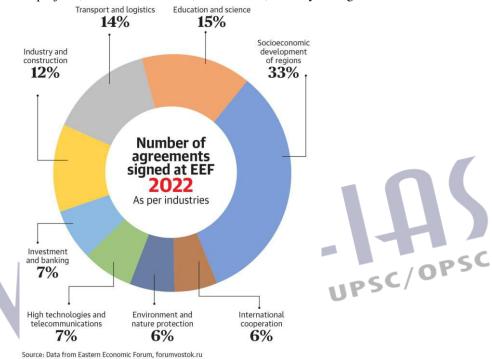


INTRNATIONAL RELATION

- The Eastern Economic Forum and India's balancing act
- **❖** CONTEXT: Russia hosted the seventh Eastern Economic Forum (EEF) Vladivostok from September 5 to 8. The four-day forum is a platform for entrepreneurs to expand their businesses into Russia's Far East (RFE).
- ***** What is the Eastern Economic Forum?
- The EEF was established in 2015 to encourage foreign investments in the RFE. The EEF displays the economic potential, suitable business conditions and investment opportunities in the region. Agreements signed at the EEF increased from 217 in 2017 to 380 agreements in 2021, worth 3.6 trillion roubles. As of 2022, almost 2,729 investment projects are being planned in the region. The agreements focus on infrastructure, transportation projects, mineral excavations, construction, industry and agriculture.



- Who are the major actors in the Forum? What are their interests?
- In 2022, the Forum aimed at connecting the Far East with the Asia Pacific region.
- China is the biggest investor in the region as it sees potential in promoting the Chinese Belt and Road Initiative and the Polar Sea Route in the RFE. China's investments in the region account for 90% of the total investments.
- Russia has been welcoming Chinese investments since 2015; more now than ever due to the economic pressures caused by the invasion in Ukraine.
- The Trans-Siberian Railway has further helped Russia and China in advancing trade ties. The countries share a 4000-kilometer-long border, which enables them to tap into each other's resources with some infrastructural assistance.
- China is also looking to develop its Heilongjiang province which connects with the RFE. China and Russia
 have invested in a fund to develop northeastern China and the RFE, through collaborations on connecting
 the cities of Blagoveshchensk and Heihe via a 1,080 metre bridge, supplying natural gas, and a rail bridge
 connecting the cities of Nizhneleninskoye and Tongjiang.
- Besides China, South Korea has also been gradually increasing its investments in the region. South Korea
 has invested in shipbuilding projects, manufacturing of electrical equipment, gas-liquefying plants,
 agricultural production and fisheries.
- In 2017, the Export-Import Bank of Korea and the Far East Development Fund announced their intention to inject \$2 billion in the RFE in a span of three years.
- Japan is another key trading partner in the Far East. In 2017, Japanese investments through 21 projects amounted to \$16 billion. Under Shinzo Abe's leadership, Japan identified eight areas of economic cooperation and pushed private businesses to invest in the development of the RFE.
- Japan seeks to depend on Russian oil and gas resources after the 2011 meltdown in Fukushima which led the government to pull out of nuclear energy. Japan also sees a market for its agro-technologies which have the potential to flourish in the RFE, given similar climatic conditions.



- However, the momentum of trade that existed with Shinzo Abe was lost with the leadership of Yoshihide Suga and Fumio Kishida. The trade ties between Japan and Russia are hindered by the Kuril Islands dispute as they are claimed by both countries.
- India seeks to expand its influence in the RFE. During the forum, Prime Minister Narendra Modi expressed the country's readiness in expanding trade, connectivity and investments in Russia. India is keen to deepen its cooperation in energy, pharmaceuticals, maritime connectivity, healthcare, tourism, the diamond industry and the Arctic.
- In 2019, India also offered a \$1 billion line of credit to develop infrastructure in the region. Through the EEF, India aims to establish a strong inter-state interaction with Russia. Business representatives of Gujarat and the Republic of Sakha have launched agreements in the diamond and pharmaceuticals industry.

***** What does the EEF aim for?

- The primary objective of the EEF is to increase the Foreign Direct Investments in the RFE.
- The region encompasses one-third of Russia's territory and is rich with natural resources such as fish, oil, natural gas, wood, diamonds and other minerals.
- The sparse population living in the region is another factor for encouraging people to move and work in the Far East.
- The region's riches and resources contribute to five per cent of Russia's GDP. But despite the abundance and availability of materials, procuring and supplying them is an issue due to the unavailability of personnel.
- The RFE is geographically placed at a strategic location; acting as a gateway into Asia. The Russian government has strategically developed the region with the aim of connecting Russia to the Asian trading routes. With the fast modernisation of cities like Vladivostok, Khabarovsk, Ulan-Ude, Chita and more, the government aims to attract more investments in the region.
- Russia is trying to attract the Asian economies in investing and developing the far east. The Ukraine invasion is a worrying issue as it affects the economic growth of the country. However, Russia believes that it can survive the economic crisis and the sanctions with the help of China and other Asian powers.
- Although, the EEF is an annual gathering, the forum comes at an opportune time for Russia who is dealing with the impact of the sanctions. Moreover, the coming together of countries like Myanmar, Armenia, Russia, and China seems like the forming of an anti-sanctions group in the international order.
- **❖** Will India be able to achieve a balance between the EEF and the Indo-Pacific Economic Framework for Prosperity (IPEF)?
- The U.S.-led Indo-Pacific Economic Framework for Prosperity (IPEF) and the EEF are incomparable based on its geographic coverage and the partnership with the host-countries. India has vested interests in both the forums and has worked towards balancing its involvement. India has not shied away from investing in the Russia-initiated EEF despite the current international conditions.
- At the same time, India has given its confirmation and acceptance to three of the four pillars in the IPEF. The country understands the benefits of being involved in the development in the RFE but it also perceives the IPEF as a vital platform to strengthen its presence in the Indo-Pacific region. The IPEF also presents an ideal opportunity for India to act in the region, without being part of the China-led Regional Comprehensive Economic Partnership or other regional grouping like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.
- The IPEF will also play a key role in building resilient supply chains. India's participation in the forum will help in disengaging from supply chains that are dependent on China and will also make it a part of the global supply chain network. Additionally, the IPEF partners will act as new sources of raw material and other essential products, further reducing India's reliance on China for raw materials. Although, India has refrained from full participation in the trade pillar of the IPEF, it does not signify an end to India's role in the forum.
- The Eastern Economic Forum was established in 2015 to encourage foreign investments in Russia's the Far East. As of 2022, almost 2,729 investment projects are being planned in the region
- During the forum, Prime Minister Narendra Modi expressed the country's readiness in expanding trade, connectivity and investments in Russia. India is keen to deepen its cooperation in energy, pharmaceuticals, maritime connectivity, healthcare, tourism, the diamond industry and the Arctic
- India has vested interests in both the EEF and the Indo-Pacific Economic Framework and has worked towards balancing its involvement. The IPEF is a vital platform for India to strengthen its presence in the Indo-Pacific region.

PRELIMS

1. Cabinet approves addition of four tribes to ST list

- **Context:** The Union Cabinet approved the addition of four tribes to the list of Scheduled Tribes (ST), including those from Himachal Pradesh, Tamil Nadu and Chhattisgarh.
- The Hatti tribe in Himachal Pradesh
- The Hatti community is largely concentrated in the Trans-Giri area of the Sirmaur district.



- The Hattis are a close-knit community who got their name from their tradition of selling homegrown vegetables, crops, meat and wool etc. at small markets called 'haat' in towns.
- The Hatti communityis cut off from Sirmaur by two rivers called Giri and Tons.
- There is a fairly rigid caste system among the Hattis
 - Bhat and Khash are the upper castes,
 - Badhois are below them.
- Inter-caste marriages are rare.
- Due to topographical disadvantages, the Hattis lag behind in education and employment.
- The Hattis are governed by a traditional council called Khumbli, which like the khaps of Harvana, decide community matters. The Khumbli's power has remained unchallenged despite the establishment of the panchayati raj system.

The Narikoravan and Kurivikkaran hill tribe of Tamil Nadu:

- It is an indigenous community from Tamil Nadu.
- They speak the unclassified Indo-Aryan language called Vaagri Booli. Due to this reason, they are also known as Vagris or Vagrivalas.
- Silambam is a stick fighting style that supposedly originated from the Kurinji hills some 5000 years ago, where the native kurayar used bamboo staves called Silambamboo to defend themselves against wild animals.

The Binjhia tribe in Chhattisgarh

- It was listed as ST in Jharkhand and Odisha but not in Chhattisgarh.
- The Binjhia is an ethnic group found in Odisha and Jharkhand.
- The Binjhia are divided into four subgroups.
 - Asur-Binjhia,
 - Agaria-Binjhia,
 - Pahariya Binjhia
 - Dand-Binjhia.
- The Binjhia settlements are large and homogeneous. They do not practise clan exogamy.
- They also allow cross-cousin marriage, levirate, sororate, remarriage of widows and divorcees.

 They practise both burial and burning of the dead.

 They worship a number crisite along with M.
- They worship a number spirits along with Hindu gods and goddesses such as Jagannath

- They have the cult of ancestor worship pitru puja.

 The structure of clar structure. The structure of clan starts at level of an extended family called dibiris.
 - A cluster of dibiris comprising a local group of families up to three generations form a jama a minor lineage.
 - Several jamas in a village constitute a major lineage khumuri.
 - The latter make a small clan barga.
 - The clan is composed of bargas and headed by a Gauntia.
- The Cabinet also approved a proposal to bring the Gond community, residing in 13 districts of Uttar Pradesh, under the ST list from the Scheduled Caste list. This includes the five subcategories of the Gond community: Dhuria, Nayak, Ojha, Pathari and Rajgond.
- The Cabinet had also approved the inclusion of synonyms for 11 tribes in Chhattisgarh and one tribe in Karnataka. The Cabinet approved 'Betta-Kuruba' as a synonym for the Kadu Kuruba tribe in Karnataka.
- In Chhattisgarh, the Cabinet approved synonyms for tribes like:
 - the Bharia (variations added include Bhumia and Bhuyian),
 - Gadhwa (Gadwa),
 - Dhanwar (Dhanawar, Dhanuwar),
 - Nagesia (Nagasia, Kisan),
 - Pondh (Pond)

Cameroon Volcanic Line

- CONTEXT: A sudden change in the colour and smell of Lake Kuk, in north-west Cameroon, has caused panic among the locals. Fears are driven by an incident that happened 36 years ago at Lake
- Both Lake Kuk and Nyos are crater lakes located in a region of volcanic activity known as the Cameroon Volcanic Line.
- The Cameroon volcanic line consists of a string of volcanoes that extend from the Atlantic Ocean into Republic of Cameroon.
- The current period of volcanic activity started approximately 38 Ma ago and extends to the present.
- The volcanoes here cross the oceanic-continental boundary.



- The rocks of this volcanic line range in composition from picro-basalt and basalt through intermediate compositions to phonolite and rhyolite.
- Silica saturated rocks are largely confined to the continental portion of the province.
- Incidents Around 36 years ago, Lake Nyos emitted lethal gases (mainly carbon dioxide) that were released from the Earth's mantle.
- This carbon dioxide gas had been accumulating at the bottom of the lake for centuries.
- Two years earlier, Lake Monoum, about 100km south-west of Lake Nyos, killed 37 people.
- There are 45 crater lakes in the Cameroon volcanic line that could contain lethal amounts of gases.
- Other lakes around the world that pose a similar threat include Lake Kivu at the border of Rwanda and the Democratic Republic of Congo, Lake Ngozi in Tanzania and Lake Monticchio in Italy.
- Managing dangerous lakes Authorities should immediately restricted access to the lakes where there is a release of gas.
- Due to the dynamic and active nature of the Cameroon Volcanic Line, there is a possibility that volcanic gases can seep into the lake at any moment.
- An onsite scientific investigation would determine with certainty the abnormal behaviour of the lakes.
- An additional step would be for a carbon dioxide detector to be installed the potentially dangerous crater lakes. This would serve as an early warning system for lethal gas releases.

3. Malaria booster vaccine shows up to 80 per cent efficacy

- A malaria vaccine booster shot at one year following a primary three-dose regime maintained high efficacy
 of 70-80 per cent against the disease, according to a study published in The Lancet Infectious Diseases
 journal. Researchers from the University of Oxford, UK and colleagues reported the findings from their
 Phase 2b trial following the administration of a booster dose of the candidate malaria vaccine, R21/MatrixM.
- The vaccine, licensed to Serum Institute of India, previously demonstrated high-level efficacy of 77 per cent over the following 12 months in young West African children in 2021.
- In their latest findings, the researchers found that a vaccine booster dose at one year following a primary three-dose regime continued to meet the World Health Organization's Malaria Vaccine Technology Roadmap goal of a vaccine with at least 75 per cent efficacy.
- A total of 450 participants aged five to 17 months were recruited from Burkina Faso, with 409 receiving the booster.
- The participants were randomly assigned to three groups, with the first two groups receiving the R21/Matrix-M vaccine as a booster and the third a rabies vaccine as the control group.
- Each child received the same booster vaccination as their primary series of vaccinations. Doses were administered in June 2020, largely prior to the peak malaria season.
- The study reports a vaccine efficacy of 80 per cent in the higher-dose adjuvant group, and 70 per cent in the lower dose adjuvant group, over 12 months of follow-up. Antibody levels were restored to similar levels as those following the primary vaccinations 28 days after the booster doses were administered. No serious adverse events related to the vaccine were noted.
- The trial has been extended for another two years to assess if further booster doses will be necessary to maintain high efficacy over time.
- Results from the key ongoing Phase III licensure trial to assess large-scale safety and efficacy in 4,800 children aged five to 36 months across four African countries, are also expected later 2022.

ANSWER WRITTING

Q. Suggest measures to improve water storage and irrigation system to make its judicious use under depleting scenario.

A continuous wastage or misuse of potable groundwater either in industries, agriculture or households has left a large population of the country facing high water stress conditions today. High wastage of water coupled with burgeoning population in some manner ensures that sooner or later we will be facing scarcity of potable water in the country.

Traditional methods to improve water storage and irrigation

- Jhalaras: They are typically rectangular-shaped stepwells that have tiered steps on three or four sides.
- Talabs: These are reservoirs that store water for household consumption and drinking purposes. They
 may be natural, such as the pokhariya ponds.
- Bawaris: These are unique stepwells that were once a part of the ancient networks of water storage in the cities. The little rain that the region received would be diverted to this man-made tank through canals.
- Taanka: It is a traditional rainwater harvesting technique indigenous to the desert region.
- Ahar Pynes: These are traditional floodwater harvesting systems indigenous to regions frequently prone to floods.

DAILY CURRENT AFFAIRS

Johads: These are one of the oldest systems used to conserve and recharge groundwater, which are small earthen check dams that capture and store rainwater. It is constructed in an area with naturally high elevation on three sides.

Modern methods to improve water storage and irrigation

- Rainwater Overhead Tanks: These are the simple tanks placed over the building or on the terrace, collecting water as it comes.
- Rooftop Rainwater Harvesting: A simple structure where the roof is used as a support for installing catchment pipes through which the rainwater flows and is eventually stored in ground level containers.
- Percolation Tanks: The percolation tanks are mostly earthen dams with masonry structure only for spillway. The purpose of these tanks is to recharge the groundwater storage.

Irrigation methods to ensure judicious use of water

- Bamboo Drip Irrigation System: It is an indigenous system in northeast India. In this, the water from perennial springs is diverted to the terrace fields using varying sizes and shapes of bamboo pipes. The system ensures that small drops of water are delivered directly to the roots of the plants.
- Irrigation Scheduling: It is basically smart water management. It deals with when, how often, and how much water needs to be provided to plants. To avoid overwatering of crops and avoid water wastage farmers carefully monitor the weather forecast, understand the soil condition, and use smart meters for water management.
- Dryland Farming: The practice of cultivating crops without irrigation in regions of limited moisture.
- Sprinkler Irrigation: It is a method of applying water to crops which is similar to natural rainfall but in a more judicious manner and spread uniformly over the land surface. It is done using a pump, pipes and nozzle to sprinkle water.

Thus, we see that traditional methods when coupled with modern scientific approaches to conserve water can produce the intended results in the field of water conservation. Hence, the above-mentioned methods should be brought to use holistically to reduce water wastage and ensure availability of potable water to mankind for a longer period of time.

MCOs

- for UPSC/OPSC "R21" vaccine often mentioned in news is related to which of the following disease?
 - a) Dengue
 - Malaria b)
 - Hepatitis C
 - d) Cervical cancer
- Consider the following statements with reference to WHO Malaria report 2021
 - In South East Asian region India being the second largest contributor in terms of estimated cases after Indonesia.
 - In case of malaria deaths India accounts for 82% in the South east Asian region

Choose the correct statement/s using the codes given below

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- 3. Consider the following statements about the Scheduled Castes and the Scheduled Tribes under the provisions of the Constitution of India:
 - State can make any special provision relating to their admission to the Government educational
 - 2. State can make any special provision relating to their admission to the private educational institutions aided by the State.
 - 3. State can make any special provision relating to their admission to the private educational institutions not aided by the State.
 - State can make any special provision relating to their admission to the minority educational institutions as described in Article 30.

Which of the statements given above are correct?

- a) 1 and 2 only
- b) 3 and 4 only
- c) 1, 2 and 3 only
- d) 1, 2, 3 and 4
- 4. Consider the following pairs

Tribes recently in news Region they belongs to 1. Hatti community Himachal Pradesh 2. Narikoravan Tamil Nadu 3. Binjhia Odisha

How many above pair/s is/are correctly matched



- a) One pair only
- b) Two pairs only
- c) Three pairs only
- d) All the pairs
- 5. With reference to Eastern economic Forum consider the followings
 - 1. EEF is an international forum organised each year in Vladivostok, Russia.
 - 2. It serves as a platform for the discussion of key issues in the world economy, regional integration, and the development of new industrial and technological sectors, as well as of the global challenges facing Russia and other nations

Choose the correct statement using the codes given below

- a) 1 only
- 2 only b)
- Both 1 and 2 c)
- d) Neither 1 nor 2
- 6. With reference to PM-AWAS Yojna (Gramin) consider the following statements
 - 1. It is a centrally sponsored scheme
 - 2. It target to achieve 2.95 crore 'pucca' houses by March 2024.
 - 3. The Union Ministry of Rural Development can impose penalties that the State governments will have to bear for any delay for their respective targets under the scheme.

Choose the correct statement using the codes given below

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) All of the above
- Which of the following nations parks are located in Madhya Pradesh
 - 1. Kuno National Park
 - 2. Kanha National Park
 - 3. Pench National Park
 - 4. Dinosaur Fossil National Park

Select the correct answer using the code given below:

- a) 1, 2 and 3 only
- 1 and 3 only
- c) 2 and 4 only
- d) 1, 2, 3 and 4
- Coaching for UPSC/OPSC Cameroon volcanic line often mentioned in news is situated in:
 - Gulf of Mexico
 - **b**) **Gulf of Guinea**
 - c) Gulf of Alaska
 - d) Gulf of Aden
- Which of the following is an example of Crater Lake in India?
 - a) Pangong Tso Lake of Ladakh
 - b) Lonar Lake of Maharashtra
 - c) Gangabal Lake of Kashmir
 - d) Gohna Lake of Garhwal
- 10. A international conference "ANGAN 2022" recently seen in news is related to which of the following?
 - a) Ministry of Environment, forest and climate change
 - b) Ministry of Renewable Energy
 - **Ministry of Power** c)
 - d) Ministry of Women and child developement