

IMPORTANT CURRENT AFFAIRS FOR PRELIMS VOL 38

- SACHIN SANYAL
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- KEN BETWA LINK PROJECT
- NATIONAL WATER DEVELOPMENT AGENCY (NWDA)



SCAN TO EXPLORE





IMPORTANT CURRENT AFFAIRS

FOR PRELIMS VOL - 38

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ART AND CULTURE**1) SACHIN SANYAL**

IN NEWS: - The 80th death anniversary of Sachin Sanyal was observed on 7th February. He was born in 1893.

ABOUT SACHIN SANYAL

- He was the founder of the Hindustan Republican Association. HRA was created to carry out armed resistance against the British Empire in India.
- Sanyal founded a branch of the Anushilan Samiti in Patna in 1913.
- In 1912 Delhi Conspiracy Trial, Sanyal with Rashbehari Bose attacked the then Viceroy Hardinge.
- He was extensively involved in the plans for the Ghadar conspiracy, and went underground after it was exposed in February 1915. He was a close associate of Rash Behari Bose.
- After Bose escaped to Japan, Sanyal was considered the most senior leader of India's revolutionary movement.
- He was a mentor for revolutionaries like Chandrashekhar Azad and Bhagat Singh.
- Sanyal and Mahatma Gandhi engaged in a famous debate published in Young India between 1920 and 1924. Sanyal argued against Gandhi's gradualist approach.
- Sanyal was sentenced to life for his involvement in the Kakori Train Action and was imprisoned at Cellular Jail in the Andaman and Nicobar Islands, where he wrote his book titled Bandi Jeevan (A Life of Captivity, 1922).

PRACTICE QUESTION

Consider the following statements

1. Bhagat Singh was the founder of Hindustan Republican Association
2. Sachin Sanyal founded a branch of the Anushilan Samiti in Patna in 1913.

Which among the above statements are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 or 2

Answer: - b

2) PANRUTI CASHEWS

IN NEWS: - The Tamil Nadu Cashew Processors and Exporters Association (TNCPEA) has applied for a Geographical Indication (GI) tag for Panruti cashews.

ABOUT PANRUTI CASHEWS

- Panruti cashew is mainly found in Tamil Nadu. This is unique because of its taste and quality. Although these cashew nuts are slightly smaller in size, they have a distinct market value.
- It is commonly cultivated in laterite & red soils as well as coastal sands. It is worth noting that along with Panruti Cashew, 'Panruti Jackfruit' and 'Panruti Cashew Apple' are also very special.
- Tamil Nadu Cashew Processors and Exporters Association (TNCPEA) has applied for Geographical Indication (GI) tag for 'Panruti Cashew'.
- Its GI (GI) tagging will encourage trade and industry as well as secondary economic activities, which will benefit farmers and cashew exporters.
- They are known as the 'goldmine' of Cuddalore, it has a huge demand across India and the world.

ABOUT GI TAG

- A geographical indication or GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- Geographical Indications are part of the intellectual property rights that comes under the Paris Convention for the Protection of Industrial Property.

- In India, Geographical Indications registration is administered by the Geographical Indications of Goods (Registration and Protection) Act of 1999.
- This tag is valid for a period of 10 years following which it can be renewed.
- GI tags are covered under World Trade Organization.
- Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products.
- It is basically an assurance that the product is coming from that specific area. It's kind of trademark in the international market.
- Karnataka has the highest number of GI tags i.e. 47 products followed by Tamil Nadu (39).

PRACTICE QUESTION

Consider the following statements

1. Panruthi Cashews are known as the 'goldmine' of Cuddalore
2. Tamil Nadu Cashew Processors and Exporters Association (TNCPEA) has applied for Geographical Indication (GI) tag for 'Panruti Cashew'.

Which among the above statements are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 or 2

Answer: - c

3) HOYSALA ARCHITECTURE

IN NEWS: - India has finalised the Hoysala Temples in Karnataka as its nominations for consideration in the World Heritage Sites List for 2022-23. The Hoysala temples in Belur and Halebeedu in Hassan district and Somanathapura in Mysuru district have been nominated. They were finalised by the Union Ministry of Culture and Archaeological Survey of India (ASI).

ABOUT HOYSALA ARCHITECTURE

- The Hoysalas temples of Belur, Halebid and Somnathapur were reportedly built in the 12th-13th centuries.
- The masterpieces represent and attest to the creativity and skill of the Hoysala artists and architects. Hoysala architecture is the building style that was developed by architects under the rule of the Hoysala Empire between the 11th and 14th centuries.
- The Hoysala influence was at its peak in the 13th century and several large and small temples built during the era remain today as examples of the Hoysala architectural style.
- The Hoysala temples include Chennakesava Temple at Belur, the Hoysaleswara Temple at Halebidu and the Kesava Temple at Somanathapura.
- There are several other examples of Hoysala craftsmanship such as the temples at Hosaholalu, Belavadi, Amruthapura, Basaralu, Mosale, Arasikere, Nuggehalli and Kikkeri.
- The Hoysala architectural style reveals a negligible Indo-Aryan influence and a more distinct impact of Southern Indian style.
- The Hoysala temples are protected monuments under the Archaeological Survey of India (ASI). Their conservation and maintenance is done by ASI but the Karnataka state government will ensure the conservation of state-protected monuments around these three monuments.

ABOUT ARCHITECTURAL SURVEY OF INDIA

- The ASI is the premier organisation for the archaeological research and protection of the cultural heritage of the country.
- The prime objection of ASI is to maintain the archaeological sites, ancient monuments and remains of national importance.
- The ASI Headquarters is in New Delhi.

- It was established in 1861 by Alexander Cunningham.
- It regulates all archaeological activities as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958.
- It functions under the aegis of the Union Ministry of Culture.
- It also regulates the Antiquities and Art Treasure Act, 1972.

SCIENCE AND TECHNOLOGY

4) NATIONAL SUPERCOMPUTING MISSION

IN NEWS: - The Indian Institute of Science (IISc) Bengaluru installed the supercomputer 'Param Pravega'. It has a supercomputing capacity of 3.3 petaflops. It has been installed under the government's National Supercomputing Mission. The National Supercomputing Mission is intended to indigenise the development and manufacturing of powerful computers.

ABOUT NATIONAL SUPERCOMPUTING MISSION

- In 2015, the National Supercomputing Mission was launched to enhance the research capacities and capabilities in the country by connecting them to form a Supercomputing grid, with National Knowledge Network (NKN) as the backbone.
- The NKN project is aimed at establishing a strong and robust Indian network which will be capable of providing secure and reliable connectivity.
- It supports the government's vision of 'Digital India' and 'Make in India' initiatives.
- The Mission is being jointly steered by the Department of Science and Technology (DST) and the Ministry of Electronics and Information Technology (MeitY).
- It is implemented by the Centre for Development of Advanced Computing (C-DAC), Pune, and the IISc, Bengaluru.
- The mission was planned in three phases:

- Phase I looking at assembling supercomputers,
- Phase II looking at manufacturing certain components within the country.
- Phase III where a supercomputer is designed by India.
- An indigenously developed server platform called 'Rudra' is being tried out in a pilot system, with an interconnect for inter node communication called Trinetra also having been developed.

5) COAL GASIFICATION

IN NEWS:- The Delhi-based non-profit, Centre for Science and Environment (CSE), has raised concerns about the Union Government's announcement on coal gasification projects in the Budget 2022-23.

ABOUT COAL GASIFICATION

- Coal gasification is a process in which coal is partially oxidised with air, oxygen, steam or carbon dioxide to form a fuel gas.
- This gas is then used instead of piped natural gas, methane and others for deriving energy.
- In-situ gasification of coal – or Underground Coal Gasification (UCG) – is the technique of converting coal into gas while it is still in the seam and then extracting it through wells.
- **Production of Syngas:** It produces Syngas which is a mixture consisting primarily of methane (CH₄), carbon monoxide (CO), hydrogen (H₂), carbon dioxide (CO₂) and water vapour (H₂O).
- Syngas can be used to produce a wide range of fertilizers, fuels, solvent and synthetic materials.
- **Significance:** Steel companies typically use coking coal in their manufacturing process. Most of the coking coal is imported and is expensive.

- To cut costs, plants can use syngas, which comes from coal gasification plants in the place of coking coal.
- It is primarily used for electricity generation, for the production of chemical feedstocks.
- The hydrogen obtained from coal gasification can be used for various purposes such as making ammonia, powering a hydrogen economy.

6) NUCLEAR FUSION

IN NEWS: - The Scientists in the United Kingdom said they have achieved a new milestone in producing nuclear fusion energy, or imitating the way energy is produced in the Sun. A team at the Joint European Torus (JET) facility near Oxford in central England generated 59 megajoules of sustained energy during an experiment in December, more than doubling a 1997 record. A kg of fusion fuel contains about 10 million times as much energy as a kg of coal, oil or gas.

THE EXPERIMENT

- The energy was produced in a machine called a tokamak, a doughnut-shaped apparatus, and the JET site is the largest operational one of its kind in the world.
- Deuterium and tritium, which are isotopes of hydrogen, are heated to temperatures 10 times hotter than the centre of the sun to create plasma.
- This is held in place using superconductor electromagnets as it spins around, fuses and releases tremendous energy as heat.

ABOUT NUCLEAR FUSION

- Nuclear fusion is defined as the combining of several small nuclei into one large nucleus with the subsequent release of huge amounts of energy.
- It is the opposite reaction of fission, where heavy isotopes are split apart.
- Harnessing fusion, the process that powers the Sun, could provide a limitless, clean energy source.

- In the sun, the extreme pressure produced by its immense gravity creates the conditions for fusion to happen.
- Fusion reactions take place in a state of matter called plasma. Plasma is a hot, charged gas made of positive ions and free-moving electrons that has unique properties distinct from solids, liquids and gases.
- At high temperatures, electrons are ripped from atom's nuclei and become a plasma or an ionised state of matter. Plasma is also known as the fourth state of matter.

INTERNATIONAL THERMONUCLEAR EXPERIMENTAL REACTOR (ITER)

ITER is a fusion research mega-project supported by seven members – China, the European Union, India, Japan, South Korea, Russia and the USA – based in the south of France, to further demonstrate the scientific and technological feasibility of fusion energy.

SCHEMES

7) PRADHAN MANTRI FASAL BIMA YOJANA

IN NEWS: - The Pradhan Mantri Fasal Bima Yojana (PMFBY) has successfully entered its seventh year of implementation with the upcoming Kharif 2022 season, completing six years of its implementation since its announcement on 18 February 2016. As part of the celebrations, the Govt. has launched a doorstep distribution drive to deliver crop insurance policies to the farmers 'Meri Policy Mere Hath' in all implementing States. The campaign aims to ensure all farmers are well aware and equipped with all information on their policies, land records, the process of claim and grievance redressal under PMFBY.

ABOUT PRADHAN MANTRI FASAL BIMA YOJANA

- It is in line with the One Nation – One Scheme theme- It replaced National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS).

- Launched in 2016.
- **Coverage:** All food & oilseed crops and annual commercial/horticultural crops for which past yield data is available.
- **Premium:** The prescribed premium is 2% to be paid by farmers for all Kharif crops and 1.5% for all rabi crops. In the case of annual commercial and horticultural crops, the premium is 5%.
- **Objectives:**
 - To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crops as a result of natural calamities, pests & diseases.
 - To stabilise the income of farmers to ensure their continuance in farming.
 - To encourage farmers to adopt innovative and modern agricultural practices.
 - To ensure flow of credit to the agriculture sector.
- **Coverage:**
 - The Scheme covers all Food & Oilseeds crops and Annual Commercial/Horticultural Crops for which past yield data is available and for which requisite number of Crop Cutting Experiments (CCEs) are being conducted under General Crop Estimation Survey (GCES).

PMFBY 2.0

- **Completely Voluntary:** It has been decided to make enrolment 100% voluntary for all farmers from 2020 Kharif.
- **Limit to Central Subsidy:** The Cabinet has decided to cap the Centre's premium subsidy under these schemes for premium rates up to 30% for unirrigated areas/crops and 25% for irrigated areas/crops.
- **More Flexibility to States:** The government has given the flexibility to states/UTs to implement PMFBY and given them the option to select any

number of additional risk covers/features like prevented sowing, localised calamity, mid-season adversity, and post-harvest losses.

- **Penalising the Pendency:** In the revamped PMFBY, a provision has been incorporated wherein if states don't release their share before March 31 for the Kharif season and September 30 for rabi, they would not be allowed to participate in the scheme in subsequent seasons.
- **Investing in ICE Activities:** Insurance companies have to now spend 0.5% of the total premium collected on information, education and communication (IEC) activities.

8) SUSTAINABLE CITIES INDIA PROGRAMME

IN NEWS: - The World Economic Forum and the National Institute of Urban Affairs (NIUA) signed a MoU to collaborate on a jointly designed 'Sustainable Cities India program'.

ABOUT SUSTAINABLE CITIES INDIA PROGRAMME

- The 'Sustainable Cities India' intends to enable cities to decarbonise in a systematic and sustainable way that will reduce emissions and deliver resilient and equitable urban ecosystems.
- This initiative is in synergy with India's commitment to turn net zero by 2070 as a climate mitigation response at COP26.
- The program aims to create an enabling environment for cities to generate decarbonization solutions across the energy, transport, and the built environment sectors.
- The Forum and NIUA will adapt the Forum's City Sprint process and Toolbox of Solutions for decarbonization in the context of five to seven Indian cities across two years.
 - City Sprint Process: The City Sprint process is a series of multi-sectoral, multi-stakeholder workshops involving business,

government, and civil society leaders to enable decarbonization, especially through clean electrification and circularity.

- Toolbox of Solutions: It provides a digital platform containing over 200 examples of clean electrification, efficiency and smart infrastructure best practices and case studies across buildings, energy systems and mobility from over 110 cities around the world.
- As per the World Economic Forum's Global Risks Report 2022, densely populated countries that are highly dependent on agriculture, such as India, are especially vulnerable to climate insecurity. Decarbonization in cities is a real opportunity to keep global warming well below 2°C and cities in India can make an enormous contribution in reaching this goal.
- The World Economic Forum's Net Zero Carbon Cities' mission is to create an enabling environment for clean electrification and circularity, resulting in urban decarbonization and resilience.
- The program aims to do this by fostering public-private collaboration to bridge the gap across the energy, built environment and transport sectors.

ENVIRONMENT AND ECOLOGY

9) KEN BETWA LINK PROJECT

IN NEWS:- Chief Ministers of Madhya Pradesh and Uttar Pradesh signed a memorandum of agreement to implement the Ken Betwa Link Project (KBLP), the first project of the National Perspective Plan for interlinking of rivers.

ABOUT KEN BETWA LINK PROJECT

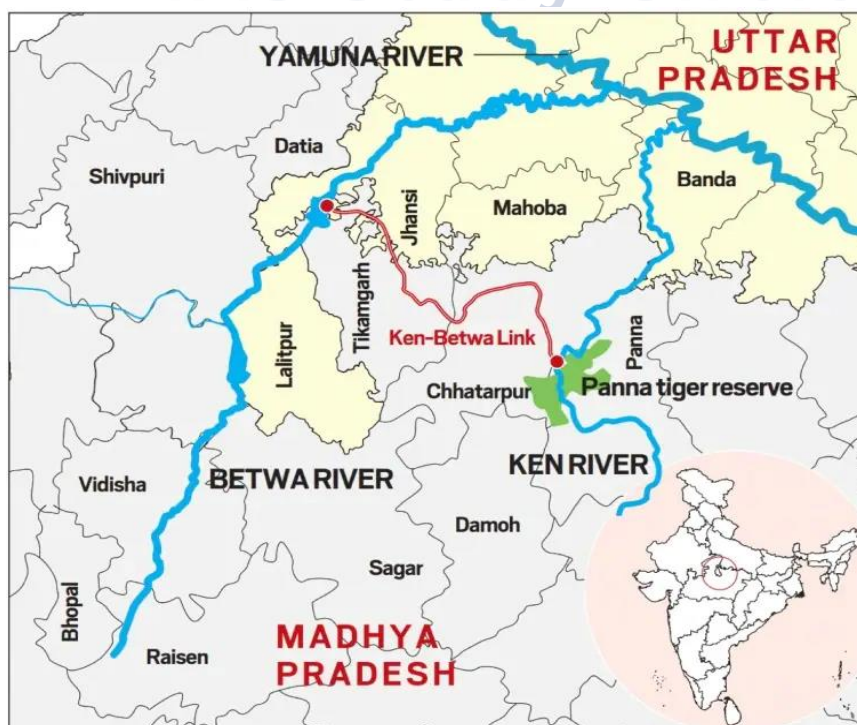
- The Ken-Betwa Link Project (KBLP) is the River interlinking project that aims to transfer surplus water from the Ken river in MP to Betwa in UP to irrigate the drought-prone Bundelkhand region.

- The region spread across the districts of two states mainly Jhansi, Banda, Lalitpur and Mahoba districts of UP and Tikamgarh, Panna and Chhatarpur districts of MP.
- The project involves building a 77-metre tall and a 2-km wide Dhaudhan dam and a 230-km canal.
- Ken-Betwa is one of the 30 river interlinking projects conceived across the country.
- The project has been delayed due to political and environmental issues.

Ken and Betwa Rivers

Ken and Betwa rivers originate in MP and are the tributaries of Yamuna.

- Ken meets with Yamuna in Banda district of UP and with Betwa in Hamirpur district of UP.
- Rajghat, Paricha and Matatila dams are over Betwa river.
- Ken River passes through Panna tiger reserve.



NATIONAL PERSPECTIVE PLAN FOR INTERLINKING RIVERS

- The National River Linking Project (NRLP) formally known as the National Perspective Plan, envisages the transfer of water from water 'surplus' basins where there is flooding, to water 'deficit' basins where there is drought/scarcity, through inter-basin water transfer projects.
- Under the National Perspective Plan (NPP), the National Water Development Agency (NWDA), has identified 30 links (16 under the Peninsular Component and 14 under the Himalayan Component) for the preparation of feasibility reports (FRs).
- The NPP for transferring water from water-surplus basins to water-deficit basins was prepared in August 1980.

10) NATIONAL WATER DEVELOPMENT AGENCY (NWDA)

IN NEWS: - The Centre has set in motion the process of creating the National Interlinking of Rivers Authority (NIRA), an independent autonomous body for planning, investigation, financing and the implementation of the river interlinking projects in the country. NIRA, to be headed by a Government of India Secretary-rank officer, will replace the existing National Water Development Agency (NWDA) and will function as an umbrella body for all river linking projects.

ABOUT NATIONAL WATER DEVELOPMENT AGENCY (NWDA)

- NWDA is the agency of the Union Ministry of Water Resources.
- It was set up in July, 1982 as autonomous society under the Societies Registration Act, 1860.
- It was established to carry out the water balance and other studies on a scientific and realistic basis for optimum utilisation of Water Resources of the Peninsular rivers system.
- Besides it was tasked to prepare feasibility reports and give concrete shape to Peninsular Rivers Development Component of National Perspective.

- In 1990, it was also entrusted with the task of Himalayan Rivers Development Component of National Perspectives.
- Recently, the functions of NWDA have been further modified and the work of preparation of detailed Project Reports (DPR) of various link proposals and Pre-feasibility Reports.
- It has been also entrusted to prepare feasibility reports of intra-State links as proposed by the States.



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