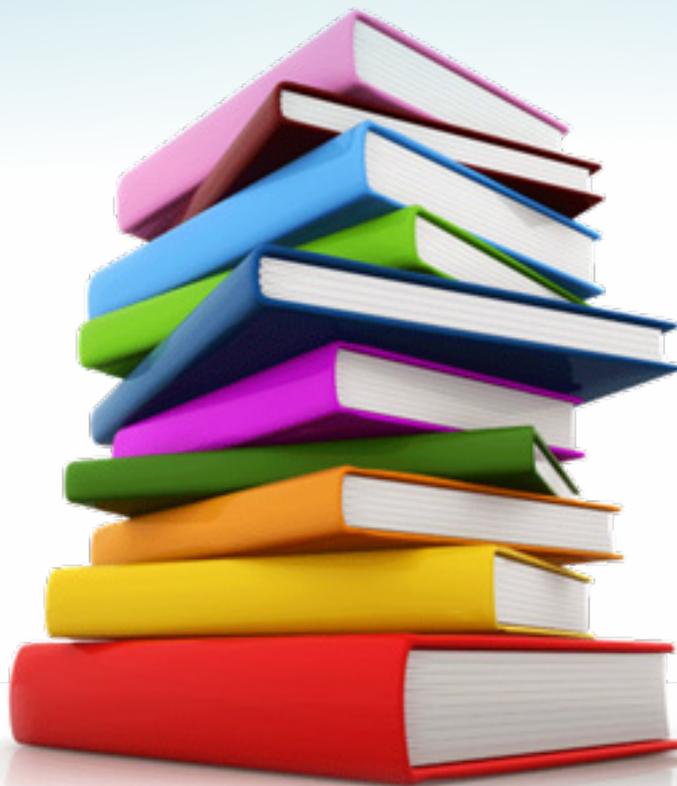




PLUTUS IAS Weekly

CURRENT AFFAIRS



PLUTUS IAS WEEKLY CURRENT AFFAIRS 25-10-2021 to 31-10-2021

Basement C59 Noida, Opposite to Priyagold Building Gate, Sector 2, Pocket 1, Noida, Contact No.: 8448440231

www.plutusias.com



CURRENT AFFAIRS

OCTOBER 2021

Dependence in the fields : Significant Art Work of Gireesh GV (GS Paper I Art and Culture)

CONTEXT

Renowned internationally recognised photographer G.V Gireesh will show his work in an exhibition after 20 years. In this Exhibition he will present his works along with his significant work Dependence in the field Apart from this work, Walking the line – Living together/Apart would also be presented in the exhibition

HIS WORK

- Through his photographs Gireesh had tried to present the picture of those farmers who are victims of natural calamities as well as the policies of the government. In this photograph he showed the humble scarecrow, (A type of horror mannequin which is generally used in the field of India to prevent the crops from the birds)
- This humble scarecrow, reflects the real picture of Indian farmers how they have been marginalised by these multinational companies
- The concept and the Idea of this photography is influenced by the pathetic conditions of the Indian farmers. This picture reflects the condition of all the farmers of India of various states like Andhra, Maharashtra, Kerala, Punjab, UP, MP etc.
- Farmers of the Maharashtra, Bihar and Andhra generally commit suicide because of the draught and other natural calamities
- During Covid , indian farmers of flowers had to face a lot of problems .participating in various exhibitions in India as well as in the world
- Among all his works of Gireesh, another import There were no buyers of the flowers in the market because of the lockdown.
- Nowadays the fear of covid is continuously going out so the art lovers are coming out and pant concept was related to Delhi during 90s. After the Sikh genocide, Gireesh tried to make photography expressing about the light (Hope) after dark (Violence). His photography was entitled 'Paint After Dark'
- In fact his father was also an expert in Photography. He has been involved in the profession of photography from his childhood . Initially he did the photography from the camera of his father but when he started to capture photos professionally he worked in numerous news publications and has participated in exhibitions across the country as well as beyond the country.
- Generally, he travelled via train for the outstationed photography so that he could understand the real

conditions of the farmers and the society. he wanted to understand the social issues deeply and then he presented those social issues through his artworks

- After the incident of Nirbhaya rape in Delhi, he decided to capture the pictures related to the exploitation of the women, exploitation of the children, exploitation of the farmers etc.
- He wants to capture those scenes which are untold and unseen and reflecting any social issues

ABOUT GIRISH

- Delhi based Gireesh had learnt the basics of photography from Thiruvananthapuram which was his hometown. Now days he is residing in Delhi . he did his masters in fine art from the central University of Hyderabad
- He had worked with several reputed houses of Journalism like India Today, outlook and forbes also contributed to the wall street min journal london . His works are also internationally recognised.

Definitely as the photographer Gireesh had earned a lot of fame in India as well as abroad but simultaneously by showing the social issues through his photography he paid his duty of a good Indian citizen also

Dr. Anshul Bajpai

Indian Railway to be Net Zero Emitter by 2030 GS – 2 Environmental Pollution & Degradation, Government Policies & Interventions, Infrastructure

CONTEXT

Recently, **Indian Railways (IR)** has announced that it is **likely to become world's first 'net-zero' carbon emitter by 2030**. Railways is taking a multi-pronged approach to go green and decarbonise – from increasing its sourcing of **Renewable Energy (RE)** to electrifying its traction network and reducing its energy consumption.

ABOUT NET ZERO EMISSION

It refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.

- First, human-caused emissions (like those from fossil-fueled vehicles and factories) **should be reduced as close to zero as possible**.
- Second, any remaining GHGs should be **balanced with an equivalent amount of carbon removal, for example by restoring forests**.

Global Scenario: As of June 2020, twenty countries and regions have adopted net-zero targets. **The Kingdom of Bhutan is already carbon-negative**, i.e. absorbs more CO₂ than it emits.

Indian Scenario: India's per capita CO₂ emissions – at 1.8 tonnes per person in 2015 – are around a ninth of those in the USA and around a third of the global average of 4.8 tonnes per person. However, overall, **India is now the planet's third-largest emitter of CO₂**, behind China and the USA. **Sectors that are the largest emitters:** Energy>Industry>Forestry>Transport>Agriculture>Building.

ABOUT INDIAN RAILWAYS INITIATIVE

Indian Railways: IR is the world's fourth largest railway network in terms of size. It is one of the largest electricity consumers in the country. Transports 24 million passengers every day across the subcontinent on 13,000 trains covering approximately 67,956 km. 3.3 million tonnes of freight per day, and thus the fuel requirements are massive.

Contribution in Total Emissions: India's transport sector contributes to 12% of the country's greenhouse gas emissions with the railways accounting for about 4% of these emissions. The Indian Railways can raise the official target of 50% freight share by 2030, up from its current share of 33%.

By shifting freight to rail and optimising truck use, India can reduce logistics costs from 14-10% of Gross Domestic Product and carbon dioxide emissions by 70% by 2050 compared to a business-as-usual scenario.

INITIATIVES TAKEN BY INDIAN RAILWAYS

- **Increased the Amount of Freight:** Indian Railways to increase the amount of freight moved by it from about 35% in 2015 to 45% by 2030 to reduce overall emissions from transportation.
- **Complete Electrification:** Complete electrification of Indian Railways is targeted by financial year 2024. It will be the world's largest 100% electrified rail transportation system by then.
- **Use of Solar Power:** Plans to install 20 GigaWatts (GW) of solar for both traction loads and non-traction loads. Built a 1.7-MW solar power plant in Bina, Madhya Pradesh, in July 2020.
- It is the first solar energy plant in the world to directly power railway overhead lines, from which locomotives draw traction power. A 2.5-MW solar project in Diwana, Haryana. Work on a third pilot with a capacity of 50 MW has begun in Bhilai (Chhattisgarh). A 16-kW solar power plant has been installed as platform shelter at the Sahibabad Railway Station. The railways ministry has installed solar panels at over 960 stations and is using solar power to meet railway station energy needs.
- **Participation of Private Sector:** The ministry has included provisions for a Letter of Credit (LC) in the event of railway payment default, as well as a penalty for late payment in the model bidding document for solar power developers. This is to encourage the private sector to participate in the project.

CHALLENGES:

- **No-objection certificate for open access:** The No objection Certificate (NoC) for open access to electricity flow for railways in West Bengal, Tamil Nadu, Chhattisgarh, Odisha, Andhra Pradesh, Kerala and Telangana has not been operationalised due to regulatory challenges that the railways are vigorously pursuing.
- If approval for procuring power through open access is granted in these states, solar deployment may increase.
- **Wheeling and banking provision:** Full deployment of solar potential will become more feasible if states provide wheeling and banking arrangements.
- **Merger of solar purchase obligation and non-solar purchase obligation:** The consolidation of solar and non-solar obligations will allow the railways to meet their Renewable Purchase Obligations.
- **Unrestricted net metering regulations:** Unrestricted net metering for rooftop solar projects would hasten the deployment of railway solar plants.

BY ANSHUM VERMA

(FACULTY POLITY, GEOGRAPHY AND ENVIRONMENT)

HOPES FOR 2030 ; [GS Paper III]

CONTEXT :

The stage is set for the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow, starting October 31.

Under the Paris Agreement, target to raise the emission reduction commitment has been set and different persuasion strategies are being used through conferences and meetings.

Many countries emitting hugely are still not following emissions reductions required by 2030 to restrict global temperature rise to “well below 2°C” or the now de facto goal of 1.5°C above pre-industrial levels.

NEW TARGET – Net zero emissions by 2050 i.e., greenhouse gases (GHG) emissions equalling absorption by sinks such as forests.

NET ZERO TARGET-

A/c the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change released in August 2021- emphasis is on NET ZERO TARGET and to keep temperature rise within 1.5°C, additionally , the global emissions should be reduced by 45% from 2010 levels by 2030, on the way to net zero 2050.

Developed countries, that accounts for over 75% of atmospheric GHGs emission, should shoulder most of the burden, and provide with technological and financial assistance to developing countries.

CBDR would imply that developed countries should reach net zero by next 2 decades and developing countries can get there later.

NEED OF THE HOUR – TO FOCUS ON ALREADY PENDING EMISSION REDDUCTION TARGETS

TARGETS FOR 2030- APPEARS AMBITIOUS-

113 / 194 Parties submitted updated NDCs by end-July 2021. The UN NDC report calls for “a significant increase in the level of ambition of NDCs” till 2030.

Several large emitters have announced deeper emission cuts than in the Paris Agreement.

The U.K. and the European Union have raised their targets to a significant 68% and 55%, respectively, compared with 1990 levels by 2030.

PERFORMANCE OF DIFFERENT COUNTRIES-

The U.S. is still lagging behind, The U.S. has now promised net zero emissions by 2050 compared to the 80% reduction that it had promised earlier.

As the U.S. is the world’s second largest emitter, and the 2005 baseline makes its commitment considerably lower than those of the EU, the U.K. and others using the Kyoto 1990 baseline.

OTHER COUNTRIES THAT NEED TO REDUCE EMISSIONS-

- Russia
- China
- Brazil

Carbon budgets represent the quantum of CO₂ the atmosphere can hold for a given global temperature, best assessed through cumulative emissions and not annual flows.

As the NDC report says, reaching net zero is necessary to stabilise global temperature rise at a particular level, “but limiting global temperature increase to a specific level would imply limiting cumulative CO2 emissions to within a carbon budget.”

Pressure will undoubtedly come from Africa, Least Developed Countries (LDCs), Small Island States and others, but will that tilt the scales against the powerful status quo?

Or will the U.S. and others succeed in focusing on the false net zero 2050 solution, escaping their own obligations for 2030 and dangerously kicking the can down the road?

INDIA'S STANCE- The country emits 7% of global emissions, has extremely low per-capita emissions that are far below the global average and yet ranks as the world's third largest emitter.

It is a G20 member and reputed economic and industrial power. India has so far resisted pressures to raise its Paris Agreement emission reduction commitments.

But it has not yet submitted its updated NDC as required and may face difficulties at Glasgow, especially from LDCs and most vulnerable countries feeling existentially threatened even as powerful nations wheel and deal.

The **Climate Tracker** website has put India at the **second- worst performing** category of countries regarding global 1.5°C goals' conformity. India can, without much difficulty, raise its NDC pledge of reducing Emissions Intensity (ratio of emissions to GDP) by 33-35% from 2005 levels by 2030 to 38-40%.

IS THIS GOAL ACHIEVABLE FOR INDIA?

It's quite achievable as India has been averaging around 2% p.a. reduction in EI as per its own NDC.

REGARDING NET ZERO TARGETS-

India could achieve that by 2070-75, invoking CBDR and comparing well with China's 2060 pledge.

- If India increases its forest and tree cover
- If India install its planned 450GW of renewable power by 2030
- If India adds green hydrogen or increases electric vehicles into commitments may require more homework than done so far.

BY RAJEEV YADAV

FACULTY OF G.S. and HISTORY- OPTIONAL

PLUTUS IAS

The separation of National Payment System Trust (NPS) from the Pension Fund Regulatory and Development Authority (PFRDA) for ensuring universal pension coverage (GS 3, Economics, The Hindu, Indian Express)

NEWS/ CONTEXT:

The government is likely to amend the Pension Fund Regulatory and Development Authority Act, 2013 so that the National Payment System Trust (NPS) could be separated from the PFRDA. As per the government, this is to be done to ensure universal pension coverage.

The development of the pension system: In the year 1999, the Government of India commissioned a national project titled **OASIS**, an acronym for Old Age Social and Income Security. This National project was to examine the policies related to income security of the age-old population in India. Based on the Recommendation of the OASIS report, the government replaced the then existing system of the Defined Benefit Pension System with the New Defined Contribution Pension system for the new entrants to the state or central government services except for armed forces.

The Government of India in 2003 established the **Pension Fund Regulatory and Development Authority** through a resolution to promote, develop and regulate the pension sector in India. Later in 2003, the government notified the contributory pension system, which was renamed as **National Pension System in 2004**. The NPS was subsequently extended to all citizens of the country w.e.f. 1st May 2009 including self-employed professionals and others in the unorganized sector on a voluntary basis. Thus today NPS is subscribed by employees of Govt. of India, State Governments, and by employees of private institutions/ organizations & unorganized sectors.

In 2013 the Pension Fund Regulatory and Development Authority Act was passed and then PFRDA came into the picture. Its main function was to regulate NPS, which still it is doing. The PFRDA is ensuring the orderly growth and development of the pension market.

The Preamble of the Pension Fund Regulatory & Development Authority Act, 2013 describes the basic **functions of the PFRDA** as “to promote old age income security by establishing, developing and regulating pension funds, to protect the interests of subscribers to schemes of pension funds and for matters connected therewith or incidental thereto.”

National Pension System Trust (NPST) was established by PFRDA as per the provisions of the Indian Trusts Act of 1882 for taking care of the assets and funds under the NPS in the best interest of the subscribers. The powers, functions, and duties of NPS Trust are laid down under the PFRDA (National Pension System Trust) Regulations 2015, besides the provisions of the Trust deed dated 27.02.2008.

NPS Trust is the registered owner of all assets under the NPS architecture which is held for the benefit of the subscribers under NPS. The securities are purchased by Pension Funds on behalf of, and in the name of the Trustees, however individual NPS subscriber remain beneficial owner of the securities, assets and funds. NPS Trust, under the NPS Trust regulations, is responsible for monitoring the operational and functional activities of NPS intermediaries' viz. custodian, Pension Funds, Trustee Bank, Central Recordkeeping Agency, Point of Presence, Aggregators and that of IRDAI registered Annuity Service Providers (empanelled with PFRDA) and also for providing directions/advisory to PF(s) for protecting the interest of subscribers, ensuring compliance through audit by Independent Auditors, and Performance review of Pension Funds etc.

The Amendment in the PFRDA Act could bring powers, functions, and duties of NPS Trust, which are currently laid down under PFRDA (National Pension System Trust) Regulations 2015, under a charitable Trust or the Companies Act. This is to be done with an intention to keep NPS Trust separate from the pension regulator and managed by a competent board. The majority of the members of the board are likely to be from the government as they, including states, are the biggest contributor to the corpus/fund of NPS. PFRDA had established the NPS Trust for taking care of the asset funds under NPS. The Trust was established by PFRDA for taking care of the assets and funds under NPS. The proposal to separate the two job roles has been under consideration for the last couple of years. The PFRDA was established for promoting and ensuring the orderly growth of the pension sector with sufficient powers over pension funds, the central record keeping agency and other intermediaries. It also safeguards the interest of members.

**Md Layeeque Azam,
Economics Faculty**

Zine Culture : A culture of Art Lovers

(GS Paper 1: Art and Culture)

CONTEXT:

A fest related to zine art is going to start in the commercial capital of India, Mumbai. On this occasion many artists, painters and the designers and art lovers would be gathered and they would discuss how they could use zine culture commercially. How zine culture can be converted into an economical vibrant art.

ZINE CULTURE

- This culture was initially developed in Europe, particularly in England. The artwork like picture making or colour designing on a small scale, particularly on self-published magazines or work is called Zine culture.
- It emerged during the 1980s when feminist and punk protests were started by several magazines in Europe.
- This culture generally promotes innovations, collaborations and sharing among various communities. These are the good art for putting our issues on an artistic way.

WHAT IS ZINE

- Even though this term is very difficult to clearly define, as per the Oxford dictionary it is derived from the term fanzine or magazine.
- Generally this was a type of book which was published for entertainment.
- Funny cartoons were used to show science fiction through these fanzines.
- Zines were the roots of the magazines which were published during the 60s and 80s to propagate the social and political activism.
- Generally the term Zine is used for the publication of appropriate appropriated texts and images in its original form. If we use the definition of this term as the self-published unique work for the interests of the minorities (Cultural, religious and other minorities).

ZINE CULTURE IS FLOURISHING IN INDIA ALSO

- During the decade of the 1930s it flourished in Europe. Gradually it started to flourish in other regions of the world. In India, it penetrated after the 1980s. We have several libraries related to various zines like **The Tate** (Renowned British Museum and the Library for the Zines). Zines are generally non-commercial and published only for the home. Zines are the symbol of home-made art.
- In India, **Bombay Underground** is the institute patroning zine culture. This is co-founded by Himanshu S and Aqi Thami. This institute is playing a lot of role in the propagation of the zine culture.
- Gayasi Zine Bazar is situated in Delhi and Mumbai both places. It has hosted physical pop-ups in both the cities.
- Zindabad is the institute working for the promotion of zine culture, organising zine-making workshops. It worked online also during this COVID pandemic.
- There's also the brilliant Blue Jackal (@bluejackalhere), an indie platform for visual narratives (including zines), picture books and comics.

ARTIST RELATED TO ZINE

- Aquí Thami, and The Sister Library
- Renuka Rajiv
- Shreyas R Krishnan
- Mil Ke Chai
- Pearl D Souza

Therefore, we can say that India is also the place where zine lovers are many in numbers. The genesis of zine culture lies with marginalised people. Historically disenfranchised communities have the greatest need for self-publishing. Many resistance movements have traditionally used zines to share their ideas. They may not call them zines

This spirit is alive in the work of Marathi feminist publication Mahila Ladaichi Katha, or Darjeeling-based Lali Guras, which publishes the work of local poets. If you go to Chaityabhoomi, especially around 6 December, you'll see lots of stalls, self-published work in many Indian languages, whether it's Ambedkar's writings or songs of resistance. Ambedkar famously self-published much of his own work, finding few avenues in the mainstream discourse of the time."

Dr. Anshul Bajpai

GLOBAL HUNGER INDEX – 2021 INDIA'S REPORT CARD [GS paper II- SOCIAL JUSTICE]

CONTEXT:

In the latest Global Hunger Index 2021, India slips to 101st spot, behind Pakistan, Bangladesh, Nepal only 15 Countries faring worse than India this year, like-

1. Papua New Guinea (102)
2. Afghanistan (103)
3. Nigeria (103)
4. Congo (105)

SOME BASIC INFORMATION:

The Global Hunger Index (GHI) is a tool that measures and tracks hunger globally, region-wise and country-wise, prepared by European NGOs of Concern Worldwide and Welthungerhilfe.

The Global Hunger Index uses a 100-point scale, with higher scores indicating higher hunger levels. The severity of hunger associated with the range of possible GHI scores is as follows:

LEVEL	VALUE
LOW	9.9
MODERATE	10-19.9
SERIOUS	20-34.9
ALARMING	35-49.9
EXTREMELY ALARMING	≥ 50

THE GHI COMBINES 4 COMPONENT INDICATORS:

1. The proportion of the undernourished as a percentage of the population (PoU).
2. the proportion of children under five suffering from wasting, a sign of acute undernutrition (low weight-for-height)
3. the proportion of children under five suffering from stunted growth, a sign of chronic undernutrition (low height-for-age)
4. child mortality under the age of five

In the **2021 Global Hunger Index-**

INDIA:

- Ranks **101st** out of the 116 countries [94 (out of 107) in 2020]
- **India scored 27.5** → that is **serious level of Hunger**
- India has got a **poor ranking** in terms of the Global Hunger Index (GHI) in the Global Hunger Report (GHR) .
- India shows a worsening in PoU and childhood wasting in comparison with 2012.

REACTION OF GOI-

- The Government objected the methodology of the Global Hunger Index.
- The Government of India, through a press release, refuted the GHI, claiming that it is 'devoid of ground reality' and based on 'unscientific' methodology.
- The Government is contesting the PoU figure of 15.3% for 2018-20.
- In opposition to the view of GOI, The report is not based on the Gallup poll; rather, it is on the PoU data that the Food and Agriculture Organization of the United Nations (FAO) puts out regularly.

A/c FAO, **PoU**→ is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life.

PoU is estimated taking into account a number of factors-

- such as food availability
- food consumption patterns
- income levels and distribution
- population structure, etc.

All the data used are from official data sources of respective national governments.

The partial results of the National Family Health Survey-5 (2019-20) also show that stunting and wasting indicators have stagnated or declined for most States for which data is available.

→ It must also be remembered that all the data are for the period before the COVID-19 pandemic and things are most likely to have become worse after the second wave.

Many of these surveys find that over 60% of the respondents say that they are eating less than before the national lockdown in 2020.

Services such as the Integrated Child Development Scheme (ICDS) and school mid-day meals continue to be disrupted in most areas, denying crores of children the one nutritious meal a day they earlier had access to.

The novel coronavirus pandemic has affected food security and nutrition across the world.

In countries such as India, the situation has worsened.

CUTS FOR SCHEMES

The provision of additional free foodgrains through the Public Distribution System (PDS), has also been lacking. It leaves out about 40% of the population, many of whom are in need and includes only cereals.

At the same time, inflation in other foods, especially edible oils, has also been very high affecting people's ability to afford healthy diets.

The argument that the GHI is an indicator of undernutrition and not hunger, is only diverting attention away from more substantial issues.

Rajeev Yadav

Understanding ETFs alongwith Bharat Bond Exchange Traded Fund (ETFs) (GS 3, Economics, The Hindu, Indian Express)



NEWS/CONTEXT:

The government is likely to launch the next tranche of the Bharat Bond ETF by December and expects to raise over Rs 10,000 crore to fund growth plans of central public sector enterprises, according to a senior finance ministry official.

The government is likely to launch the next tranche of the Bharat Bond ETF by December and expects to raise over ₹10,000 crore to fund growth plans of central public sector enterprises, according to a senior finance ministry official.

The official added that the fund requirements of CPSEs are being worked out and the third tranche of the exchange-traded fund (ETF) will be launched by the end of the calendar year.

“We are finalising on the amount to be raised but it would be over Rs 10,000 crore,” the official said.

What is ETF: An ETF, short for exchange traded fund, is just like a stock and can be also called a basket of securities that also trade on the stock market.

Exchange traded funds pool the financial resources of several people and use it to purchase various tradable monetary assets such as shares, debt securities such as bonds and derivatives. Most ETFs are registered

with the Securities and Exchange Board of India (SEBI). It is an appealing option for investors with limited expertise in the stock market.

Bharat Bond ETF is an exchange-traded fund that invests in debt of public sector companies. The ETF currently invests only in 'AAA'-rated bonds of public sector companies

Bharat Bond ETF is an exchange-traded fund that invests in debt of public sector companies. The ETF currently invests only in 'AAA'-rated bonds of public sector companies.

The second tranche of the Bharat Bond ETF, which was launched in July 2020, was oversubscribed more than three times, collecting about ₹11,000 crore. It had fetched about ₹12,400 crore in its debut offer in December 2019.

The Bharat Bond ETF offered maturity options of five and 12 years in its second tranche, while in the first tranche, maturity options were for three and 10 years.

Edelweiss Asset Management is the fund manager of the scheme.

What is Bond Rating: Bond ratings are representations of the creditworthiness of corporate or government bonds. The ratings are published by credit rating agencies and provide evaluations of a bond issuer's financial strength and capacity to repay the bond's principal and interest according to the contract. The three private independent rating agencies – S&P, Moody's, and Fitch – control almost 95% of the market share of the bond rating business. Each rating agency uses its own grading system. However, all rating systems classify bond investments by quality grade (investment grade/non-investment grade/not rated) and risk (from default to highest quality). Investment grade bonds are considered safe investments with minimal default risk but provide minimal yields. Non-investment grade bonds are riskier, but they offer a higher yield.

Bond ratings prepared by professional analysts provide institutional and individual investors with a reliable source for making investment decisions.

MD. Layeeque Azam

International Solar Alliance (ISA) GS- 2 International Treaties & Agreements, Important International Institutions

CONTEXT

Recently, the fourth general assembly of the International Solar Alliance (ISA) was held. A total of 108 countries participated in the assembly, including 74 member countries, 34 observer and prospective countries, 23 partner organisations and 33 special invitee organisations.

ABOUT ISA

The ISA is an **intergovernmental treaty-based organisation** with a global mandate to catalyse solar growth by helping to reduce the cost of financing and technology. ISA, **co-founded by India and France during the 2015 climate change conference in Paris** has assumed centre-stage for India's attempts at a global climate leadership role.

ISA is the **nodal agency for implementing One Sun One World One Grid (OSOWOG)**, which seeks to transfer solar power generated in one region to feed the electricity demands of others. India has allotted **5 acres of land to the ISA in National Institute of Solar Energy (NISE) campus, Gurugram** and has released a sum of Rs. 160 crore for creating a corpus fund, building infrastructure and meeting day to day recurring expenditure of the ISA up to the year 2021-22. NISE is an **autonomous institution** of the **Ministry of New and Renewable (MNRE)** and is the apex National R&D institution in the field of Solar Energy.

KEY HIGHLIGHTS

Solar Investments:- A promise to **achieve USD 1 trillion global investments** in solar energy by 2030. A **Solar Investment Action Agenda** and a **Solar Investment Roadmap** will be **launched at COP26 (United Nations (UN) Climate Change Conference)**.

On One Sun One World One Grid (OSOWOG): Gave a **green light** to the “One Sun” political declaration for the launch of **Green Grids Initiative-One Sun One World One Grid (GGI-OSOWOG) at COP26**. The concept of a **single global grid for solar** was first outlined at the **First Assembly of the ISA** in late 2018.

COP 26 Green Grid Initiative:- The aim of this initiative is to help achieve the pace and scale of reforms to infrastructure and market structures needed to underpin the global energy transition.

New ISA Programmes: New ISA programmes launched **on management of solar PV panels & battery usage waste and solar hydrogen programme**. The **new Hydrogen initiative** is aimed at enabling the use of solar electricity to produce hydrogen at a more affordable rate than what is available currently (USD 5 per KG), by bringing it down to USD 2 per KG.

INITIATIVES OF INDIA

- **National Solar Mission** (a part of National Action Plan on Climate Change): To **establish India as a global leader in solar energy**, by creating the policy conditions for its diffusion across the country as quickly as possible.
- **INDC’s target:** It targets installing 100 GW grid-connected solar power plants by the year 2022. This is in line with **India’s Intended Nationally Determined Contributions (INDCs)** target to achieve about 40% cumulative electric power installed capacity from non-fossil fuel based energy resources and to reduce the emission intensity of its GDP by 33 to 35% from 2005 level by 2030.
- **International Solar Alliance (ISA) and One Sun One World One Grid (OSOWOG):**
- **Government Schemes:** Such as **Solar Park Scheme**, Canal bank & Canal top Scheme, Bundling Scheme, Grid Connected **Solar Rooftop Scheme** etc.
- **First Green Hydrogen Mobility project:** National Thermal Power Corporation Limited (NTPC) Renewable Energy Ltd (REL) signed a Memorandum of Understanding with the Union Territory of Ladakh to set up the country’s first Green Hydrogen Mobility project. **Green hydrogen** is produced by electrolysis of water **using renewable energy (like Solar, Wind)** and has a lower carbon footprint.

Anshum Verma

Fashion of Mughal Period : Use of Stylish Glasses (GS Paper I : Art and Culture)

CONTEXT :

Sotheby, a famous exhibition centre of London declared that the Two pairs of bejewelled Mughal-era spectacles set with diamond and emerald lenses are expected to fetch millions (approx 3.5 millions) each when they are auctioned in London

FASHION DURING MUGHALS

- Mughal Period was the witness of Luxurious and prosper life style of the royal people They used various types of ornaments , clothes jewelries of too much prestigious stones

- Last days we saw that some glasses of the Mughal periods are brought for auction in the exhibition in London
- The use of precious stone implies that the people of that time were spiritual enlightened
- The name of the two pairs of glasses are “Gate of Paradise” & “Halo of Light”. In first pair of the glass we see the lenses were set in diamond-mounted frames while in other pair of glasses diamonds were used for lenses also and frame is also made of diamond
- Scholars predict that these lenses are related to the 17th century while the frames are from the 19th century.
- Regarding the use of glasses there are many stories related to it. Many scholars thought that these glasses were brought by the Europeans, particularly by the Portuguese. Definitely Mughals absolutely loved gemstones, so they had to buy these precious stones
- In fact the raw materials used in Glasses were definitely brought from the Golconda mines (in India) and at the Mughal court by using these stones, they made glasses. Up to what extent technology used in these glasses are Indians or were learned about glasses from Portuguese

MUGHAL COSTUME

- During the Mughal Period male and female both used very luxurious and costly clothes to wear. The rich people, mainly the people from the royal family, wore luxurious clothes. Women wore beautiful and expensive clothes made from the finest materials and adorned themselves with jewellery from head to toe.
- The garments used during that time were the most demandable garments in Entire world. The material used in Garments were silk, velvet and brocade
- Muslims used various types of clothes like Ab-e-Rawan (running water), Baft Hawa (woven air) and Shabnam (evening dew). Muslins called Shabnam were brought from Dacca and were famous as Dhaka malmal.

FOLLOWING WERE THE NAMES OF THE DRESSES WORE AT THE TIME OF MUGHAL PERIOD

- Peshwaz Peshwaz Yalek Pai-Jama: Dhilja The Jama The Chogha:
- Mughal Men's Clothing:
- Dhoti
- Pajama
- Churidar
- Shalwar
- Garara
- Farshi

There are some head wears also. During the Mughal period male and female both wore on their head like various types of turbans decorated with various types of ornaments and these turbans were printed in various colours. Mughal royal people they used very precious stones in their turban also

Apart from this, people wore footwear of various designs and styles. Most of them are still popular in the entire world and some of them have lost their significance. They used leather as well as clothes in such footwear. They used diamonds and other costly stones on foot wear also. On the basis of the above analysis

we may conclude that during the Mughal period the concept of fashion was there and various types of dressing and ornaments were used by the public. On the bases of ornaments and the fashion we could predict the status of the society

DR ANSHUL BAJPAI

China's New Border Law GS- 2 India and its Neighbourhood Effect of Policies & Politics of Countries on India's Interests

CONTEXT

China's legislature has adopted a **new border law** that calls on the **state and military to safeguard territory and "combat any acts" that undermine China's territorial claims**. The new land border law was adopted amid the continued **standoff between Indian and Chinese militaries** in eastern Ladakh.

ABOUT THE LAW:

Sovereignty and Territorial Integrity: It stipulates that the sovereignty and territorial integrity of the People's Republic of China are sacred and inviolable. The state shall take measures to safeguard territorial integrity and land boundaries and guard against and combat any act that undermines territorial sovereignty and land boundaries.

Responsibilities: It designates the various responsibilities of the military, the State Council or Cabinet, and provincial governments in managing the security and economic issues in border areas. The **People's Liberation Army (PLA)** "shall carry out border duties" including **"organising drills" and "resolutely prevent, stop and combat invasion, encroachment, provocation and other acts"**.

The **state shall take measures to strengthen border defence, support economic and social development** as well as opening-up in border areas, improve public services and infrastructure in such areas, encourage and support people's life and work there. The state shall, following the principle of equality, mutual trust and friendly consultation, **handle land border-related affairs with neighbouring countries through negotiations** to properly resolve disputes and longstanding border issues.

CONCERNS:

It would **formalise some of China's recent actions in disputed territories** with both India and Bhutan. The passing of the law coincides with stepped up Chinese activity along the land borders, which have mirrored actions in **disputed waters in the East and South China Sea**. It includes the PLA's massing of troops in forward areas along the India border and multiple transgressions across the **Line of Actual Control (LAC)**.

China in recent years has been strengthening border infrastructure, including the establishment of air, rail and road networks. It also launched a **bullet train in Tibet** which extends **up to Nyingchi**, the border town **close to Arunachal Pradesh**. The construction of new **"frontier villages" along the border with Bhutan**.

CHINA'S MAJOR DISPUTES:

China has a 22,100-kilometer **land border with 14 countries** and it has disputes with almost every country including the ones which are maritime neighbours.

BHUTAN

The 2017 standoff between Indian and Chinese troops was because China intended to build a road in the Doklam Plateau, a Himalayan region controlled by India's close ally, Bhutan. India considers Doklam plateau as a buffer zone that is close to other disputed areas with China.

This year, China has laid claim to Bhutan's Sakteng Wildlife Sanctuary, a 650 sq km land located in the easternmost part of the Kingdom. This is the first public instance of China making border claims in eastern Bhutan. China claims that the Sakteng Wildlife Sanctuary is located in the China-Bhutan disputed areas. The basis for this recent claim is the historic precedent.

NEPAL

China territorial disputes with Nepal dates back to the Sino-Nepal War in 1788-1792, with Beijing claiming that they were part of Tibet, therefore part of China. Nepal has accused China of encroaching into its northern districts of Humla, Rasuwa, Sindhupalchowk and Sankhuwasabha.

Despite protests, Nepal's communist party did not escalate its border tensions with China. During this time, Beijing had increased its investments in Nepal and initiated an exercise to measure Mount Everest and install telecommunication equipment to provide 5G services to the country.

Early this year, China's state-run China Global Television Network, in a tweet, claimed Mount Everest as a part of China and not Nepal. This post was quickly taken down in response to massive outrage from Nepalis.

YELLOW SEA & EAST CHINA SEA

China has Exclusive Economic Zone (EEZ) disputes with North Korea and South Korea in the Yellow Sea. It also has an EEZ dispute with South Korea and Japan in the East China Sea. Furthermore, it lays claim over the Senkaku/Diaoyu Islands of Japan in the East China Sea.

SOUTH CHINA SEA

China is claiming almost the whole of the resource-rich South China Sea based on the "historic rights". It is currently taking efforts to militarise the region. The South China Sea is one of the busiest maritime trade routes that serve as a passage for annual trade worth \$3.5 trillion. China has island and maritime boundary disputes with Taiwan, Brunei, Indonesia, Malaysia, Singapore, Philippines and Vietnam in the South China Sea and its extension.

It also has disputes over Spratly Islands (with Vietnam, Philippines, Malaysia, Brunei and Taiwan), Paracel Islands (with Vietnam), Scarborough Shoal (Philippines) and Gulf of Tonkin (with Vietnam).

China aims to coerce these countries to abandon their claims and territorial rights under international law and impose the so-called nine-dash line, an unrecognised boundary it has drawn around 85% of the South China Sea, almost the entire international waters. In addition, it also claims the whole of Taiwan and its controlled islands as its own.

RUSSIA

Multiple agreements have failed to prevent China unilaterally claiming 160,000 sq km territory of Russia. China is currently encroaching sparsely populated Far East Russia, which is rich with natural resources.

Just recently, Russia faced a backlash from Chinese social media when Vladivostok, the main city in the Russian Far East, marked the 160th anniversary of its founding on July 2, 2020. It was claimed that the territory of Primorsky Krai of which Vladivostok is the administrative capital, historically belonged to China.

Primorsky Krai was a small Manchu settlement under the control of the Qing Dynasty before it became a part of Russian territory in 1860. Vladivostok was called Haishenwei or the Bay of Sea Slugs under the Qing Dynasty.

CONCLUSION

China has similar such disputes with countries in south east asia like Cambodia, Myanmar, Thailand etc. The following strategies can be used by India to tackle Chain

- Apart from being militarily prepared, India must create a coalition of democratic countries that are willing to counter Chinese aggression and subscribe to rules-based world order.
- The Quad or Quad Plus can be used by India while pursuing a leadership role in this arrangement.
- The post-COVID-19 world would witness a major shift of global supply chains as many countries like Australia, the US and others are preparing to delink their economies from China. India should make use of the situation.
- India should also address the issue of “Chinese proxies” like Pakistan and Nepal by keeping them out of the leadership positions in global organisations.
- India can increase the naval operations east of the Malacca Strait and follow up with rapid tri-service expeditionary capabilities in the Indian Ocean Region. This can be made into an expeditionary command.
- It can also enhance its defence relations with Southeast Asian countries to counter China’s presence in the region.

BY ANSHUM VERMA

FACULTY (POLITY, GEOGRAPHY AND ENVIRONMENT)

Understanding Cryptocurrency and its Surged Demand along with the challenges it poses to the Sovereign Governments (GS 3, Economics, The Hindu, Indian Express)



NEWS/CONTEXT:

Bitcoin, the most popular private cryptocurrency in the world, has been rallying this year, hitting an all-time high of over \$66,000 last week. Many investors have been piling into bitcoin and they expect the bull run to continue. According to some estimates, over 10 crore Indians own cryptocurrencies, making India the country with the largest number of bitcoin holders in the world. India has recently also witnessed a number of bitcoin brokerages opening their doors to serve customers.

What actually is Bitcoin or any other Cryptocurrency: To understand the concept of bitcoin we have to understand the concept of money first. Modern money is basically paper currency which is issued by the Central Bank of every country. Any paper currency will be there first with the central bank. After that it moves out and circulates. The circulation of money actually is its journey. In its journey it goes from one hand to another and in parallel with that the goods and services are created. For example if A gives some money to B, B would have done something for A, which means B would have created some goods or services for A against the payment she has received. So it is like one chain in the journey of money. Now the same money will go from the hand of B to anybody else and in parallel goods or services would be created. This is like another chain in the journey of the same money. This is what we need to understand that every money has a history of transaction. If you have one 500 rupees note, this 500 rupees note has a history of exchange. So can we say for a moment that the history if recorded is nothing but the money itself? Yes, in the case of cryptocurrency, actually all transactions which are taking place are recorded online and this online record itself is the currency. It is called Crypto because all exchanges which are recorded are encrypted/coded. Because of this coding nobody can come to know who has transferred the cryptocurrency to whom against what kind of goods and services. **Thus the cryptocurrency is nothing but an online record of all exchanges which is encrypted.** The online encrypted record of exchange in itself is money here. The technology behind the online record of transactions is **Blockchain Technology**.

Because of the fact that it is encrypted, the government or anyone else can never come to know who owns the cryptocurrency. Thus few people with the intention of tax evasion hide their income and wealth in cryptocurrency. It means they won't be keeping other assets like cash, bank deposits, real estate property or gold. This is one of the major reasons why demand of the cryptocurrency like Bitcoin has surged and its value has increased manifold in recent times. At the same time the cryptocurrencies are **challenging the fiat money** issued by the sovereign governments. Bitcoin, Ethereum, Ripple, Litecoin, Dogecoin are some examples of cryptocurrency.

WHY IS BITCOIN GAINING TRACTION IN INDIA?

Bitcoin and other cryptocurrencies have been growing rapidly in India despite the pessimism of the Centre and the Reserve Bank of India (RBI). In 2018, the RBI had banned banks and other regulated financial entities from dealing with clients who handled private cryptocurrencies such as bitcoin. However, the Supreme Court last year overturned the RBI's order. This has cleared some of the uncertainty around the legal status of cryptocurrencies and contributed to the rapid rise in their trading volumes. Notably, trading volumes in popular crypto exchange platforms such as WazirX grew multi-fold last year within weeks of the Supreme Court's decision.

CoinSwitch Kuber, CoinDCX, Zebpay and BuyUCoin are some of the other more popular platforms that have come up to facilitate retail trading in cryptocurrencies. CoinSwitch Kuber and CoinDCX have in fact managed to achieve unicorn status with their valuations crossing the \$1-billion milestone recently. These companies have bet on India despite looming regulatory uncertainties as they see huge potential for growth in a market with a predominantly young population. Blockchain, the technology that underlies many cryptocurrencies, has also found favour among celebrities such as Amitabh Bachchan and Salman Khan.

These stars plan to launch NFTs (non-fungible tokens) to sell memorabilia that will carry their exclusive digital signatures validated using blockchain technology.

WHAT LIES AHEAD FOR PRIVATE CRYPTOCURRENCIES?

The biggest threat to private cryptocurrencies going forward will come from governments. At the moment, governments possess an absolute monopoly over the issuance of money within their territories. This allows them to enjoy various special privileges that they would not otherwise. For instance, with the help of the central bank, they manage to fund their increasing budget deficits. Central banks also use their control over the nation's money supply to manage aggregate demand in the economy. All such privileges that governments currently enjoy along with their central banks, however, would cease to exist in a world where private currencies actively compete against fiat currencies issued by the state. In such a world, people can readily switch to other competing currencies if they believe that their wealth held in a certain currency issued by a central bank is losing value rapidly. As more people refuse to accept currencies issued by the central banks, this will limit the spending powers of governments and their central banks. So it is highly unlikely that governments will allow private cryptocurrencies to flourish as alternative money. While national currencies at the moment do compete against each other, such competition is limited to a great extent by geographical and other barriers.

It should be noted that the Supreme Court had overturned the 2018 RBI order saying that under existing laws the RBI does not have the powers required to restrict individuals dealing in cryptocurrencies. However, this does not put an end to the primary uncertainty over the legal status of private cryptocurrencies. The Centre may well pass a new law that either completely bans or heavily restricts private currencies. China has already deemed all private cryptocurrencies as illegal and banned them. It soon plans to issue a Central Bank Digital Currency that is based on the same blockchain technology on which private cryptocurrencies work. More governments may adopt the same approach in the coming years.

**Md Layeeque Azam,
Economics Faculty**

The carbon markets conundrum at COP26 (GS-3, environment and climate change)

Article 6 of the Paris Agreement would be the king to be checkmated and captured for concluding the Paris Agreement Work Programme (PAWP) at the 26th Conference of the Parties (COP26).

- **Article 6** of the Paris Agreement introduces provisions for using international carbon markets to facilitate fulfilment of Nationally Determined Contributions (NDCs) by countries.
- Developing countries, particularly India, China and Brazil, gained significantly from the carbon market under the Clean Development Mechanism (CDM) of the Kyoto Protocol.
 - ▶ India registered 1,703 projects under the CDM which is the second highest in the world.
- Certified Emission Reductions (CERs) issued for these projects are around 255 million.
- U.S.\$2.55 billion in the country.
- logically, India has a lot to gain from a thriving carbon market.
- Developing countries are faced with a dilemma of either selling their carbon credits in return for lucrative foreign investment flows or use these credits to achieve their own mitigation targets.

WHAT SHOULD BE DEBATED

- ▶ market mechanism
- ▶ it should help promote sustainable development and assist climate change adaptation in the developing countries. It should encourage private sector participation and attract foreign investments
- ▶ While over 50% of the countries have communicated their intention of using market mechanisms to achieve NDC
- ▶ It is the developed countries that would rely more on market mechanisms for achieving their climate targets
- ▶ The three critical issues that would be hotly debated in Article 6 negotiating rooms are CDM Transition, Accounting rules and Share of Proceeds to the Adaptation Fund.
- **CDM transition:**
 - ▶ transition of credits. If the decision regarding transition of CDM is not favourable, it could lead to a loss of billions of dollars worth of potential revenue to India alone
 - ▶ a new supervisory body to be formed under the Paris Agreement can re-examine the validity and rigour of such credits.
- **Accounting rules:**
 - ▶ mechanism is meant to incentivise the private sector and public entities to undertake mitigation activities for sustainable development.
 - ▶ emission reductions transferred from a host country be adjusted against its NDC targets. It must be appreciated that these reductions represent additional efforts of the private sector or public entities to mitigate greenhouse gas emissions, and in fact raise global climate ambition
- **The path ahead:-**
 - ▶ India does not need to undertake economy wide emission reduction targets at this stage of its development
 - ▶ It can significantly gain from the market mechanism
 - ▶ Robust accounting will ensure that there will be no double counting of emission
 - ▶ Share of Proceeds (SOP) to the Adaptation Fund:
 - ▶ For developing countries, adaptation is a necessity. However, it remains severely underfunded compared to financing for mitigation activities.
- carbon markets allow developed countries to keep emitting greenhouse gases while developing countries benefit from the revenue generated from the sale of their carbon credits
- climate justice demands that developing countries get access to their fair share of global carbon space.
- a facilitative carbon market mechanism that respects the principles enshrined in UNFCCC would greatly help accelerate their transition to low carbon.

Swarn Singh

CLIMATE VULNERABILITY INDEX

GS- 3 CONSERVATION, ENVIRONMENTAL POLLUTION AND DEGRADATION

CONTEXT

Recently, a report titled “**Mapping India’s Climate Vulnerability – A District-level Assessment**” has been released by the **Council on Energy, Environment and Water (CEEW)** (not-for-profit policy research institution). The report has also launched the first-of-its-kind **Climate Vulnerability Index**. The index has **analysed 640 districts** in India and found that **463 of these are vulnerable to extreme floods, droughts and cyclones**.

ABOUT INDEX

- **Affected States:** 27 Indian states and Union territories are vulnerable to extreme climate events which often disrupt the local economy and displace weaker communities. The states of Assam, Andhra Pradesh, Maharashtra, Karnataka and Bihar are the most vulnerable to extreme climate events such as floods, droughts and cyclones in India.
- **Magnitude of Impact of Climate Change:** More than 80% of Indians live in districts vulnerable to climate risks. 17 of 20 people in the country are vulnerable to climate risks, out of which every five Indians live in areas that are extremely vulnerable. More than 45% of these districts have undergone “unsustainable landscape and infrastructure changes”.
- **Low-level of Adaptability:** More than 60% of Indian districts have medium to low adaptive capacity in handling extreme weather events.
- **Role of Anthropogenic Activities:** The anthropogenic activity has already made vulnerable districts become even more vulnerable to impacts of natural disasters. Some of the activities have led to: Loss of wetlands and loss in mangroves which would act as a natural barrier, making it more vulnerable. Landscape disruptions such as the disappearance of forest cover, over-construction, have led to degradation of natural ecosystems.
- **Triggering Financial Crisis:** Combating the rising frequency and scale of extreme climate events is fiscally draining for developing countries such as India. Investments in infrastructure such as housing, transport, and industries will be threatened by these events, especially along the coasts, adding that mounting weather-related insurance losses could trigger the next financial crisis.

MITIGATION

- **Decentralized Planning:** Since most districts in India are highly vulnerable to extreme weather events, a district-wise climate action plan is required. The CEEW study also indicated that only 63% of Indian districts have a District Disaster Management Plan (DDMP). Policymakers, industry leaders and citizens must use the district-level analysis to make effective risk-informed decisions.
- **Mobilizing Green Finance:** With loss and damage rising exponentially due to the climate crisis, India must demand climate finance for adaptation-based climate actions at **COP-26** (Climate Conference). At COP-26, developed countries must regain trust by delivering the USD 100 billion promised since 2009 and commit to stepping up climate finance over the coming decade. Further, India must collaborate with other countries to create a **Global Resilience Reserve Fund**, which could act as insurance against climate shocks.

- **Climate Risk Identification:** Finally, developing a Climate Risk Atlas for India would help policymakers to better identify and assess risks arising from extreme climate events. Climate-proofing of physical and ecosystem infrastructures should also now become a national imperative.
- **Institutional Setup:** India must create a new **Climate Risk Commission** to coordinate the environmental de-risking mission. Enhanced climate finance can also support India-led global agencies like the **Coalition for Disaster Resilient Infrastructure (CDRI)** to further mainstream climate actions.

WAY FORWARD

India's climate change mitigation strategy should include post-Covid-19 recovery plans, according to the report. These include **reducing fossil fuel subsidies, phasing out coal, better coordination** between the central and state governments and raising self-sufficiency by domestic manufacturing in the **renewable sector**.

Anshum Verma

Bhupen Khakar : A renowned Artist of India (GS Paper I : History and culture)

CONTEXT:

A London Based multinational Art company Sotheby declared that A art work of the Indian Artist Bhupen Khakhar titled Krishna Hotel was auctioned for 12.7 crores . In fact the objective of this auction was to raise the funds for the Bangladeshi refugees who are residing in Ahmedabad .

AN INTRODUCTION ABOUT THE ARTWORK OF THE BHUPEN KHAKKAR :

- The art work entitled Krishna Hotel was auctioned in London by 26th Oct and it attracted thousands of art lovers of London.
- In this painting few people are chatting over tea and snacks at what appears to be a neighbourhood restaurant. This work of Bhupen was still unpublished in public. But by Monday (26th Oct 2021) when it was auctioned it was the third highest price for the artist and six times the pre-auction estimate.
- this particular painting has immense importance as it marks the beginning of Bhupen's "Tradesmen Series" of paintings,

WORKS/ PAINTINGS OF THE BHUPEN

- Salman rushdi also portrayed the image of Bhupen as as an accountant in his noble The Moor's Last Sigh (1995).
- Head; Couple (1983) , Birth of Water (1983), HANUMAN (1960) , Trees, Man with a Monkey (1995), The Red Colour & Grills Spilled over his Face (2000) , TWO PRINTS – THE UNFINISHED DREAM; RED RAIN (1981), IN THE COCONUT GROVES (1993), His Last Days of Aids – He Remembered his friend (1998), TWO ARMCHAIRS, TIGER AND STAG (1970) and PREPARATORY STUDY FOR THE CELEBRATION OF GURU JAYANTI (1980) are one of the few and best art work

ABOUT BHUPEN KHAKAR

- Bhupen Khakar was well known Indian painter whose paintings are attracting the attention of the art

lovers in these days in london

- Bhupen was born in Mumbai, Maharashtra in 1934.
 - He was not only expert in making painting only on the paper and cloths but also he painted our glasses, ceramics also
 - By profession he was a chartered accountant . painting was his hobby but he became famous internationally because of his artwork
 - He was influenced by the great artist Ghulam Mohammad Sekh , a renowned painter, poet and critic of Gujrat.
 - He worked as the faculty in the department of fine art in Vadodara university
 - Gradually Khakkar became the core figure in the Baroda School
 - Khakar invented his own technique and style of the painting and he used vibrant oil, gouache or watercolour and containing imaginative and deeply personal references.
 - Khakhar has often been linked to the Pop Art movement and parallels have been drawn with the work of David Hockney
 - In the Khakhar painting we see the features of Indian miniatures and Henry Rousseau
 - He was graduated from the university of Bombay where he did his graduation in Economic therefore he worked as accountant also
 - The artist's homosexuality was prominent feature in much of his work, and was often tinged with the melancholy of living in a country in which that lifestyle was condemned.
 - Today, his works are held in the collections of the Victoria and Albert Museum in London, The Museum of Modern Art in New York, and the National Gallery of Modern Art in New Delhi, among others
- Nowadays Khakhar is one of the most popular Indian artist / painters whose paintings are being sold in crores of rupees. Definitely his artworks should also be appreciated in India also

Dr. Anshul Bajpai

NEED TO ACCELERATE CURRENT INDO-RUSSIA BILATERAL EXCHANGE [GS II, International Relations]



CONTEXT :

- India and Russia discussed about the expansion in cooperation of energy sector as New Delhi looks at newer sources of oil and natural gas to diversify its import basket.
- In September, at the 6th Eastern Economic Forum (EEF) in Vladivostok [Russia], Indian PM Narendra Modi in a virtual address said, “India-Russia energy partnership can help bring stability to the global energy market.”
- Oil Minister Hardeep Singh Puri held a video interaction with Russian Energy Minister Nikolay Shulginov on forwarding the energy cooperation between the two nations, as tweeted by the minister.

INFORMATION:-

- India has been at the forefront of the global energy transformation and aiming to diversify its trade relations.
- India has plethora of energy sources and aspirations to diversify the trade. Russia fits in India’s such ambitions well.
- To strengthen the bilateral ties, an attempt from both government and corporate leaders is needed.
- Indian and Russian Energy Ministers announced that the companies of both the countries are pushing for greater cooperation in the oil and gas sector.

POST CORONA RECOVERY- INDIA

- In the economic recovery post corona, India (Asia’s third-largest economy) has expanded by more than 20% in the June quarter and is expected to grow by around 9% by the end of 2021. (Higher than China’s 8.5%)
- Since the recovery started, India has a bend toward green transition.
- The examples of cooperation between the two countries are:-

FOR EXAMPLE-

1. Russia’s Gazprom and India’s ONGC Videsh Ltd. and the Indian Oil Corporation have signed separate MOUs at Vladivostok.
2. A few years ago, Rosneft invested approx U.S.\$12.9 billion in India’s second-largest private oil refiner, Essar Oil, renamed Nayara Energy, marking it one of the most significant foreign investments in many years.
3. In Energy transformation, there is a joint venture between India’s Reliance Industries Ltd. and Russia’s Sibur.

This joint venture (set up in Jamnagar, Gujarat), is leading as the first butyl and halogenated butyl rubber production facility in South Asia.

- This facility (operational in 2019), will meet the growing demand from domestic tyre manufacturers.
- Sibur has come up with unique technology to India, which is not commercially available in the market and is the most advanced in terms of ecological footprint.
- The project will support the growth of India’s auto industry by making the critical raw material supply available.
- The venture is also promoting halogenated butyl rubber. The project is a clear example of the “Make in India” and “Atma-Nirbhar Bharat” initiatives, representing a practical example of technology transfer from Russia to India.

SOME IMPORTANT FACTORS-

- India is currently one of the fastest-growing **butyl rubber** and **halogenated butyl rubber** markets due to its rapidly expanding car manufacturing industry pushing for electric vehicles.
- Additionally, **India** is emerging as a **critical refining hub** in Asia to boost its petrochemical capacity.
- The International Energy Agency wrote in the **India Energy Outlook 2021** report in February that over the past years, India's refineries have been expanding towards petrochemicals to capture additional value.
- The agency evaluates the country's **ethylene production** to grow by 2/3 rd over the period to 2030.

TOWARDS RENEWABLE AND NUCLEAR ENERGY-

- In efforts to transition to green energy, India has achieved the countrywide installation of 100 gigawatts of total installed renewable energy capacity.
- India's next target → to hit 175 GW of renewable energy target by December 2022.
- Furthermore, A/c the government survey, additional investments in renewables up to the year 2022 would be about \$80 billion.

Russian companies have been involved in the construction of six nuclear reactors in the Kudankulam nuclear power project at Tamil Nadu.

Russian President Vladimir Putin had showed Russia's willingness to build a dozen reactors in India over the next 20 years.

By 2031 → India's nuclear power generation capacity of 6,780 MW may increase to 22,480 MW.

In September, almost all of Russia's major energy companies were interested in projects in India.

However, the current bilateral exchange rate needs to be accelerated for India to grasp its potential from energy transformation.

COAL DEPENDENCY TO BE REDUCED AND INVESTMENTS IN RENEWABLE ENERGY TO BE ENHANCED :-

- coal remains India's most important source of electricity production, and it's not a good news for the environment.
- To meet its growing energy demand and succeed in green transformation, India needs approximately U.S.\$500 billion of investments in wind and solar infrastructure, grid expansion, and storage to reach the 450 GW capacity target by 2030.

Rajeev Yadav

Strong Recovery can boost the Tax Revenue (GS 3, Economics, The Hindu, Indian Express)

NEWS/CONTEXT:

Indian government is expecting the tax revenue for current financial year 2020-21 to be 10% above the budget, Beating forecast for the first time in 4 years as the economic powers back towards free pandemic labels.



The 2021-22 Budget (presented On 1st February 2021) estimated that for the financial year 2021-22 (starting from 1st April 2021 to 31st march 2022) the tax revenue collection will be 15.45 lakh crore. It is going to be 10% more than what was estimated as per tax officials.

Tax revenues have been below projections ever since 2017-18 as the economy lost momentum even before COVID-19 and then slipped into a deep recession.

But now retail sales have picked up and exports are surging at a record rate, suggesting it is rebounding faster than anticipated after a devastating second wave.

India's economy grew 20.1% between April and June, versus a 24.4% contraction during the same period last year. Activity levels have improved a lot. All indicators are showing a faster-than-anticipated recovery.

Explained the percentage game: Here one thing to understand is that when we say the GDP for a quarter has increased to 20% which is like record growth, is true in terms of percentage but that the absolute value of production is still the same as it was earlier before covid. We can take an example to understand this. Supposedly the GDP in the first Quarter (April,May, June of 2019) of the financial year 2019-20 is 100. This GDP went down say to the level of 80 in the first quarter (April,May,June of 2020) of the financial year 2020-21, because of Covid. Then it will be said that GDP for the first quarter of 2020-2021 is reduced to 20%, or we got a negative GDP growth of 20% in the first quarter of 2020-21. And now obviously things would be coming better with the ease in restriction/lockdown and our economy will be proceeding towards normal. Say now that the GDP in the first quarter of 2021-2022 ((April,May,June of 2021) is 100 again as it was earlier in in the first Quarter of 2019-2020. This time it will be said as we have achieved 25% growth in the first quarter of 2021-2022, but see the level of GDP in the absolute value terms is still 100 as it was earlier. This 25% growth has come because of a low base. It is called base effect. So the whole story can be summarised in two lines as GDP moved from 100 to 80, showing 20% negative growth and then again moved from 80 to 100, showing positive growth of 25%. Absolute value is still 100 as it was earlier.

You can understand this when Ministry of statistics and programme implementation (MosPI) data shows "GDP at Constant (2011-12) Prices in Q1 of 2021-22 is estimated at ₹32.38 lakh crore, as against ₹26.95 lakh crore in Q1 of 2020-21, showing a growth of 20.1 percent as compared to a contraction of 24.4 percent in Q1 2020-21.

Government to get a good total from sale of Air India, other disinvestment and through the listing of LIC: India aims to raise ₹1.75 lakh crore in the current fiscal year through sales of stakes in state-run companies

and is hoping the sale of Air India to the Tata Group will provide an impetus. The listing of state-owned Life Insurance Corp. could fetch up to a further ₹1 lakh crore, according to another official. “We are working very hard to complete the listing of LIC and we should be able to do it by March,” the third official said.

Rating agency Moody’s Investors Service this month upgraded its outlook on India to stable from negative, saying downside risks in the country and its financial institutions had eased.

