing agents.
- Some of them can prevent the growth and spread of cancer cells and yet others prevent tumour growth itself.

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## CPCB TO CLASSIFY RAILWAY STATIONS BASED ON WASTE WATER GENERATION

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- The Central Pollution Control Board will classify railway stations under the red, orange and green categories based on the quantity of waste water generated.
  - ▶ **Red:** Railway stations generating waste water equal to or more than 100 Kilo Litres per Day would be categorised as red.
  - ▶ **Orange:** Railway stations greater than 10 KLD but less than 100 KLD would come under the orange category.
  - ▶ **Green:** Railway stations with less than 10 KLD waste water generation would be branded green.

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## DEXAMETHASONE

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A drug known for decades is being hailed as a wonder cure for Covid-19 after the study group conducting a clinical trial in United Kingdom said Dexamethasone "reduces death by up to one third in hospitalised patients with severe respiratory complications".

### What is Dexamethasone?

- It is a synthetic hormone.
- Natural corticosteroids (commonly called as steroids) are hormones secreted by the adrenal glands situated right above the kidneys.
- They are required for sustaining many vital functions of the body. Babies born without adrenal glands don't survive beyond half an hour without hormone supplementation.

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- Dexamethasone is a long acting potent synthetic steroid available in oral (tablet), topical (ointment) and intravenous (injection) forms.
- It has been around for decades. Some of the indications to use it include cancer (tumor compressing spine, Multiple myeloma), tuberculosis (some specific forms), mountain sickness (to decrease brain swelling) and severe asthma.
- It is also a potent drug for highly vomiting inducing chemotherapy.

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## **INTERNATIONAL HORSESHOE CRAB DAY**

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- Horseshoe crabs face an uncertain future in Odisha, their largest habitat in India, even as the world gets ready to celebrate the first-ever 'International Horseshoe Crab Day' on June 20, 2020.
- The International Union for Conservation of Nature (IUCN)'s Horseshoe Crab Specialist Group had decided to observe the day in its meeting from June 14-20, 2019 at Qinzhou City in China.

### **About Horseshoe crabs**

- The horseshoe crab is a living fossil. It has been on Earth some 220 million years, longer than dinosaurs.
- Horseshoe crabs are a critical link to world health, biodiversity and hold cultural importance across the globe. One of their ecological functions is to lay millions of eggs on beaches to feed shorebirds, fish and other wildlife. Unfortunately, this ecological link can be broken in areas where population density is low.
- The horseshoe crab was included on September 9, 2009 in the Schedule IV of the Wild (Life) Protection Act, 1972, under which, the catching and killing of a horseshoe crab is an offence.

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## **INTERNATIONAL ALBINISM AWARENESS DAY**

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- June 13 marks International Albinism Awareness Day around the globe.
- On December 18, 2014, the United Nations' General Assembly adopted a resolution establishing June 13th as International Albinism Awareness Day.
- The theme of the 5th anniversary of International Albinism Awareness Day is "Made To Shine." This day is an appeal to stand in solidarity with people living with this condition.
- Albinism is a rare, non-contagious, genetically inherited condition found in all countries across the world irrespective of background or culture.
- This dissimilarity is a lack of melanin in the eyes, skin and hair making prone to the sun and bright light.
- There is no treatment or cure for the absence of pigmentation that is dominant in albinism.
- People with albinism often face discrimination and violence and this day is celebrated in an effort to stand against the bullies who target them.
- This commemoration holds immense significance in the lives of individuals with albinism and their families globally.

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## **JAGANNATH PURI RATH YATRA**

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- Supreme Court of India has stayed annual Rath Yatra at Puri's Jagannath Temple in Odisha.
- The Jagannath Puri Rath Yatra, which is considered one of India's biggest chariot festivals was set to commence from June 23.

**About the festival**

- Ratha Jatra, the Festival of Chariots of Lord Jagannatha is celebrated every year at Puri, the temple town in Odisha, on the east coast of India.
- The presiding deities of the main temple, Sri Mandira, Lord Jagannatha, Lord Balabhadra and Goddess Subhadra, with the celestial wheel Sudarshana are taken out from the temple precincts in an elaborate ritual procession to their respective chariots.
- The huge, colourfully decorated chariots, are drawn by hundreds and thousands of devotees on the bada danda, the grand avenue to the Gundicha temple, some two miles away to the North.
- After a stay for seven days, the deities return to their abode in Srimandira.

**NEW FISH SPECIES DISCOVERED IN ARUNACHAL PRADESH**

- A new species of fish from genus Schizothorax has been discovered in Arunachal Pradesh.
- The fish species is named as Schizothorax sikusirumensis. The name of this fish species has been derived from the name of the rivers where it was found.
- This fish was collected from the junction of River Siku and Sirum near Gakang area under Mebo circle of East Siang District.
- The fish inhabits the water logged area of torrential river drainage.

**KODUMANAL EXCAVATION**

- A team from the State Department of Archaeology, Chennai, has identified 250 cairn-circles at the Kodumanal village in Erode district.
- The Kodumanal excavation of 10 pots and bowls, placed outside three-chambered burial cists and inside the cairn-circle, threw light on burial rituals and the concept of afterlife in megalithic culture.
- The rectangular chambered cists, each two metres long and six metres wide, are made of stone slabs, and the entire grave is surrounded by boulders that form a circle.
- This is probably the first time that 10 pots have been found near the cists during excavations in the State.
- Earlier excavations revealed that the site served as a trade-cum-industrial centre from 5th century BCE to 1st century BCE.

**Megaliths culture**

- Megaliths are spread across the Indian subcontinent, though the bulk of them are found in peninsular India, concentrated in the states of Maharashtra (mainly in Vidarbha), Karnataka, Tamil Nadu, Kerala, Andhra Pradesh and Telangana.
- Even today, a living megalithic culture endures among some tribes such as the Gonds of central India and the Khasis of Meghalaya.

**MALABAR GLIDING FROG (RHACOPHORUS MALABARICUS)**

- The species Malabar gliding frog has been recently spotted in the orchard of a house at Pullad, near Kozhencherry.
- Malabar gliding frog (Rhacophorus malabaricus) is a rare amphibian that can glide in the air up to 10 to 12 metres.

- The species is **endemic to the rain forests of Western Ghats**.
- **IUCN Conservation status:** Least Concern.
- Its gliding abilities, with the long skin between the fingers, helped these frogs to cover 10 to 12 feet in one leap.
- The frog has got a body length of 10 cm, making it one of the largest mossy frogs. The fingers and toes are like sticks to attach and walk through tree branches. Males are smaller than females.

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## KAESONG INDUSTRIAL COMPLEX (KIC)

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North Korea blew up the joint liaison office (communication channel) with South Korea in Kaesong Industrial Complex (KIC), after a recent deterioration in relations between North and South Korea.

### What is Kaesong Industrial Complex (KIC)?

- The Kaesong Industrial Complex (KIC) is located inside North Korea just across the demilitarised zone from South Korea.
- The project was launched in 2004, largely financed by the South to increase co-operation.
- It is one of the last remaining points of peaceful engagement between North and South Korea, and is often seen as an indicator of relations between them.

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## RAJA PARBA

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- Raja Parba, a three-day festival in Odisha, is a celebration of menstruation and womanhood.
- It is based on the belief that Mother Earth menstruates for those three days and she is given a ceremonial bath on the fourth day.
- For those three days, no agricultural activity like ploughing or sowing takes place as Mother Earth is expected to be going through rejuvenation.
- The first day of the ceremony is called Pahili Rajo, the second day is Mithuna Sankranti, and the third is Bhu Daaha or Basi Raja.
- Each day signifies a different phase of celebration with the second day signifying Mithuna, the solar month.
- Until the fourth day, which is called **Vasumati Snana**, the day of the ceremonial bath, women and young girls do not take part in cooking and instead, play games and celebrate.
- Men also take part in this festival, conducted around the middle of June every year.
- The festival, which started as a tribal practice, has now spread to all parts of Odisha. Though it has undergone a lot of changes over time, it still revolves around respecting and celebrating women.

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## TALA-MADDALE

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- Tala-Maddale is an ancient form of performance dialogue or debate performance in Southern India in the Karavali and Malnad regions of Karnataka and Kerala.
- The plot and content of the conversation is drawn from popular mythology but the performance mainly consists of an impromptu debate between characters involving sarcasm, puns, philosophy positions and humour.
- The main plot is sung from the same oral texts used for the Yakshgana form of dance- drama. Performers claim that this was a more intellectual rendition of the dance during the monsoon season.

- It is a variant of Yakshagana theatre.
- Yakshagana is a traditional Indian theatre form, developed in Dakshina Kannada, Udupi, Uttara Kannada, Shimoga and western parts of Chikmagalur districts, in the state of Karnataka and in Kasaragod district in Kerala that combines dance, music, dialogue, costume, make-up, and stage techniques with a unique style and form.
- It is believed to have evolved from pre-classical music and theatre during the period of the Bhakti movement.

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