

INTERNATIONAL RELATION

- **❖** China-Pakistan Economic Corridor (CPEC)
- **CONTEXT:** In a reference to China's Belt and Road Initiative (BRI), at a virtual meeting of the Shanghai Cooperation Organisation (SCO), India's External Affairs Minister recently reiterated that connectivity projects (China-Pakistan Economic Corridor (CPEC)) should respect sovereignty and territorial integrity.
- The External Affairs Minister also pitched for more trade through Iran's Chabahar port and the International North South Transport Corridors (INSTC) that India is a part of, aiming to improve bilateral trade with Central Asian countries.
- **❖** About China-Pakistan Economic Corridor (CPEC)
- Launched in 2015, the CPEC is the flagship project of the multi-billion-dollar Belt and Road Initiative (BRI), a pet project of Chinese President Xi Jinping, aimed at enhancing Beijing's influence around the world through China-funded infrastructure projects.
- The **3,000 km-long China–Pakistan Economic Corridor (CPEC)** consists of highways, railways, and pipelines.
- CPEC eventually aims at linking the city of Gwadar in South Western Pakistan to China's North Western region Xinjiang through a vast network of highways and railways.
- The proposed project will be financed by heavily-subsidised loans that will be disbursed to the Government of Pakistan by Chinese banks.



Significance

- The agreement is aimed at boosting Chinese investment in Pakistan as well as transferring Chinese industrial capacity.
- The framework will promote industrialisation and development of economic zones, and initiate, plan, execute, and monitor projects, both in the public as well as the private sectors.
- The corridor links Xinjiang with Gwadar and also passes through Pakistan-occupied Kashmir (PoK) where China is investing in a number of projects.
- CPEC's early-harvest projects had transformed Pakistan's economic landscape, thus laying a solid foundation for sustainable economic growth.
- Challenges associated with the plan
- **Delays in execution:** The CPEC projects were also facing delays because of the change in taxation policies by the last government in violation of commitments given to China.
- **Pakistan's failure:** The Chinese authorities were irritated because of Pakistan's failure to honour its contractual obligations under the CPEC framework.
- **Financial crisis:** China is also concerned over the acute financial crisis faced by Pakistan, prompting it to step in periodically to bail it out with induction of foreign exchange loans.
- Pakistan was a critic of the China Pakistan Economic Corridor (CPEC) earlier for its **secrecy and uneven investments** neglecting certain provinces of the country.



- India has protested to China over the CPEC as it is being laid through the Pakistan-occupied Kashmir (PoK).
- A report by US-based international development research lab AidData said that a substantial chunk of Chinese development financing under the CPEC consists of loans that are at or near commercial rates as opposed to grants.
- Lack of transparency: As much as 40 percent of China's lending to Pakistan does not appear on the government's books.
- Laxity: The project is behind schedule and only three of the total 15 projects announced have been completed so far.
- China's debt trap policy: Critics also foresee that the weak economic indicators of Pakistan might lead to a possibility of the country defaulting on debt repayments, as Chinese loans have high interest rates.
- **❖** India's Concerns
- Violation of Indian Sovereignty: The project violates the sovereignty of India as it passes through Pakistan-occupied Kashmir (PoK), which is a disputed territory between India and Pakistan. As per well-established international conventions, no construction is allowed in any disputed territory, without taking the other country into confidence.

Exploitation of Natural Resources: Under CPEC, China plans to build two mega-dams on the Indus, named Bunji Dam and Bhasha Dam. This will put a heavy strain on the Indus Water Basin.

Security Concerns for India:

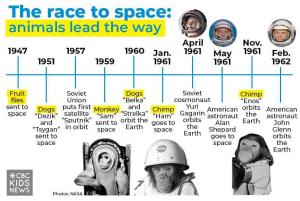
- Increase in China's Activities in IOR: With Gwadar being a part of CPEC, India fears an escalation of PLA Navy activities in the Indian Ocean Region (IOR).
- Threat to Indian Trade and Connectivity: Majority of Indian tangible imports pass through the Strait of Hormuz. China can easily create impediments to its access to the Middle-east in case of a conflict, jeopardizing India's energy security.
- Enhanced threat from Pakistan: With the overhauling of the Karakoram Highway, Pakistan will enjoy an advantage in mobilizing troops as well as heavy military equipment to PoK. At the same time, an increase in financial returns to Pakistan through CPEC may expand its ability to fund military infrastructure as well as state-sponsored terrorism in Kashmir, thus destabilizing the region.
- * Way ahead
- Maintain Communication: Experts have advocated that India maintain communication and cordial relations with its neighbours.
- In such a context, India has done well to keep participating in forums like Shanghai Cooperation Organization to maintain communication with both Pakistan and China.
- **International Collaboration:** It is well settled that India cannot compete with China in the matter of financing developmental projects like CPEC in other developing countries.
- Therefore, it needs to collaborate with agencies like Japan International Cooperation Agency (JICA) to offer soft loans to save them from falling into the Chinese debt trap.
- **Security Concerns:** Developing countries, especially the countries of Southeast Asia have pinned their hopes on India to counter China's hegemony in the region.
- Here, India needs to build on alliances like Quad to maintain the balance of power in the Indo-pacific region.

SCIENCE AND TECHNOLOGY

- Recalling top dog Laika, 65 years after path breaking space flight
- ❖ CONTEXT: On November 3, 1957, the Soviet Union launched 'Sputnik 2' and made history for carrying the first-ever living creature to orbit the Earth, a dog named Laika. The flight, which was meant to test the safety of space travel for humans, ended up as a one-way trip for Laika.
- Sixty-five years later, here's a look-back at why Laika was chosen for the mission, why the Soviet Union sent an animal to space, and if there have been more incidents of animals being sent to space post the Sputnik 2 mission.
- Laika was a stray dog and in the US, she was eventually dubbed "Muttnik."
- The dog was promoted to cosmonaut (a term referring to an astronaut in the Soviet or Russian space program).
- Soviet rocket scientists wanted to send dogs to space to understand microgravity and other aspects of what spaceflight might do to a human body.
- **❖** Was Laika the first animal to be experimented with?
- It was not, though it is often claimed to be. That distinction goes to some fruit flies that the US launched on a mission in February 1947.

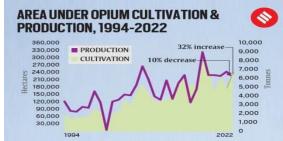


- She also was not the first dog in space, as the Soviet Union had launched two dogs named Dezik and Tsygan in 1951 before that.
- However, the dogs before Laika were used only during sub-orbital launches.
- Sputnik 2
- Sputnik 1, which launched on October 4, 1957, was a beach-ball-size sphere that just emitted beeps as it circled Earth.
- A month later, Sputnik 2 was launched. Sputnik 2, launched on November 3, 1957, carried the dog Laika, the first living creature to be shot into space and orbit Earth. It contained several compartments for radio transmitters, a telemetry system, a programming unit, a regeneration and temperature-control system for the cabin, and scientific instruments. Sputnik 2 reentered the Earth's atmosphere on 14 April 1958. The satellite burned up in the atmosphere.



PRELIMS

- 1. Poppy love in Afghanistan
- ❖ Context: Driven by the demand for heroin and other opioids, mostly in the West, Afghanistan's poppy farmers have figured out that in a broken country where there are no jobs, and the de facto government has no money, poppy guarantees survival.
- What is poppy?
- A poppy is a flowering plant in the subfamily Papaveroideae of the family Papaveraceae.
- Poppies are herbaceous plants, often grown for their colourful flowers. One species of poppy, Papaver somniferum, is the source of the narcotic drug opium which contains powerful medicinal alkaloids such as morphine and has been used since ancient times as an analgesic and narcotic medicinal and recreational drug.
- It also produces edible seeds.
- Key details:
- A new report by the United Nations Office on Drugs and Crime (UNODC) says the land under poppy cultivation in Afghanistan in 2021 increased by 32 per cent over the previous year.
- In some places, farmers even replaced traditional crops with poppy.
- The UNODC report says the 2021 harvest could be converted into 350-380 tonnes of export-quality heroin.
- Eighty per cent of the world's opiates come from Afghanistan.
- The income of farmers from opium sales more than tripled from \$425 million in 2021 to \$1.4 billion in 2022—29 per cent of the Afghan agricultural sector's total value in 2022, higher by 20 percentage points over the previous year.



- UNODC
- The United Nations Office on Drugs and Crime is a United Nations office that was established in 1997 as the Office for Drug Control and Crime Prevention by combining the United Nations International Drug



Control Program (UNDCP) and the Crime Prevention and Criminal Justice Division in the United Nations Office at Vienna.

- It was renamed the United Nations Office on Drugs and Crime in 2002.
- The agency's focus is the trafficking in and abuse of illicit drugs, crime prevention and criminal justice, international terrorism, and political corruption.
- It is a member of the United Nations Development Group.
- The Office is committed to supporting Member States in implementing the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs) at its core.

2. National Natural Farming Mission Portal

- * CONTEXT: Union Agriculture Minister launched the National Natural Farming Mission portal at Krishi Bhawan, New Delhi.
- The National Mission on Natural Farming (NMNF) portal was launched at the first steering committee meeting of National Natural Farming Mission.
- The National Natural Farming Mission portal was developed by the Union Ministry of Agriculture and Farmers Welfare.
- The portal will help in promoting natural farming in the country and for the benefit of the farming community.

❖ National Mission on Natural Farming

- The Bhartiya Prakratik Krishi Paddhati (BPKP) is being up-scaled as National Mission on Natural Farming (NMNF) for implementation all across the country.
- BPKP is a sub-scheme of Paramparagat Krishi Vikas Yojna (PKVY) since 2019-20 for promoting natural farming.
- National Steering Committee (NSC) under the Chairmanship of the Union Agriculture Minister, is the policy making body of the mission.

Mission Objectives

- To promote alternative system of farming and thereby increasing income of farmers.
- To collect, validate and document Natural Farming practices and to encourage participatory research with farmers.
- To undertake activities for awareness creation, capacity building, promotion and demonstration of Natural
- To create standards, certification procedure and branding for Natural Farming products.

- **Amur falcons Context:** Nagaland is undertaking the first avian documentation exercise to go beyond Amur falcons, the migratory raptor that put the State on the world birding map.
- The exercise name is Tokhü Emong Bird Count (TEBC).
- The exercise entails watching and counting birds from anywhere in Nagaland for at least 15 minutes and uploading the avian names on eBird (www.ebird.org/india), the bird recording platform.
- The TEBC falls within the Salim Ali Bird Count, a nationwide event conducted by the Bombay Natural History Society.

The Bird

- The Amur falcon (Falco amurensis) is a small raptor of the falcon family.
- It breeds in south-eastern Siberia and Northern China before migrating in large flocks across India and over the Arabian Sea to winter in Southern and East Africa.
- Locally known as Akhuipuina, the bird arrives mainly in Manipur and Nagaland on its southbound migration from breeding grounds in North China, Eastern Mongolia and far-east Russia.
- They travel to Manipur en-route to its wintering grounds in South Africa.
- The one-way journey via India is about 20,000 km long and the birds do this twice a year.
- They spend three-four weeks in many parts of Manipur to build fat reserves by preying on termites that emerge around this time.

Conservation status

- It is protected under the Wildlife Protection Act 1972 and included under its Schedule IV.
- It is listed in the IUCN Red list as Least Concern.
- Hunting of the birds or possessing its meat is punishable with imprisonment up to three years or a fine up to Rs 5,000.
- In 2018, the forest department started a conservation programme by radio-tagging the birds to study their migratory route.



ANSWER WRITTING

Q. Explain the purpose of the Green Grid Initiative launched at World Leaders Summit of the COP26 UN Climate Change Conference in Glasgow in November, 2021. When was this idea first floated in the **International Solar Alliance (ISA)?**

The Green Grid or the One Sun One World One Grid (OSOWOG) initiative was announced at COP-26, Glasgow by India and the UK. The initiative is aimed at accelerating the development and deployment of interconnected electricity grids across continents, countries, and communities, and improving energy access of the poorest through mini-grids and off-grid solutions. The idea for the single global solar grid was first outlined at the International Solar Alliance in 2018, by the Prime Minister of India.

The Green Grid Initiative aims:

- To speed up the process of decarbonising energy production.
- To create an international network of global interconnected solar power grid to ensure 24×7 supply of green power.
- To help in increasing investment in R&D centers by pooling skill, technology and financial resources.

As good as it sounds, the implementation of the Green Grid has to counter the following challenges:

- The creation of global transmission infrastructure involves huge financing.
- For connecting with the Green Grid, a global cooperation between the countries is needed.
- As the grid will pass through several geographical locations, it will be sensitive to the security risks emanating from terror organisations.

The Green Grid initiative is a transformational new programme, with the goal of making universal access to renewable energy a reality. It will ensure that clean power is the most affordable and reliable option for all countries to meet their energy needs efficiently by 2030.

- With reference to Amur Falcon birds consider the following statements:
 - 1. It is the longest flying migratory bird on earth.
 - They are Nearly Threatened in the IUCN Red Data List.
 - 3. They are protected under schedule I of Wild life (Protection)Act 1972

Select the correct statement/s suing the codes given below:

- a) 1 and 3 only
- b) 2 and 3 only
- c) 1 only
- d) 3 only
- Consider the following statements
- Coaching for UPSC/OPSC 1. Organic farming requires basic agro practices like plowing, tilting, mixing of manures, weeding, etc. to be performed.
 - In natural farming there is no plowing, no tilting of soil and no fertilizers, and no wedding is done
 - 3. Natural farming is promoted under Paramparagat Krishi Vikas Yojana (PKVY)

Choose the correct statement/s using the codes given below

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1,2,3
- Which of the following is/are the principle of Zero Budget Natural Farming?
 - 1. Soil to be covered with crops 365 days
 - 2. Use indigenous seed
 - 3. Reduce Mixed cropping
 - 4. Integrate animals in to farming
 - 5. Increase organic residues on the soil
 - 6. Pest-management through botanical extracts
 - 7. Use of biodegradable pesticides, herbicides

Choose the correct answer using the codes given below

- a) 1,2,3,4and 5 only
- b) 3,4,5,6 and 7 only
- c) 2,3,5,6 and 7 only
- d) 1,2,4,5, and 6 only
- With reference to Opium cultivation consider the following statements
 - 1. The cultivation of opium poppy in India is strictly regulated with the crops being allowed to be sown only in tracts of land notified by the central government
 - Every state has one notified districts has been allowed to cultivate opium poppy in India.



Choose the correct statement using the codes given below

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2
- 5. Which of the following statement is correct about the "One Belt One Road" initiative?
 - a) "Belt" refers to the Himalayan belt and "road" refers to the land routes. The initiative aims at improving connectivity among Asia, Africa and Antarctica.
 - b) "Belt" refers to maritime roads and "road" refers to air and land routes. The initiative aims at improving connectivity among China, Pakistan, India and other Asian countries.
 - c) "Belt" refers to the overland routes and "road" refers to the sea routes. The initiative aims at improving connectivity among Asia, Africa and Europe.
 - d) "Belt" refers to the Arabian Belt and "road" refers to land routes. The initiative aims at improving connectivity among Asia, Africa, Australia, Indian Ocean and Arabian Sea.
- 6. Consider the following statements about the China-Pakistan economic corridor (CPEC)
 - 1. It is part of China's one belt one road initiative.
 - 2. It is passing through the disputed region of Pakistan occupied Kashmir (PoK).
 - 3. It connects the Pakistan's deep-sea Gwadar port with Kunming of China.

Select the incorrect statement/s using the codes given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 3 only
- 7. The term "Cordy gold nanoparticles (Cor-AuNPs)" often mentioned in news is related to which of the following?
 - a) Quantum computing
 - b) Gene editing Creasers
 - c) Bio remediation technology
 - d) Drug delivery within the body
- 8. With reference to recently released Performance Grading Index consider the following
 - 1. It has been released by NITI Ayog
 - 2. It ranked the states and UTs based on the scores out of 1000 points.
 - 3. The newly formed UT viz., Jammu and Kashmir has made significant improvement in PGI from Level 8 to Level 4 in 2020-21 compared to 2019-20.

Which of the above statement/s is are correct?

- a) 1 only
- b) 2 only
- c) 1 and 2 only
- d) 2 and 3 only
- 9. Which of the following initiatives are related to online education
 - 1. SWAYAM
 - 2. SWAYAM Prabha
 - 3. E-Yantra
 - 4. FOSSEE project

Choose the correct answer using the codes given below

- a) 1,2 and 4 only
- b) 1,2 and 3 only
- c) 1 and 4 only
- d) All of the above
- 10. Island of Vanuatu is recently seen in news is situated in which?
 - a) South Atlantic Ocean
 - b) Indian Ocean
 - c) North Arctic Ocean
 - d) South Pacific Ocean