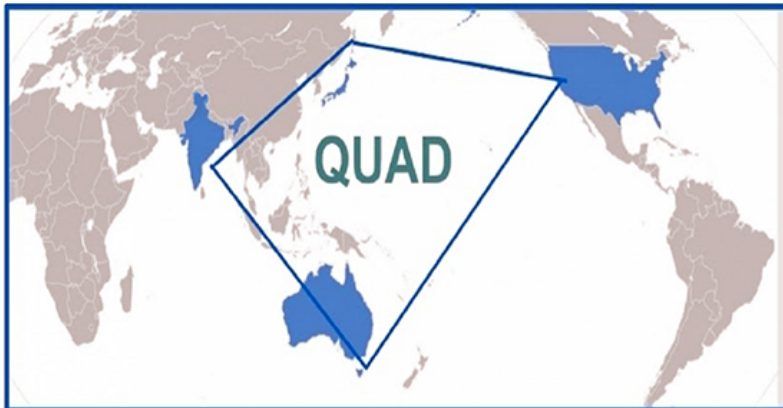# drishti

News Analysis (27 Sep, 2021)

drishtiias.com/current-affairs-news-analysis-editorials/news-analysis/27-09-2021/print

First in-Person Meeting of Quad Countries

Why in News

Recently, the first in-person meeting of **Quad** leaders was hosted by the US. Issues like climate change, Covid-19 pandemic and challenges in the Indo Pacific, amidst China's growing military presence in the strategic region, were discussed in the meeting.

Key Points

- **Background:**
    - In **November 2017, India, Japan, the US and Australia gave shape to the long-pending proposal of setting up the Quad** to develop a new strategy to keep the critical sea routes in the Indo-Pacific free of any influence.
        - **China claims nearly all of the disputed <u>South China Sea</u>**, though Taiwan, the Philippines, Brunei, Malaysia and Vietnam all claim parts of it.
        - The South China Sea is an arm of the Western Pacific Ocean.
    - In **2020**, the trilateral **India-US-Japan <u>Malabar naval exercises</u> expanded to include Australia**, marking the first official grouping of the Quad since its resurgence in 2017.
        - Further, it is the first joint military exercises among the four countries in over a decade.
    - In **March 2021**, the **<u>Quad leaders met virtually</u>** and later released a joint statement titled **'The Spirit of the Quad,'** which outlined the group's approach and objectives.
    - Further, just before this meeting, the US has announced a new trilateral security partnership for the Indo-Pacific, between **Australia, the UK and the US (<u>AUKUS</u>).**

- **Major Highlights of the Quad Summit:**
  - Discussed **Afghanistan** and agreed to deepen their cooperation in South Asia.
  - **Quad Vaccine Initiative**: Under this, the Quad countries have pledged to donate more than 1.2 billion Coid-19 vaccine doses globally, in addition to the doses financed through **Covax**.
  - **Building Back Better Health Security**: Supported the call for a "global pandemic radar" to improve viral genomic surveillance and expand the **WHO Global Influenza Surveillance and Response System (GISRS)**.
  - **Quad Infrastructure Coordination Group:** The **G7 grouping** has recently announced the **Build Back Better World (B3W) initiative.**
    - Based on similar lines, the Quad will establish high-quality infrastructure and will share expertise, capacity, and influence in the region and identify new opportunities to meet the needs there.
  - **Tackling Climate Change:** In this context, Quad countries has envisaged to establish:
    - **Green-Shipping Network** for deployment of green-port infrastructure.
    - **Clean-Hydrogen Partnership** to strengthen and reduce costs across all elements of the clean-hydrogen technology, leveraging existing bilateral and multilateral hydrogen initiatives in other fora.
    - **Climate Adaptation, Resilience, and Preparedness** for increasing the Indo-Pacific region's resilience to climate change by improving critical climate information-sharing and disaster-resilient infrastructure.
    - Apart from this, Quad countries intend to update or communicate ambitious **NDCs** (Nationally Determined Contributions) **by COP26**.
  - **The Quad Fellowship:** The Fellowship will sponsor 100 students per year - 25 from each Quad country - to pursue masters and doctoral degrees at leading STEM (Science, Technology Engineering, and Mathematics (STEM) programmes) graduate universities in the United States.
  - **Semiconductor Supply Chain Initiative:** It will be a joint initiative to map capacity, identify vulnerabilities, and bolster supply-chain security for semiconductors and their vital components.
    - This initiative will help ensure Quad partners support a diverse and competitive market that produces the secure critical technologies essential for digital economies globally.
  - **Critical and Emerging Technologies**: The announcement of launch of a **5G** deployment and calls for monitoring trends in advanced biotechnologies, including synthetic biology, genome sequencing, and biomanufacturing.
  - **Quad Senior Cyber Group**: This group will make shared cyber standards; development of secure software; building workforce and talent; and promoting the scalability and cybersecurity of secure and trustworthy digital infrastructure.

- **Satellite Data Sharing**: The Quad will begin space cooperation for the first time with a new working group.
  - In pursuance of this, Quad countries will start discussions to exchange Earth observation satellite data and analysis on climate-change risks and the sustainable use of oceans and marine resources.

Way Forward

- **Need For Clear Vision**: The Quad nations need to better explain the Indo-Pacific Vision in an overarching framework with the objective of advancing everyone's economic and security interests.
  - This will reassure the littoral States that the Quad will be a factor for regional benefit, and a far cry from Chinese allegations that it is some sort of a military alliance.
- **Expanding Quad**: India has many other partners in the Indo-Pacific, therefore India should pitch for countries like Indonesia, Singapore to be invited to join in the future.

Source: IE

India-US Bilateral Meet

Why in News

Recently, the Indian Prime Minister met the **newly elected US President** for their **first bilateral meeting in the US.**

- Both leaders **discussed a wide range of priority issues,** including combating **Covid-19**, **climate change**, and economic cooperation.
- Earlier, **the US Secretary of State**, in his visit to India, mentioned that actions by **India and the US will shape the 21st century.**

Key Points

- **Highlights of the Meet:**
  - Discussions to **further cement the <u>Indo-US strategic partnership</u>** and discussed global issues of common interest, including threats to democracy, **<u>Afghanistan</u>** and the **<u>Indo-Pacific.</u>**
    - Discussed **Pakistan's role in Afghanistan** as one of the key challenges, and there was a sense that it needs more "careful monitoring".
  - Both sides **denounced any use of terrorist proxies** and emphasised the importance of denying the logistical, financial or military support to terrorist groups, which could be used to plan, or launch terror attacks.
    - They **called on the Taliban to adhere** to these and all of its commitments under **<u>Resolution 2593.</u>**
  - The US Government, companies based in the USA and the Indian diaspora were very **helpful when India was fighting a <u>tough wave of Covid-19 infections.</u>**
    - India will **resume** export of surplus Covid-19 vaccines in the fourth quarter of 2021 under the **<u>Vaccine Maitri programme</u>** and to meet its commitment to the **<u>COVAX</u>** global pool.
  - India raised several **issues involving the Indian community in the US,** including access for Indian professionals there and **<u>H-1B visas.</u>**

- **India-US Relations:**
  - **About:**
    - India-US bilateral relations have developed into a **"global strategic partnership",** based on shared democratic values and increasing convergence of interests on bilateral, regional and global issues.
    - In 2015, both the countries issued a **Delhi Declaration of Friendship** and adopted a **Joint Strategic Vision for Asia-Pacific and the Indian Ocean Region.**
  - **Civil-Nuclear Deal:**
    - The **bilateral civil nuclear cooperation** agreement was signed in October 2008.
  - **Energy and Climate Change:**
    - As a priority initiative under the **PACE (Partnership to Advance Clean Energy),** the US Department of Energy (DOE) and the Government of India have established the **Joint Clean Energy Research and Development Center** (JCERDC) designed to promote clean energy innovations by teams of scientists from India and the United States.
    - **India-US Clean Energy Agenda 2030 Partnership** was launched at the Leaders climate summit 2021.

- **Defence Cooperation:**
  - Defence relationship has emerged as a major pillar of India-US strategic partnership with the signing of **'New Framework for India-US Defense Relations'** in 2005 which was further updated for 10 years in 2015.
  - India and US inked important defence pacts in the last few years and also formalised the four nation alliance of **QUAD** (India, US, Japan and Australia).
    - The alliance is seen as an important counter to China in the Indo-Pacific.
  - The **Malabar exercise** in November 2020 portrayed a high point in Indo-US strategic ties, it was the first time in 13 years that all four countries of QUAD came together sending a strong message to China.
  - India now has access to American bases from **Djibouti in Africa** to Guam in the Pacific. It can also access advanced communication technology used in US defence.
  - India and US have **four foundational defence agreements:**
    - **Basic Exchange and Cooperation Agreement for Geospatial Intelligence (BECA).**
    - General Security of Military Information Agreement (GSOMIA).
    - Logistics Exchange Memorandum of Agreement (LEMOA).
    - **Communication Compatibility and Security Agreement (COMCASA).**
  - **India-US Counter-Terrorism Cooperation Initiative** was signed in 2010 to expand collaboration on counter-terrorism, information sharing and capacity building.
  - A tri-services exercise– **Tiger Triumph**- was conducted in November 2019.
  - Bilateral and regional exercises include: **Yudh Abhyas (Army); Vajra Prahar (Special Forces); RIMPAC; Red Flag.**
- **Trade:**
  - The **US is India's second largest trading partner** and a major destination for India's exports of goods and services.
  - The **US replaced Mauritius as the second largest source of foreign direct investment into India** during 2020-21.
  - The previous US government **ended India's special trade status (GSP withdrawal)** and also imposed several bans, India also retaliated with bans on 28 US products.
  - Current US government has allowed **all the bans by the previous government to expire.**
- **Science & Technology:**
    - ISRO and NASA are working together to realize a joint microwave remote sensing satellite for Earth observation, named **NASA-ISRO Synthetic Aperture Radar (NISAR).**

- **Indian Diaspora:**
  - There is a **growing presence of Indian diaspora** in all spheres in the US. For example the current Vice-President (Kamala Harris) of the US has a strong Indian connection.

Way Forward

- The **stage has been set for transforming India's partnership with the US.** Afghanistan remains a key area of continuing concern for both India and the US and both sides are now **looking at the bigger challenges emerging in the Indo-Pacific,** driven by the rise and assertion of China.
- There is a **huge potential to boost bilateral trade between the countries** especially on account of increasing anti-China sentiment in both the nations.
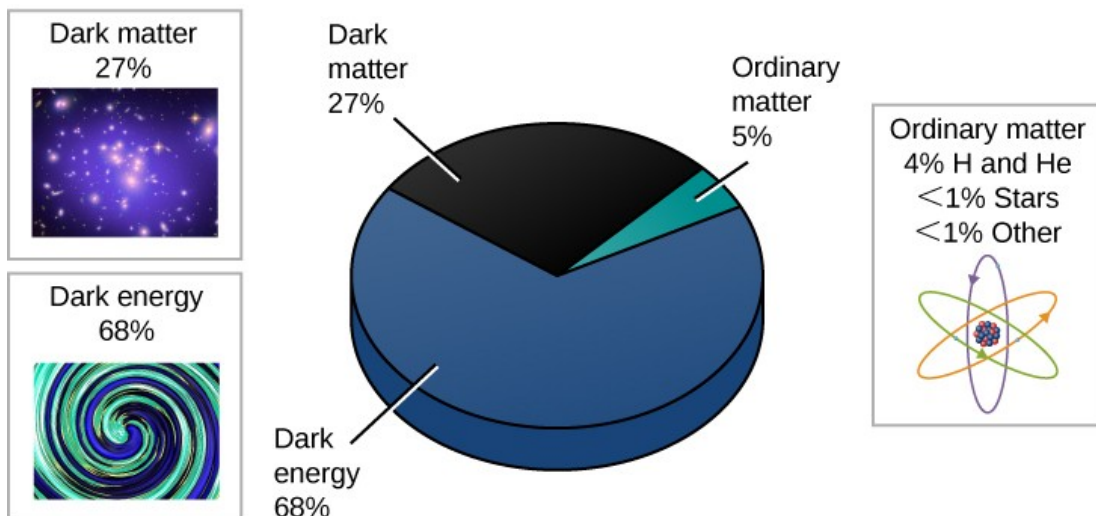
Source: IE

Dark Energy

Why in News

Recently, an international team of researchers made the **first direct detection of dark energy.** The experiment named **XENON1T,** is the **world's most sensitive dark matter experiment** and was operated deep underground at the **INFN Laboratori Nazionali del Gran Sasso in Italy.**
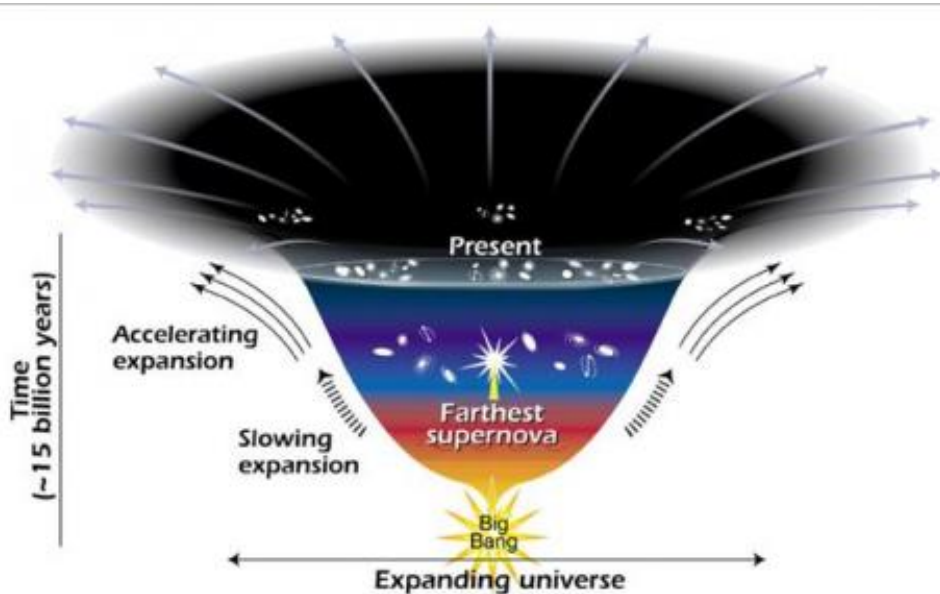
Dark energy is the mysterious form of energy that makes up about **68% of the universe,** and has intrigued physicists and astronomers for decades.

Composition of the Universe

Dark matter 27%

Dark energy 68%

Dark matter 27%

Ordinary matter 5%

Ordinary matter 4% H and He <1% Stars <1% Other

Dark energy 68%

Key Points

- **About the Experiment:**
  - The XENON1T is a dark matter research project, operated at the **Italian Gran Sasso National Laboratory.**
  - It is a deep underground research facility featuring increasingly ambitious experiments aiming to detect dark matter particles.
  - The experiments aim to detect particles in the form of **Weakly Interacting Massive Particles (WIMPs)** by looking for rare interactions via nuclear recoils in a **liquid xenon target chamber.**
- **Other Dark Matter and Energy Experiments:**
  - **LUX-Zeplin** – a next generation dark matter experiment located at the Sanford Underground Research Facility, US.
  - **PandaX-xT** – project at China Jinping Underground Laboratory.
- **Dark Matter And Dark Energy:**
  - While **dark matter attracts and holds galaxies together, dark energy repels and causes the expansion of our universe.**
  - Despite both components being invisible, a lot more is known about dark matter, since its existence was suggested as early as the 1920s, while dark energy wasn't discovered until 1998.
- **About Dark Energy:**
  - The **Big Bang** occurred nearly **15 billion years ago** and expanded. Earlier, astronomers believed that eventually the expansion of the Universe will slow down because of gravity and it will recollapse.
  - However, data from the **Hubble Telescope** suggested that the **Universe's expansion is accelerating.**
  - The astronomers theorize that the **faster expansion rate is due to a mysterious, dark force or energy** that is pulling galaxies apart.
    - The term **'dark' is used to denote the unknown.**
  - The following diagram reveals changes in the rate of expansion since the universe's birth 15 billion years ago.

Possible Explanations of Dark Energy:
- **Property of Space:** Albert Einstein was the first person to realize that empty space is not nothing.
  - One version of **Einstein's gravity theory,** the version that contains a **cosmological constant,** implies that "empty space" can possess its own energy.
  - Because this energy is a property of space itself, it would not be diluted as space expands. As more space comes into existence, more of this energy-of-space would appear. As a result, this form of energy would cause the universe to expand faster and faster.
- **Quantum Theory of Matter:** Another explanation for how space acquires energy comes from the **quantum theory of matter.**
    In this theory, "empty space" is **actually full of temporary ("virtual") particles that continually form and then disappear.**
- **Fifth Fundamental Force:** There are four fundamental forces in the universe, and speculative theories have proposed a **fifth force** – something that can't be explained by the four forces.
  - To hide or screen this fifth force, many models for dark energy use special mechanisms.
  - Some theorists have named this **"quintessence," after the fifth element of the Greek philosophers.**
- However, **none of the theories have been proved.** Due to this, Dark energy has been noted as "the most profound mystery in all of science".

Note

The Four Fundamental Forces of Nature are Gravitational force, Weak Nuclear force, Electromagnetic force and Strong Nuclear force.

Fundamental Force Particles

Force	Particles Experiencing	Force Carrier Particle	Range	Relative Strength*
Gravity acts between objects with mass	all particles with mass	graviton (not yet observed)	infinity	much weaker
Weak Force governs particle decay	quarks and leptons	W^+, W^-, Z^0 (W and Z)	short range	
Electromagnetism acts between electrically charged particles	electrically charged	γ (photon)	infinity	
Strong Force** binds quarks together	quarks and gluons	g (gluon)	short range	much stronger

Reduction in Left Wing Extremism Related Violence

Why in News

According to data provided by the **Ministry of Home Affairs (MHA),** there has been a steady decline in **Left Wing Extremism (LWE)** related violence and geographical spread of LWE influence in the country.

- The **geographical influence of Maoists** has contracted to only 41 districts in the country, which is a sharp reduction from 96 such districts in 10 States in 2010.
- **LWE incidents have also reduced** from 2,258 in 2009 to 349 incidents till August 2021.

Key Points

- **Left Wing Extremism in India:**
  - Left-wing extremists, popularly known as **Maoists** worldwide and as **Naxalites** in India.
  - The **term Naxalism** derives its name from the **village Naxalbari of West Bengal.** It **originated as a rebellion against local landlords** who bashed a peasant over a land dispute.
    - The rebellion was initiated **in 1967,** with an objective of rightful redistribution of the land to working peasants under the leadership of **Kanu Sanyal** and **Jagan Santhal.**
  - The movement has **spread across the Eastern India in less developed areas** of states such as Chhattisgarh, Odisha and Andhra Pradesh.
  - It is considered that **Naxals support Maoist political sentiments and ideology.**
    - Maoism is a **form of communism developed by Mao Tse Tung.** It is a doctrine to capture State power through a combination of armed insurgency, mass mobilization and strategic alliances.
    - **The region, affected by LWE,** is referred to as the **Red corridor.**
- **Reasons for the LWE:**
  - **Tribal Discontent:**
    - The **Forest (Conservation) Act, 1980** has been used to target tribals, who depend on forest produce for their living.
    - Massive **displacement of tribal population** in the naxalism-affected states due to development projects, mining operations and other reasons.
  - **Easy Target for Maoists:**
    - Such people who do not have any source of living are taken into naxalism by Maoists.
    - Maoists provide arms and ammunition and money to such people.
  - **Gaps in the Socio-Economic System of the Country:**
    - Government measures its success on the basis of the number of violent attacks rather than the development done in the naxal-affected areas.
      - **Absence of strong technical intelligence to fight with naxalites.**
    - **Infrastructural problems,** for instance, some villages are not yet connected properly with any communication network.
  - **No Follow-Up from Administration:**
    - It is seen that **even after police take hold of a region,** administration fails to provide essential services to the people of that region.
    - Confusion over tackling naxalism as a social issue or as a security threat.

- **Governments Initiatives to Check Naxal Activities:**
  - **Aspirational Districts Programme:** Launched in 2018, it **aims to rapidly transform the districts** that have shown relatively lesser progress in key social areas.
  - **SAMADHAN (2017):**
    - It stands for
      - **S-** Smart Leadership,
      - **A-** Aggressive Strategy,
      - **M-** Motivation and Training,
      - **A-** Actionable Intelligence,
      - **D-** Dashboard Based KPIs (Key Performance Indicators) and KRAs (Key Result Areas),
      - **H-** Harnessing Technology,
      - **A-** Action plan for each Theatre, and
      - **N-** No access to Financing.
    - This doctrine is the **one-stop solution for the LWE problem.** It encompasses the entire strategy of government from short-term policy to long-term policy formulated at different levels.
  - **National Policy and Action Plan in 2015:** It consists of a **multi-pronged approach** comprising security measures, development initiatives and ensuring rights & entitlements of local communities.
    - **The Ministry of Home Affairs (MHA) is supporting the State Governments** extensively by way of deployment of **Central Armed Police Force (CAPF)** Battalions, provision of helicopters and UAVs and sanction of India Reserve Battalions (IRBs)/ Special India Reserve Battalions (SIRBs) etc.
    - Funds are provided under **Modernization of Police Force (MPF), Security Related Expenditure (SRE) Scheme and Special Infrastructure Scheme (SIS)** for modernization and training of State Police.
    - **Several development initiatives have been implemented** for construction of roads, installation of mobile towers, skill development, improving network of banks and post offices, health and education facilities.
    - Funds for development are also provided to most **LWE affected districts** under the **Special Central Assistance (SCA) scheme.**
  - **Greyhounds:** It was raised in 1989 as an elite anti-naxal force.
  - **Operation Green Hunt:** It was started in 2009-10 and massive deployment of security forces was done in the naxal-affected areas.

Way Forward

- Though the **number of incidents of LWE violence has come down** in the recent past, continued efforts and focus are needed in eliminating such groups.

- **Innovative measures are required** to be employed in **preventing IED (Improvised Explosive Device) related incidents** which have caused significant casualties in recent years.
- States should **rationalize their surrender policy** in order to bring innocent individuals caught in the trap of LWE into the mainstream.

Source: TH

Steps Towards Abatement of Air Pollution: CAQM

Why in News

The **State Governments of Punjab, National Capital Region (NCR) States** and **Government of National Capital Territory of Delhi (GNCTD)** have developed detailed monitorable action plans based on the framework by the **Commission for Air Quality Management (CAQM)** to tackle the problem of air pollution.

- The newly constituted commission **(CAQM)** has sweeping powers in controlling air pollution in Delhi-NCR.
- Also, recently, the **World Health Organisation (WHO)** has released new **Global Air Quality Guidelines (AQGs).**

Key Points

- **Framework of the Commision:** The CAQM has directed for implementation of the action, based on following components of the framework:
    - **In-situ Crop Residue Management**- Supported by the CRM (Crop Residue Management) Scheme of the Ministry of Agriculture.
    - Ex-situ Crop Residue Management.
    - Prohibition of **Stubble/Crop Residue Burning.**
    - Effective monitoring/enforcement.
    - Plans/Schemes to reduce the generation of paddy straw.
    - Information, Education and Communication (IEC) activities for the Plan of Action.

- **Action Plans:**
  - **Recording Fire Counts:** Adopting a **Standard protocol developed by <u>ISRO</u>** for recording and monitoring the fire counts owing to Stubble burning.
  - **In- situ Crop Residue Management :** The **<u>PUSA Bio-Decomposer technology</u>** application is planned in **NCR States.**
  - **Ex-situ Crop Residue Management:** Promoting utilization of Paddy Straw Pellets/Briquettes for **Co-firing in Thermal Power Plants.**
  - **Abatement of Dust:** Establishing a "Dust Control and Management Cell".
    - Monitoring construction and demolition through a dedicated Web-portal and Video fencing of projects.
    - Installation of **Anti-smog guns** and screens at construction sites, **dust-suppressants and water mist,** transportation of materials in covered vehicles, installation of air quality monitoring sensors in project sites and Self-audit and certification mechanism by the project agencies are the key steps towards management of dust from construction and demolition project activities.
  - **Industrial Pollution:** Shifting of Industries to **Piped Natural Gas (PNG)/Cleaner Fuels** should be a priority.
  - **Vehicular Pollution:** The Commission has issued an advisory for **"Mandating procurement of zero emission and e-vehicles"** to give a further push to clean technologies in the transport sector and a gradual shift towards **zero emission vehicles/e-mobility** and progress reviewed.
    All the identified 124 border entry points of Delhi have now been provided with **<u>RFID system</u>** to facilitate **cashless toll/ cess collection** thus avoiding huge traffic congestions and resultant heavy air pollution at the border points.
  - **Monitoring:**
    - A **dedicated taskforce** envisaged in each NCR state to continuously monitor and take steps regularly to ensure smooth traffic management, including developing an **"Intelligent Traffic Management System" (ITMS).**
    - **Petrol/Diesel vehicles** more than **15/10 years old are not permitted to ply** in NCR and progress is reviewed periodically.
    - **State- wise action plans** have also been prepared for **control of Biomass/Municipal Solid Waste Burning and fires in Landfill Sites.**
    - A **Decision Support System (DSS)** for **Air Quality Emergency response.**

<u>**Source: PIB**</u>

Rajaji Tiger Reserve: Uttarakhand

Why in News

Recently, **a Supreme Court-appointed committee has questioned relaxations given for the upgrade of a 4.7-km road (Laldhang-Chillarkhal road) in the buffer zone of Rajaji Tiger Reserve** and sought replies from the Centre and Uttarakhand government.

The relaxation for measurement of roads was approved by the **National Board for Wildlife (NBWL)**. NBWL is the apex agency to clear projects in and around protected areas.

Key Points

- **Core and Buffer Area of a Tiger Reserve:**
    - According to the **Wild Life (Protection) Amendment Act of 2006, a tiger reserve must have a core or critical habitat and a buffer zone peripheral to it.**
    - While the **critical habitat** is supposed to be kept inviolate for conservation, a **buffer zone** is needed to ensure the integrity of the habitat with adequate space for dispersal of tigers. It is **aimed at promoting co-existence between wildlife and human activity.**
- **About Rajaji Tiger Reserve:**
    - **Location: Haridwar (Uttarakhand),** along the foothills of the Shivalik range. It is part of **Rajaji National Park.**
    - **Background:** Rajaji National Park was established in the year 1983 after amalgamating three sanctuaries in the Uttarakhand i.e. Rajaji, Motichur and Chila.
        - It was **named after the famous freedom fighter C. Rajgopalachari;** popularly known as "Rajaji".
        - It was declared a **Tiger Reserve** in 2015 as the 48th tiger reserve of the country.
    - **Salient Features:**
        - **Flora:** Broadleaved deciduous forests, riverine vegetation, scrubland, grasslands and pine forests form the range of flora in this park.
            Sal *(Shorea robusta)* is the characteristic dominant tree species.
        - **Fauna:** The reserve is home to more than 50 species of mammals including tiger, elephant, leopard, Himalayan black bear, sloth bear, jackal, hyena, spotted deer, sambhar, barking deer, nilgai, monkeys and over 300 species of birds.
        - **Rivers:** The **Ganga and Song rivers** flow through this.

- **Other Protected Areas in Uttarakhand:**
  - **Jim Corbett National Park** (first National Park of India).
  - Valley of Flowers National Park and Nanda Devi National Park which together are a **UNESCO World Heritage Site.**
  - Govind Pashu Vihar National Park and Sanctuary.
  - **Gangotri National Park.**
  - Nandhaur Wildlife Sanctuary.

National Parks & Sanctuaries of Uttarakhand

SAUBHAGYA Scheme

Why in News

Recently, the **Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA Scheme)** has successfully completed four years of its implementation.

2.82 crore households have been electrified since its launch till 31st March, 2021.

Key Points

- **About:**
  - It was **launched in 2017** to ensure electrification of all households in the country in rural as well as urban areas.
- **Objectives:**
  - Achieving **Universal Household Electrification** in the country, through last mile connectivity.
  - Providing access to electricity to **all un-electrified households** in rural areas and poor households in urban areas.
- **Beneficiaries:**
  - They are identified using **Socio Economic and Caste Census (SECC) 2011** data.
  - However, un-electrified households not covered under the SECC data would also be provided electricity connections under the scheme by paying Rs 500.
- **Expected Outcomes:**
  - Environmental upgradation by substitution of Kerosene for lighting purposes.
  - Improvement in education services.
  - Better health services.
  - Enhanced connectivity through radio, television, mobiles, etc.
  - Increased economic activities and jobs.
  - Improved quality of life especially for women.
- **Related Initiatives:**
  - Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY).
  - **PM-KUSUM.**
  - **Integrated Power Development Scheme (IPDS).**
  - **Ujwal Discom Assurance Yojana (UDAY).**
  - GARV (Grameen Vidyutikaran) App.

Source: PIB

National Mission on Cultural Mapping

Why in News

Recently, the **National Mission on Cultural Mapping** (NMCM) has been handed over to the **Indira Gandhi National Centre for the Arts (IGNCA)**, which will start a trial run in **75 villages** in October 2021.

- IGNCA was established in 1987 as an autonomous institution under the **Ministry of Culture,** as a centre for research, academic pursuit and dissemination in the field of the arts.
- IGNCA aims to complete mapping in 5,000 villages by the end of financial year 2021-2022.

Key Points

- **About:**
  - The **Ministry of Culture had approved the NMCM in 2017** to build **a comprehensive database of artists, art forms and other resources** from organisations under the Ministry.
  - It is aimed at addressing the necessities of preserving the **threads of rich Indian Art and Cultural Heritage,** converting vast and widespread cultural canvas of India into **an objective Cultural Mapping** while creating a strong **"Cultural Vibrancy"** throughout the nation.
  - It encompasses **data mapping, demography building, formalising the processes** and bringing all cultural activities under one umbrella for better results.
  - The work on creating **a database for folk arts and mapping of heritage of villages** would be carried out over five years (From 2017).
  - Volunteers from the **Nehru Yuva Kendra Sangathan**, the **National Service Scheme** and students of sociology and social work would be deputed to collect such data from villages.
- **Other Schemes Related to Art and Culture:**

Source: TH

GI Tag to Assam's Judima Wine Rice

Why in News

Judima, a home-made rice wine of **Assam's Dimasa tribe** has become the **first traditional brew in all of northeast** to bag a **Geographical Indication (GI) tag.**

- This is the **second product from the hill districts of Karbi Anglong and Dima Hasao** to get GI tag.
- Earlier, **Manipur's most famous Hathei chilli and Tamenglong orange** were awarded the GI Tag.

Geographical Indication (GI)

- GI is an indication **used to identify goods having special characteristics originating from a definite geographical territory.**
- It is **also a part of the World Trade Organisation's Trade-Related Aspects of Intellectual Property Rights (TRIPS).**
- GI tag in India is governed by **Geographical Indications of Goods (Registration & Protection) Act, 1999.** It is issued by the **Geographical Indications Registry (Chennai).**

- The registration of a geographical indication is **valid for a period of 10 years.**
- The GI protection in India **leads to recognition of the product in other countries thus boosting exports.**

Key Points

- **About Judima:**
    - Judima is a **rice wine made from sticky rice (glutinous rice called Bora),** which is steamed and mixed with traditional herbs called **Thembra (Acacia pennata).**
    - The wine is a **specialty of the Dimasa tribe of the state (Assam)** and has a distinct sweet taste and takes around one week to prepare and it can be stored for years.
        - There are around 14 recognized Plain Tribe communities, 15 Hills Tribe communities and 16 recognized Scheduled Caste communities in the state.
        - The **Bodos are the largest group,** comprising almost half of the state's tribal population. Other major ST groups include **Mising, Karbi, Rabha, Kachari, Lalung and Dimasa.**
- **Other Recent GI Tagged Products from Assam:**
    - Kaji Nemu (a type of lemon) (2020)
    - Chokuwa Rice of Assam (2019)

Source: TH

Tunnels in Jammu & Kashmir

Why in News

The Union Minister for Road Transport and Highways will lay the foundation stone of various **National Highway (NH) Projects** and will review and inspect **Z-Morh and Zojila Tunnel** in the Union Territory of Jammu & Kashmir.

Key Points

- **Shyama Prasad Mukherjee Tunnel:** The **Chenani-Nashri Tunnel** renamed as Shyama Prasad Mukherjee Tunnel.
    - It is **not only India's longest highway tunnel (9 km long)** but also **Asia's longest bi-directional highway tunnel.**
    - It is located in the lower Himalayan mountain range, between Udhampur and Ramban in Jammu & Kashmir.
- **Banihal Qazigund Tunnel:** It is the 8.5 km road tunnel at elevation of 1,790 m in the **Pir Panjal range** in the union territory of Jammu and Kashmir **connecting Banihal and Qazigund.**

- **Jawahar Tunnel:** It is also called **Banihal Tunnel or Banihal Pass.** The length of the tunnel is 2.85 km.
  - It is situated between Banihāl and Qazigund on NH 1A that has been renumbered NH 44.
  - The tunnel facilitates round-the-year road **connectivity between Srinagar and Jammu.**
- **Nandni Tunnels:** These tunnels are the series of four highway tunnels built under **Nandni wildlife sanctuary** on Jammu-Srinagar National Highway in Udhampur district. At a combined length of 1.4 km, the tunnels have reduced the distance and travel time between Jammu and Srinagar.
- **Pir Panjal Railway Tunnel:** It is India's longest transportation railway tunnel measuring 11.2 km long.
  - The tunnel link, which is the only broad gauge mountain railway in India, stretches through the **Pir Panjal mountain range** between **Quazigund and Baramulla.**
  - The tunnel section is a part of the 202km **Udhampur – Srinagar – Baramulla rail link project** undertaken by the Northern Railways.
- **Z-Morh Tunnel:** It is an under construction tunnel, 20 km away from the Zojila Pass, on Srinagar-Kargil-Leh highway.
  - The 6.5 km long tunnel will connect **Gagangir directly to Sonamarg** in Kashmir.
- **Zojila Tunnel:** It is an under construction tunnel **located to the north-east of Srinagar, on the Srinagar- Leh section of the NH 1**.
  - The 14.2 km road tunnel between Baltal and Minamarg.
  - The Zojila Tunnel will be **Asia's longest road tunnel**, to be built at an **altitude of 11,578 m above sea level**.
  - It will ensure safer, all weather year round connectivity between Leh, Kargil and Srinagar.
- **Nilgrar Tunnels:**
  - The **Nilgrar-I** is a **twin tube tunnel** of 433 m length each.
  - The Nilgrar twin tunnel-II is of 1.95 Km length each.
  - Nilgrar-I and Nilgrar-II tunnels are part of the 18 Km long approach road to Zojila west portal.
    - Zojila tunnel will provide connectivity to Ladakh region Kargil, Drass and Leh.
  - **Chattergala Tunnel**: It is an under construction road tunnel in Jammu and Kashmir.
    - The tunnel will be 6.8 km long and **will connect Kathua and Doda districts of Jammu and Kashmir** via basohli-bani through Chattergala.

Source: PIB