PRS Capsule December 2020

Key Highlights of PRS

Governance

Online Gaming and Fantasy Sports Advertisements

- The **Ministry of Information and Broadcasting** observed that a large number of advertisements on online gaming and fantasy sports have been appearing on the television.

  - In view of this, it has issued an advisory to all private satellite television channels to ensure compliance with the guidelines issued in November 2020 by the **Advisory Standards Council of India (ASCI).**
  - The guidelines by ASCI provide:

    - Advertisements must not depict any person under the age of 18 or anyone who appears below the age of 18 engaged in playing an online game for winning real money.
    - It must carry a disclaimer stating that the game involves financial risk and may be addictive. Such disclaimer should occupy at least 20% of the advertisement space.
    - The advertisements must not present 'online gaming for real money winnings' as an income opportunity or alternative career. Further, it should not suggest that the person engaged in gaming activity is in any way more successful than others.

Advertising Standards Council of India (ASCI)

- The Advertising Standards Council of India (ASCI), established in 1985, is committed to the cause of Self-Regulation in Advertising, ensuring the protection of the interests of consumers.

- It is a self-regulatory voluntary organization of the advertising industry in India. It is a non-Government body.
- ASCI was formed with the support of all four sectors connected with Advertising, viz. Advertisers, Advertising Agencies, Media (including Broadcasters and the Press) and others like PR Agencies, Market Research Companies etc.

Telecom Connectivity in Remote Areas

- The Union Cabinet approved two projects for improvement in telecom connectivity in remote areas.

    - These projects will be funded from the Universal Service Obligation Fund (USOF).

        - USOF has been established to provide widespread, non-discriminatory, and affordable access to information and communication technology services to people in rural and remote areas.
        - Resources for USOF are raised through a levy on the revenue of all the telecom operators under various licenses.
    - The projects are:

        - **Submarine optical fibre cable link between Kochi and Lakshadweep Islands:** Under this project, a direct communication link through a dedicated submarine optical fibre cable will be created between Kochi and 11 islands of Lakshadweep.

            - Currently, the only medium of providing telecom connectivity to Lakshadweep islands is through satellites, and the bandwidth available is limited to 1 Gbps.
            - The estimated cost of the project is Rs 1,072 crore. The project is targeted to be completed by May 2023.
        - **Mobile coverage in Arunachal Pradesh and parts of Assam:** This project will provide mobile coverage to 1,683 uncovered villages in Arunachal Pradesh, and 691 villages in Karbi Anglong and Dima Hasao districts of Assam.

            - The estimated cost of the project is Rs 2,029 crore. The project is targeted to be completed by December 2022.

Universal Service Obligation Fund (USOF)

- USOF ensures that there is universal non-discriminatory access to quality ICT services at economically efficient prices to people in rural and remote areas.

    - Currently, it is charged at the rate of 5%, while the TSPs demand it to be reduced to 3%.
- It was created under the Department of Telecommunications in 2002.
- It is a non-lapsable fund, i.e., the unspent amount under a targeted financial year does not lapse and is accrued for next years' spending.
- All credits to this fund require parliamentary approval and it has statutory support under Indian Telegraph (Amendment) Act, 2003.

Prime Minister's Wi-Fi Access Network Interface (PM-WANI)

- In a bid to fuel broadband internet proliferation across the country, the Government of India launched the **PM WANI (Prime Minister Wi-Fi Access Network Interface) Scheme.** The

scheme aims to bring large scale deployment of Wi-Fi hotspots through the country to drive up connectivity options and improve digital access.

- The Department of Telecommunications (DoT) released a new framework called the [PM-WANI](#) for the proliferation of broadband through public wi-fi networks.

  - The framework seeks to improve last-mile broadband connectivity through a network of public wi-fi access points.
  - The framework will facilitate local shops and small establishments in becoming wi-fi service providers.

- **The PM-WANI framework will involve the following:**

  - **Public Data Office (PDO):** PDOs are entities which will procure internet bandwidth from telecom/internet service providers and establish and operate PM-WANI compliant wi-fi access points.

    - PDOs will not be required to obtain any licence or register with any authority. No fees will be charged to PDOs for providing services.

  - **Public Data Officer Aggregator (PDOA):** PDOA will be an aggregator of PDOs and will perform the functions relating to authorisation of users and accounting of subscription charges on their behalf.

    - PDOAs will need to register with the DoT.

  - **App provider:** App providers will develop an app to register a user, discover the PM-WANI compliant wi-fi access points in the nearby area, and display the same within the App to the users for accessing the internet.

    - App providers will be required to register with the DoT. The registration with DoT will provide permission for pan India operations to both PDOA and App providers.

  - **Central Registry:** The central registry will maintain the details of PDOs, PDOAs, and App providers (made available through PDOAs).

    - It will certify the systems and software applications of PDOA and app providers for compliance with the specifications of the framework.

  - The potential user will need to download the app from any of the app providers, get authenticated, and thereafter access the internet from any PM-WANI compliant wi-fi access point.

National Strategy for Additive Manufacturing

- The Ministry of Electronics and Information Technology invited comments on the **Draft National Strategy for Additive Manufacturing.**

  - **Additive manufacturing:** It is popularly known as 3D printing. It refers to the construction of a three-dimensional object from a digital 3D model by adding materials layer by layer. The technology is being utilised in a variety of industries such as aerospace, electronics, and consumer goods.

- The Ministry noted that the additive manufacturing industry is growing rapidly and is expected to be at USD 36 billion by 2023.

  - However, in comparison to countries such as the USA, China, and Germany, the adoption of additive manufacturing has not seen much traction in India.

- It identifies certain key challenges in the adoption of additive manufacturing. These include:

  - (i) high cost of equipment and material due to dependence on import, (ii) lack of formal industry standards, (iii) lack of skilled manpower, and (iv) uncertainty in the regulatory and legal framework.
  - **Key recommendations under the draft strategy include:**

    - **Promotion of additive manufacturing:** Government procurement policies

should encourage the purchase of additive manufacturing machines, manufactured components, and systems for their operations.

- Preferential market access policy should be developed to support local manufacturers.
- Additive manufacturing should be included in the government schemes for technology upgradation for MSMEs.
- Following benefits to the industry are suggested: (i) long term tax benefits, (ii) ready to use facilities at a subsidised rental cost, and (iii) benefit in electricity tariffs for units with high consumption requirements.
- **National Additive Manufacturing Centre:** A dedicated Centre may be constituted to lead the national initiative for development and adoption of additive manufacturing technologies.

  - The Centre may take initiatives such as a study of the sectoral potential for integrating additive manufacturing and development of standards and certifications.
- **Research:** A centre of excellence dedicated to additive manufacturing may be established. The research efforts in the area of additive manufacturing could be supported by an increase in grants-in-aid.

  - Intellectual property developed through government-funded projects should be made accessible.
  - International partnership for research and development at government as well as industry level should be encouraged.
- **Skill development:** For the development of manpower for additive manufacturing, engineering curriculum, as well as industry-driven apprenticeship programs, should include additive manufacturing.

  - Free online resources, certifications, and diplomas should be provided with training modules for all educational levels.
  - A special curriculum for the training of teachers should be developed to acclimatise them with the technology.

Report of the Expert Committee on Non-personal Data

- In July 2020, an Expert Committee constituted by the Ministry of Electronics and Information Technology to study various issues relating to non-personal data had published a draft report for public consultation.
- Based on the feedback received, the Committee has released a revised version of the draft report.
- Key recommendations under the revised draft are:

  - **Definition of non-personal data:** Under the first draft, non-personal data was defined as any data which is not personal data as defined under the Personal Data Protection Bill, 2019 (PDP Bill) or data without any personally identifiable information.

    - The PDP Bill defines personal data to include data pertaining to characteristics, traits, or attributes of identity, which can be used to identify an individual. The revised draft retains this definition.
    - The Committee recommended that the PDP Bill should be amended to remove provisions related to non-personal data so that there is no overlap between the two regulatory frameworks.
    - Currently, the PDP Bill empowers the central government to direct any entity to provide non-personal data for targeting of delivery of services or formulation of evidence-based policies by the government.
  - The first draft had categorised non-personal data among:

    - **public:** data collected or generated by government
    - **community:** raw or factual data which is sourced from a community of natural

persons

- **private:** data which is collected or generated by private entities through privately owned processes (derived insights or proprietary knowledge).

      - In the revised draft, the Committee has removed this classification.
  - **High-value datasets:** The first draft provided that the government may specify certain datasets as high-value datasets at a national level.

    - The revised draft defines a high-value dataset as a dataset beneficial to the community at large and is shared as a public good, subject to certain guidelines.
    - It will include datasets useful for: (i) creation of new and high-quality jobs, (ii) creation of new businesses, and (iii) socio-economic objectives such as financial inclusion, healthcare, and urban planning.
    - A representative entity called data trustee may be appointed for creation, maintenance, and sharing of high-value datasets.
    - The data trustee will request the data custodian (entity collecting, processing, and storing data) to provide the required data.
  - **Sharing of non-personal data:** As per the first draft, sharing of non-personal data could be mandated for defined purposes including:

    - **sovereign:** national security, law enforcement, or regulatory purposes
    - **public interest:** community benefits, research and innovation, policy making for better delivery of public services, and
    - **economic:** to encourage competition or provide a level-playing field among for-profit entities. The revised draft only requires data sharing for public good purposes.

        - It only mandates sharing of high-value datasets managed by data trustees.
        - The Committee observed that data sharing for sovereign purposes, and for business purposes between for-profit entities, already exists and hence, has not made any recommendations on it.

Draft Indian Ports Bill, 2020

- The Ministry of Ports, Shipping and Waterways released the draft Indian Ports Bill, 2020 for public comments.
- The draft Bill seeks to repeal the Indian Ports Act, 1908. It seeks to enable growth of ports and increased investment by establishing effective administration and management of all ports in India.
- Key features of the draft Bill include:

  - **Maritime Port Regulatory Authority:** The draft Bill proposes to establish the Maritime Port Regulatory Authority.

    - The Authority will consist of: (i) a Chairperson, two full-time members (with a term of five years) appointed by the central government, of which one will be in the legal field, and (iii) two part-time members (with a term of two years) nominated in rotation by coastal states.
  - **Functions of the Authority include:** (i) advising the central government on formulation of the National Port Policy, (ii) aiding in formulating and implementing short-term plans, (iii) monitoring and assessing ports, (iv) specifying standards for safety and quality of vessels and port assets, and (v) determining measures to promote investment, technological advancement, and growth in the sector.
  - **State Maritime Board:** Every state government must establish a State Maritime Board for ports other than Major Ports (notified by the central government). State Maritime Boards can initiate plans for development of ports, and license infrastructure and services.
  - **Dispute redressal:** For Major Ports, a Bench consisting of nominated members from the Authority will receive and adjudicate on complaints concerning: (i) anti-competitive practices, (ii) abuse of dominant positions, or (iii) disputes between Port service providers

and terminal operators.

- - For all other ports, Adjudicatory Boards constituted by state governments can adjudicate on disputes concerning: (i) rights and obligations of ports, (ii) port officials, users, service providers and licensees, and (iii) private operators.
- The draft Bill lays down safety and security requirements to be followed by all ports and vessels. For instance, every port must appoint officers and prepare plans to ensure security based on requirements notified by the central government. It also mandates all ports and terminals to provide facilities for waste and pollution management.

Draft National Rail Plan

- The Ministry of Railways invited comments on the Draft National Rail Plan. The plan seeks to improve the infrastructural capacity of Railways to cater to growth in demand up to the year 2050.

  - It aims to increase the modal share of Railways in freight from 27% currently to 45% by 2030. The implementation cost of projects under the plan will be about Rs 38 lakh crore.
- These projects will be executed between 2021 and 2051. The plan envisages an initial surge in capital investment up to 2030. Post 2030, it is expected that revenue surplus generated would be adequate to finance future capital investments and government funding will not be required.
- **Dedicated freight corridors:** Three new dedicated freight corridors with a cumulative length of 5,750 km will be developed: (i) East coast (Kharagpur-Vijayawada), (ii) East-West (Palghar-Dankuni), and (iii) North-South (Pirthala-Arakkonam).53
- **High-speed rail corridors:** Several high-speed rail corridors with a cumulative length of 7,479 km will be developed.
- **Network improvements:** Number of lines will be increased on specified routes with higher capacity utilisation or high traffic demand such as Delhi-Howrah, Mumbai-Chennai, and Kharagpur-Udhna.

  - Connectivity with ports and industrial corridors will be improved.
  - These projects will cover 75,194 network kilometres.

Economy

Draft National Fisheries Policy released

- The Department of Fisheries released a revised draft of the National Fisheries Policy for public comments. The previous draft of the policy was released in February 2020.

  - The policy aims to integrate the various policies relating to different aspects of fisheries (such as inland fisheries, marine plants and animals, processing, and marketing) for its comprehensive development.
- **Key features of the revised draft policy include:**

  - **Objectives:** The objectives of the policy include: (i) sustainable development of the fisheries sector during 2021-30, (ii) sound management and sustainable development of the resources and associated habitats, (iii) meeting the food and nutritional security of the growing population, (iv) protecting the rights of fishing communities and building their resilience, and (v) making Indian fish and fish products globally competitive.
  - **Legal framework:** The Marine Fishing Regulation Acts of coastal states need to be amended to align them with international agreements to ensure that they cover all the aspects of fisheries management.

    - The central government will prepare a model Bill in this regard for consideration of the states. Similarly, there is a need to prepare a model Bill for regulation of inland fisheries and aquaculture, which can be used by states to replace or amend their existing Acts to make them contemporary and in compliance with the topical requirements.

- **Sustainability:** The expertise of scientific institutions and fishers will be utilised to optimise fishing efforts and implement measures to check resource depletion and ensure sustainability.

    - Comprehensive fisheries management plans will be made to conserve and sustainably manage natural fisheries resources. The policy will also focus on improving the ecological health of the riverine ecosystem and curbing the flow of pollution into rivers and their tributaries.
- **Coordination:** Kerala, Puducherry, and Tamil Nadu have set up co-management structures at different tiers for management of fisheries resources by the government and the community, through instruments such as a charter of rights and duties.

    - The policy aims to take forward such initiatives to the other inland and coastal states.
    - The policy also aims to enhance the mandate of the present Ministry under the Ministry of Fisheries and Maritime Affairs, an umbrella agency for effective fisheries governance.
    - The new Ministry will converge the various institutions working on aspects related to fisheries under different Ministries.
    - The policy also aims to set up a mechanism to allow for better coordination between all concerned agencies of the central and state governments through coordinating bodies.

Social Justice

National Family Health Survey-5

- The Ministry of Health and Family Welfare has completed the first round of the fifth phase of the **National Family Health Survey (NFHS).**
- The fourth round of NFHS was conducted five years ago in 2015-16. The survey covers key indicators on population, reproductive and child health, family welfare, and nutrition. The first phase covers 17 states and 5 union territories.
- **Key results of the survey include:**

    - **Fertility rate:** The replacement level of fertility at which population stability is achieved (i.e., population replaces itself) has been achieved in 19 out of the 22 states and union territories.

        - Three states (Bihar, Manipur, and Meghalaya) have a total fertility rate (average number of children born to a woman) higher than the replacement level.
    - **Sex ratio:** Sex ratio at birth refers to the number of female children born per 1,000 male children. It was below 900 in Telangana, Himachal Pradesh, Goa, Daman and Diu, and Dadra and Nagar Haveli.
- **Infant mortality:** Infant mortality rate has marginally declined in nearly all states. Assam has seen one of the largest drops in it, from 48 deaths (per 1,000 live births) to 32 deaths. It remains high in Bihar (47 deaths per 1,000 live births).
- **Malnutrition:** Nutritional status of children below 5 years of age is worsening. Stunting or chronic malnutrition (i.e., low height with respect to age) has increased in 11 of the 17 states.

    - Proportion of severely wasted children has increased in 13 of the 17 states. Wasting or acute malnutrition refers to low weight with respect to height. Children who are stunted or wasted are more vulnerable to diseases and illness.
- **Internet usage:** Across all states, the proportion of men who have used the internet was higher than women, with the difference being higher than 25%-point in states such as Telangana, Gujarat, and Andhra Pradesh. In Andhra Pradesh, Bihar, and Tripura, less than 25% women have used the internet.

Policy on School Bag, 2020

- A working group constituted by the Ministry of Education, has released the **School Bag Policy, 2020.**

    - The working group was constituted in 2018 after a Madras High Court ruling that directed the central government to formulate a policy for school bags.
- The Policy provides recommendations for the reduction in the weight of the school bag.
- The Policy recommended that the universally accepted norm of limiting the weight of the school bag to 10% of the student's weight should be followed from Class 1 to Class 10.
- It observed that a heavy bag can affect a student's spinal posture, foot shape, and walk. It recommended that the weight of the school bag needs to be monitored and checked on a regular basis in the school.
- Lockers may be installed for storing and retrieving books and other items for students with disabilities.

    - Further, it recommended that NCERT must develop guidelines to conduct bagless days in schools using different timetables, experiential pedagogies, and team teaching.
- **Note:** The National Education Policy, 2020 had recommended a 10-day bagless period for grades 6-8 where they intern with local vocational experts such as artists and gardeners.

National Council of Educational Research and Training (NCERT)

- The **National Council of Educational Research and Training (NCERT) is an autonomous organisation set up in 1961** by the Government of India to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education. **Hence, statement 1 is correct.**
- The major objectives of NCERT and its constituent units are to:

    - Undertake, promote and coordinate research in areas related to school education;
    - Prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc.
    - Organise pre-service and in-service training of teachers;
    - Develop and disseminate innovative educational techniques and practices;
    - Collaborate and network with state educational departments, universities, NGOs and other educational institutions;
    - Act as a clearing house for ideas and information in matters related to school education;
    - Act as a nodal agency for achieving the goals of Universalisation of Elementary Education.
- In addition to research, development, training, extension, publication and dissemination activities, NCERT is an **implementation agency** for bilateral cultural exchange programmes with other countries in the field of school education.
- The NCERT also interacts and **works in collaboration with the international organisations,** visiting foreign delegations and offers various training facilities to educational personnel from developing countries.
- NCERT acts as a **nodal agency** for achieving the goals of **Universalization of Elementary Education. Hence, statement 2 is correct.**

Environment

Implementation of Paris Agreement

- The Ministry of Environment, Forest and Climate Change (MoEF) constituted a high-level inter-ministerial **Apex Committee for Implementation of** Paris agreement **(AIPA).**

    - Paris agreement is an international treaty on climate change, which is aimed at reducing greenhouse gas emissions globally.
- The Committee consists of 17 members, which include: (i) Secretary of MoEF as Chairperson, (ii) Additional Secretary, MoEF as Vice-Chairperson, (iii) Additional Director General (Forest), MoEF,

and (iii) Joint Secretaries from 14 ministries including Finance, Health and Power, as members.
- The Committee will be the national regulatory authority for carbon markets in India.
- Its functions include:
    - Developing policies and programmes to make India's domestic climate change compliant to international obligations.
    - Coordinating communications of **nationally determined contributions (NDCs)** to the United Nations Framework Convention on Climate Change (UNFCCC), and (iii) define responsibilities of concerned ministries for achieving India's NDC goals.
        - NDCs refer to the climate action plans of various countries around the world. It includes actions planned by countries to reduce greenhouse gas emissions to achieve goals under the Paris agreement.

Paris Climate Accord

- Paris Agreement (also known as the Conference of Parties 21 or COP 21) is a landmark environmental accord that was adopted in 2015 to address climate change and its negative impacts.
    - It replaced the **Kyoto Protocol** which was an earlier agreement to deal with climate change.
- Aims: To reduce global GHG emissions in an effort to limit the global temperature increase in this century to well below 2°C above pre-industrial levels, while pursuing means to limit the increase to 1.5°C by 2100.
- **Legal status:** It is a **legally binding** international treaty on climate change.
- **Adoption:** It was adopted by 196 countries at **Conference of the Parties** COP 21 in Paris in December 2015.
- **Goal:** To limit global warming to well below 2° Celsius, and preferably limit it to 1.5° Celsius, compared to pre-industrial levels.
- **Objective:** To achieve the long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate-neutral world by mid-century.

Science and Technology

Technology Transfer Policy and Guidelines

- The Department of Space has released Technology Transfer Policy and Guidelines 2020. The guidelines provide the principle and mechanism for the transfer of technologies developed by the **Indian Space Research Organisation (ISRO)** to the Indian industries.
- ISRO will be responsible for identifying technologies for transfer. The Department of Space will be the approval body.
    - All transfer of technologies will be given effect through the **New Space India Limited (NSIL)** which will fix the license fee and other charges for the transfer.
- Each centre of the ISRO must identify technologies which can be transferred, based on factors such as: (i) readiness of the technology, (ii) proven use of the technology, (iii) chances of success in the recipient organisation, and (iv) socio-economic or commercial viability.
    - A **dedicated Technology Transfer Cell** will be responsible for end-to-end coordination to ensure successful commercialisation of technologies.
        - Further, the guidelines state that transfer of technology must not be made to any individual.
        - For non-profit or non-government organisations seeking transfer of technologies which have societal application, no transfer of technology cost will be payable.

- **The cost of transfer will include:** (i) cost of direct material or components, (ii) direct staff costs, (iii) travel and logistics expenses, and (iv) intellectual expenses (nominal, up to 5% of total estimated cost).

New Space India Limited (NSIL)

- NSIL is a Central Public Sector Enterprise of the Government of India.
- It was established in 2019 under the administrative control of the Department of Space.
- Headquarter: Bengaluru
- NSIL is the commercial arm of Indian Space Research Organisation (ISRO) with the primary responsibility of enabling Indian industries to take up high technology space related activities and is also responsible for promotion and commercial exploitation of the products and services emanating from the space industry.
- NSIL is incorporated to carry forward the industry production of space systems and the ISRO's efforts in realising **Polar Satellite Launch Vehicles (PSLV)** from industry.
- NSIL differs from ISRO's existing commercial arm Antrix Corporation:
    - Antrix will handle ISRO's commercial deals for satellites and launch vehicles with foreign customers.
    - NSIL will deal with capacity building of local industry for space manufacturing.

Scheme for Increasing Ethanol Production

- The Union Cabinet approved an expansion of the scheme to provide **interest subvention to sugar mills and distilleries** on loans for augmentation of **ethanol** production capacity.

    - **Biofuel:** Any hydrocarbon fuel that is produced from an organic matter (living or once living material) in a short period of time (days, weeks, or even months) is considered a biofuel.
- Interest subvention is provided at the rate of 6% per annum, or 50% of the rate of interest charged, whichever is lower.

    - The **revised scheme aims** to enhance the capacity for production of first-generation ethanol from other feed stocks as well such as sugar beet, and cereals including rice, wheat, sorghum, maize, and barley.

        - Earlier, only sugar mills and molasses-based standalone distilleries which produce ethanol from sugarcane juice, sugar syrup, sugar, and B-heavy molasses were eligible under the scheme.
- **Target:** The Government had fixed a target of 10% blending of fuel grade ethanol with petrol by 2022 and 20% blending by 2030 but now Government is preparing a plan to prepone achievement of 20% blending target.

    - The Ministry of Consumer Affairs, Food & Public Distribution noted that the blending target cannot be achieved only from the production of ethanol from sugarcane and sugar.
    - This also requires the production of ethanol from other feed stocks, but their current production capacity is not sufficient.
- **Extension of interest subvention:** Under the revised scheme, interest subvention will be extended to loans taken for setting up or expanding: (i) distilleries to produce ethanol from other feed stocks producing **first-generation ethanol,** (ii) grain-based distilleries using dry milling process, and (iii) dual feed distilleries (using both molasses and grain or any other feed stocks).

    - It will also be provided on loans taken for conversion of molasses-based distilleries or grain-based distilleries to dual feed distilleries.
    - Only those distilleries will be eligible under the revised scheme which supply at least 75% of the ethanol produced from added capacity to oil marketing companies for blending with petrol.

Govt Initiatives to Promote Biofuels

- **Blending of biofuels:** Ethanol Blended Petrol (EBP) programme, Administrative price mechanism for ethanol, Simplifying the procurement procedures by Oil Marketing Companies (OMCs), amending the provisions of Industries (Development & Regulation) Act, 1951 etc are some of the initiatives taken to promote blending of biofuels.
- Researchers at the International Centre for Genetic Engineering and Biotechnology (ICGEB) are developing a method to use **cyanobacterium for biofuel production.**
- Recently, the Central government has also allowed the **conversion of surplus rice to ethanol.**
- Initiatives by Department of Biotechnology, Ministry of Science and Technology:

    - Development of 2G Ethanol and transfer of the technology to OMCs.
    - Development of Indigenous Cellulolytic Enzyme for the production of biofuels.
    - Strengthened the international collaboration to accelerate innovation in Sustainable Biofuel through multilateral programs like **Atal Innovation Mission (AIM)** and Biofuture Platform.
- **Pradhan Mantri JI-VAN Yojana**, 2019: The objective of the scheme is to create an ecosystem for setting up commercial projects and to boost Research and Development in 2G Ethanol sector
- **GOBAR (Galvanizing Organic Bio-Agro Resources) DHAN scheme, 2018:** It focuses on managing and converting cattle dung and solid waste in farms to useful compost,biogas and bio-CNG, thus keeping villages clean and increasing the income of rural households.

    - It was launched under Swachh Bharat Mission (Gramin).
- Repurpose Used Cooking Oil **(RUCO)**: It was launched by **Food Safety and Standards Authority of India (FSSAI)** aims for an ecosystem that will enable the collection and conversion of used cooking oil to biodiesel.
- **National Policy on Biofuels, 2018:**

    - The Policy categorises biofuels as "Basic Biofuels'' viz. First Generation (1G) bio ethanol & biodiesel and "Advanced Biofuels''- Second Generation (2G) ethanol, Municipal Solid Waste (MSW) to drop-in fuels, Third Generation (3G) biofuels, bio-CNG etc. to enable extension of appropriate financial and fiscal incentives under each category.
    - It expands the scope of raw material for ethanol production by allowing use of sugarcane juice, sugar containing materials like sugar beet, sweet sorghum, starch containing materials like corn, cassava, damaged food grains like wheat,broken rice, rotten potatoes, unfit for human consumption for ethanol production.
    - The Policy allows use of surplus food grains for production of ethanol for blending with petrol with the approval of National Biofuel Coordination Committee.
    - With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs. 5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to 1G biofuels.