News Analysis (13 May, 2020)

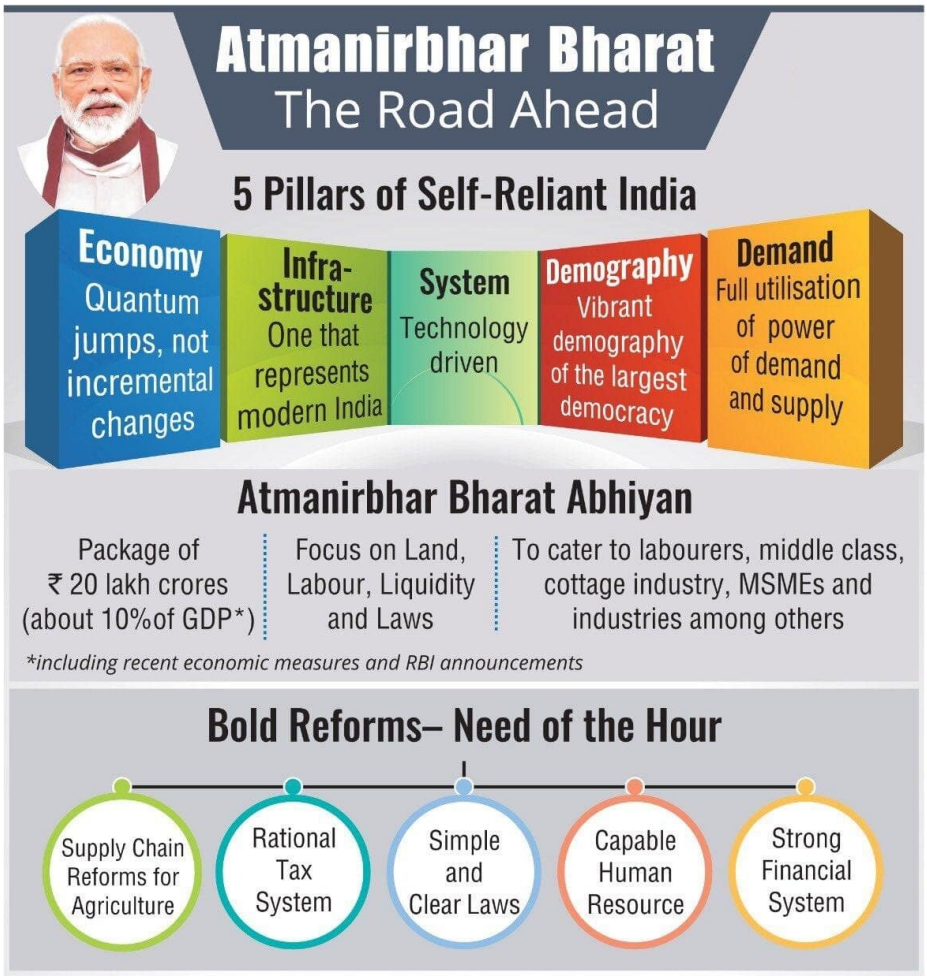
Atmanirbhar Bharat and Economic Stimulus

Why in News

Recently, the Prime Minister has announced the **'Atmanirbhar Bharat Abhiyan (or Self-reliant India Mission)'** with an **economic stimulus package — worth Rs 20 lakh crores** aimed towards achieving the mission.

- The announced economic package is **10% of India's Gross Domestic Product (GDP) in 2019-20.**
- The amount **includes** packages already announced at the beginning of the lockdown incorporating **measures from the RBI** and the **payouts under the Pradhan Mantri Garib Kalyan Yojana.**
- The package is expected to focus on **land, labour, liquidity and laws.**

Self-Reliant India Mission



- The Self-Reliant India Mission aims towards **cutting down import dependence** by focussing on substitution while improving safety compliance and quality goods to gain global market share.

  The Self-Reliance **neither signifies any exclusionary or isolationist strategies** but involves creation of a helping hand to the whole world.
- The Mission focuses on the **importance of promoting "local" products.**
- The Mission will be carried out in **two phases:**
  - **Phase 1:** It will consider sectors like medical textiles, electronics, plastics and toys where local manufacturing and exports can be promoted.
  - **Phase 2:** It will consider products like gems and jewellery, pharma and steel, etc.
- The Mission would be based on **five pillars** namely,
  - Economy
  - Infrastructure
  - System
  - Vibrant Demography
  - Demand
- The Mission is also expected to complement **'Make In India Initiative'** which intends to encourage manufacturing in India.

Analysis of Declared Economic Package

- **Inclusion of RBIs' Expenditure in Fiscal Package:**
  - The declared package is considered to be substantially less because **it includes the actions of RBI as part of the government's "fiscal" package, even though only the government controls the fiscal policy and not the RBI** (which controls the 'monetary' policy).
  - Thus, the Government expenditure and RBI's actions are **neither the same nor can they be added** in this manner. And thus nowhere in the world fiscal packages are declared in this manner.
  - For instance, when the US announced a relief package of $3 trillion (Rs 225 lakh crore), it only refers to the money that will be spent by the government — and does not include the expenditure of the Federal Reserve (US central bank).
- **Implication of Inclusion of RBIs' Expenditure :**
  - If the government is including RBI's liquidity decisions in the calculation, then the **actual fresh spending by the government could be considerably lower.**
    That's because RBI has been coming out with **Long Term Repo Operation (LTRO)**, to infuse liquidity into the banking system worth Rs 1 lakh crore at a time. If RBI launches another LTRO of Rs 1 lakh crore, then the overall fiscal help falls by the same amount.
  - The direct expenditure by a government usually includes wage subsidy or direct benefit transfer or payment of salaries, etc — **immediately and necessarily stimulates the economy.** In other words, that **money necessarily reaches the people —** either as **through salary or purchase.**
  - But **measures from RBI include credit easing—** that is, making more money available to the banks so that they can lend to the broader economy — is not like government expenditure.
    - In times of crisis, banks may take that money from RBI and, instead of lending it, may park it back with the RBI.
    - Recently, Indian banks have parked Rs 8.5 lakh crores with the central bank. So in terms of calculations, RBI has given a stimulus of Rs 6 lakh crore. But in reality, RBI has received an even bigger amount back from the banks.
  - Thus, the **declared amount is 10% of GDP, but less than 5% cash outgo is expected.**

Source: PIB

Global Nutrition Report 2020

Why in News

The **Global Nutrition Report 2020** stated that **India is among 88 countries that are likely to miss global nutrition targets by 2025.**

> It also identified the country as one with the **highest rates of domestic inequalities in malnutrition.**

Global Nutrition Targets

> In 2012, the **World Health Assembly** (the decision-making body of the **World Health Organisation**) identified **six nutrition targets to be met by 2025.** These are:
>
> - Reduce stunting by 40% in children under 5.
> - Reduce the prevalence of anaemia by 50% among women in the age group of 19-49 years.
> - Ensure 30% reduction in low-birth weight.
> - Ensure no increase in childhood overweight.
> - Increase the rate of exclusive breastfeeding in the first six months up to at least 50%
> - Reduce and maintain childhood wasting to less than 5%.

India's Status

- India will **miss targets for all four nutritional indicators** for which there is data available, i.e.
  - Stunting among under-5 children,
  - Anaemia among women of reproductive age,
  - Childhood overweight and
  - Exclusive breastfeeding.
- **Stunting and wasting among children**
  - **Data:** 37.9% of children under 5 years are stunted and 20.8% are wasted, compared to the Asia average of 22.7% and 9.4% respectively.
  - **Inequity:**
    - **India is identified as among the three worst countries,** along with Nigeria and Indonesia, for **steep within-country disparities in stunting,** where the levels varied four-fold across communities.
    - For example, Stunting level in Uttar Pradesh is over 40% and their rate among individuals in the lowest income group is more than double those in the highest income group at 22.0% and 50.7%, respectively.
    - In addition, stunting prevalence is 10.1% higher in rural areas compared to urban areas.

- **Overweight and Obesity**
    - **Data: Rate of overweight and obesity continues to rise,** affecting almost a fifth of the adults, at 21.6% of women and 17.8% of men.
    - **Inequity:** There are nearly double as many obese adult females than there are males (5.1% compared to 2.7%).
- **Anaemia**

  One in two women of reproductive age is **anaemic.**
- **Underweight children**
    - Between 2000 and 2016, rates of underweight have decreased from 66.0% to 58.1% for boys and 54.2% to 50.1% in girls.
    - However, this is still **high compared to the average of 35.6% for boys and 31.8% for girls in Asia.**
- **Link Between Malnutrition and Inequity**
    - The report emphasises on the link between malnutrition and different forms of inequity, such as those based on geographic location, age, gender, ethnicity, education and wealth in all its forms.
    - **Inequities in food and health systems increase inequalities in nutrition outcomes** that in turn can lead to more inequity, perpetuating a vicious cycle.
    - Coming at a time the world is battling Covid-19, which has exposed different forms of socio-economic inequities, the report calls for promoting equity to address malnutrition.

Malnutrition

- Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients.
- The term malnutrition covers two broad groups of conditions.
    - One is **'undernutrition'**—which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals).
    - The other is **overweight,** obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes and cancer).
- In April 2016, the United Nations General Assembly adopted a resolution proclaiming the **UN Decade of Action on Nutrition from 2016 to 2025.**
- The **Sustainable Development Goal (SD Goal 2: Zero hunger)** aims to **end all forms of hunger and malnutrition by 2030,** making sure all people – especially children – have access to sufficient and nutritious food all year round.

Global Nutrition Report

- The **Global Nutrition Report** was conceived following the first **Nutrition for Growth Initiative Summit (N4G)** in 2013.
  The first report was published in **2014.**
- It acts as a report card on the world's nutrition—**globally, regionally, and country by country—**and on efforts to improve it.
- It is a multi-stakeholder initiative, consisting of a Stakeholder Group, Independent Expert Group and Report Secretariat.

Source: TH

Annulment of Election of MLA

Why in News

The **Gujarat High Court** has set aside the election of a BJP leader in 2017 on grounds of **"corrupt practice"** and **"manipulation of record".**

Key Points

- The order passed on a petition, filed by the opposing Congress candidate, alleged that the returning officer had illegally rejected 429 votes received via postal ballot.
- The Court held election as void under Section 100(1)(d)(iv) of the **Representation of the People Act, 1951.**
- The observation gains relevance since the number of **rejected votes (429) was more than the victory margin (327).**
- The judgment also held that the **instructions of the Election Commission was not followed,** giving an unfair advantage to the winning candidate and thus materially affecting the election.

Election to the State Legislature

- The **Constitution of India as well as the Parliament of India** has laid down qualifications and disqualifications for being elected as a member of State Legislative Assembly and State Legislative Council.
- We can study about various provisions on the same in the table given below.

Qualifications

Constitutional Provisions

- Citizenship of India.
- Subscription to an oath or affirmation before the person authorised by the Election Commission.
- Age must be not less than **25 years for the legislative assembly** and **not less than 30 years for the legislative council.**
- Need to possess other qualifications **prescribed by Parliament.**

Parliamentary Provisions (RPA, 1951):

- A person to be elected to the legislative assembly must be an **elector for an assembly constituency** in the concerned state.
- A person to be elected to the legislative council must be an elector for an assembly constituency in the concerned state and to be qualified for the governor's nomination, he **must be a resident in the concerned state.**
- He must be a member of a scheduled caste or scheduled tribe if he wants to contest a seat reserved for them. However, a member of scheduled castes or scheduled tribes can also contest a seat not reserved for them.

Disqualifications

Constitutional Provisions:

- Any **office of profit** under the Union or State government (except that of a minister or any other office exempted by the state legislature).
- **Unsound mind** and stands so declared by a court.
- **Undischarged insolvent.**
- Not a citizen of India or has voluntarily acquired the citizenship of a foreign state or is under any acknowledgement of allegiance to a foreign state.
- Disqualified under any law made by Parliament.

Parliamentary Provisions (RPA, 1951):

- Must **not** have been found guilty of certain **election offences or corrupt practices** in the elections.
- Must **not** have been convicted for any offence resulting in **imprisonment for two or more years.** But, the detention of a person under a **preventive detention law is not a disqualification.**
- Must **not fail** to lodge an account of **election expenses** within the time.
- Must **not** have any interest in **government contracts,** works or services.
- Must **not** be a **director** or managing agent nor hold an office of profit in a corporation in which the **government has at least 25% share.**
- Must **not** have been **dismissed from government service** for **corruption** or **disloyalty to the state.**
- Must **not** have been convicted for promoting enmity between different groups or for the **offence of bribery.**
- Must **not** have been punished for preaching and practicing **social crimes** such as untouchability, dowry and sati.

Note: On the question of whether a member has become subject to any of the above disqualifications, the **governor's decision is final.** However, he should obtain the **opinion of the Election Commission and act accordingly.**

Election Petition

- The **Constitution** lays down that no election to the Parliament or the state legislature is to be questioned except by an election petition presented to such authority and in such manner as provided by the appropriate legislature.
- **Since 1966,** the election petitions are triable by **High Courts alone.** Whereas the **appellate jurisdiction** lies with the **Supreme Court alone.**
- **Article 323 B** empowers the appropriate legislature (Parliament or a state legislature) to establish a tribunal for the adjudication of election disputes.
    - It also provides for the exclusion of the jurisdiction of all courts (except the special leave appeal jurisdiction of the Supreme Court) in such disputes.
    - So far, no such tribunal has been established.
- In **Chandra Kumar case (1997),** the clause of the exclusion of **the jurisdiction of all courts in election disputes** was declared **unconstitutional** by the Supreme Court.

- Consequently, if at any time an election tribunal is established, an appeal from its decision lies to the high court.

Source: IE

Aarogya Setu Data Access and Knowledge Sharing Protocol

Why in News

Recently, the **Ministry of Electronics and Information Technology (MeitY)** has issued **'Aarogya Setu Data Access and Knowledge Sharing Protocol, 2020'** laying down guidelines for sharing such data with government agencies and third parties amid **Covid-19 pandemic**.

> The executive order issued came amid **concerns and privacy issues expressed by a number of experts** over the efficacy and safety of the app.

Aarogya Setu App

- It has been launched by the Ministry of Electronics and Information Technology.
- It will help people in identifying the risk of getting affected by the Coronavirus.
- It will also help to calculate risk based on the user's interaction with others, using cutting edge Bluetooth technology, algorithms and **artificial intelligence**.
    - Once installed in a smartphone, the app detects other nearby devices with Aarogya Setu installed.
- The app will help the Government take necessary timely steps for assessing risk of spread of Covid-19 infection and ensuring isolation where required.

Key Points

- **Description:**
    - The issued Protocol intends to ensure that data collected from the app is gathered, processed and shared in an **appropriate way.**
    - The **violation of the protocol** will lead to the penalties under the **Disaster Management Act, 2005.**
    - **MeitY** is designated as the agency **responsible for the implementation** of this Protocol. Further, the app's developer, **National Informatics Centre (NIC)** shall be responsible for collection, processing and managing response data collected by the Aarogya Setu app under this Protocol.
    - Further, it also calls for the **Empowered Group on Technology and Data Management** to review the protocol after six months; unless extended. It will be in **force only for six months** from the date of its issue.
        - **Empowered Group of Ministers** (EGoM) is a Group of Ministers (GoM) of the Union Government appointed by the Cabinet or the Prime Minister for investigating and reporting on such matters as may be specified.
        - These EGoMs are also authorised to take decisions in such matters after investigation.
- **Definition of Individual:**
    - The order states that the data pertaining to individuals is urgently required in order to formulate appropriate health responses for addressing the Covid-19 pandemic.
    - The Protocol clarifies that individuals means persons who are infected or are at high risk of being infected or who have come in contact with infected individuals.
- **Categorisation of Data:**
    - The data collected by the Aarogya Setu app is broadly divided into **four categories—**
        - **Demographic Data:** It includes information such as name, mobile number, age, gender, profession and travel history.
        - **Contact Data:** It is about any other individual that a given individual has come in close proximity with, including the duration of the contact, the proximate distance between the individuals and the geographical location at which the contact occurred.
        - **Self-assessment Data:** It includes the responses provided by that individual to the self-assessment test administered within the app.
        - **Location data:** It comprises the geographical position of an individual in latitude and longitude.
    - The demographic data, contact data, self-assessment data and location data are collectively called as **response data.**

- **Ground for Data Sharing:**
    - The data can be shared only if it is strictly necessary to directly formulate or implement an **appropriate health response.**
    - It can also be shared for **appropriate research work.**
- **Allowed Entities to Access Data:**
    - The **response data containing personal data** may be shared by the app's developer with the Health Ministry, Health Departments of State/Union Territory governments/local governments, National and State Disaster Management Authorities, other ministries and departments of the central and state governments, and other public health institutions of the central, state and local governments.
    - It can also be shared further with any **third parties** that include the Indian universities or research institutions and research entities registered in India.
        Further, the Protocol also empowers above mentioned universities and research entities to share the data with other such institutions.
- **Checks and Balances:**
    - **De-identified Form:** Except for demographic data, the response data must be stripped of information that may make it possible to identify the individual personally. **De-identification is the process used to prevent someone's personal identity from being revealed.**
        - Stripped information must be **assigned a randomly generated ID.**
        - The Protocol also discourages reversal of de-identification and imposes penalties under applicable laws for the time being in force.
    - **Maintenance of the List:** The NIC needs to maintain a list of, the agencies with the time at which data sharing was initiated, the categories of such data and the purpose of sharing the data.
    - **Data Retention:** Any entity with which the data has been shared shall not retain the data **beyond 180 days** from the day it was collected.
- **Concerns:**
    - There is a **need for a Personal data protection law** to back the government's decision to make the app mandatory for everyone.
        The **Personal Data Protection Bill 2019** is in the process of being approved by Parliament.
    - The **clause for data sharing with third parties is open ended** and has a highest possibility of being misused. The stated list of the third parties with which the data can be shared would have been helpful.
    - Further, the **process of de-identifying the data should have been detailed,** given that reversing de-identification was not difficult.

Source: IE

Energy Needs in the Context of Climate Crisis

Why in News

Recently, on the occasion of the **National Technology Day**, **Padma Vibhushan** Dr. Anil Kakodkar conveyed a message to the people of India about **'Dealing with energy needs in the Context of Climate Crisis'.**

- National technology day marks the **anniversary of the Pokhran Nuclear Tests of 1998** that strengthened Indian national security.
    India successfully test-fired its Shakti-1 nuclear missile in operation called Pokhran-II, also codenamed as **Operation Shakti.**
- After the tests, India has entered into many **international agreements** to **promote nuclear commerce for peaceful purposes and to secure energy security** through nuclear energy.
    Nuclear commerce in general refers to a worldwide trade centered on nuclear energy.

Key Points

- **HDI and Energy Consumption:**
    - Dr. Kakodkar highlighted the correlation between **Human Development Index** (HDI) and **Per Capita Energy Consumption** all over the world.
    - As per the statistics, countries with higher HDI have higher per capita consumption of energy.
    - HDI emphasizes that **people and their capabilities should be the ultimate criteria for assessing the development** of a country, not economic growth alone.
- **Energy and Climate Security:**
    However, **developing countries** like India, on the other hand, face the **challenge of choosing between energy security and climate security.** It is important to strike a balance between enhancing the quality of human life as well as keeping a control over the climate crisis.
- **Emission Targets:**
    - Various studies have been conducted on how to control **carbon dioxide (CO2)** emissions, which is a **serious threat** to the environment.
    - As per the report of the **Intergovernmental Panel on Climate Change** (IPCC), "staying below **1.5 degree increase in 2100** will require cuts in **Greenhouse Gases** (GHGs) emissions of 45% below 2010 levels by 2030 and to net zero by 2050".

- **Decarbonisation:**
  - **Zero emission targets** can be easily met by the use of **nuclear energy.** It can also **reduce the cost of deep decarbonisation.**
  - Decarbonising means **reducing carbon intensity,** i.e. reducing the emissions per unit of electricity generated (often given in grams of carbon dioxide per kilowatt-hour).
  - Decarbonisation is **essential** since the demand for electric power from industries/commercial sectors is high.
  - It is possible by **increasing the share of low-carbon energy sources,** particularly **renewables** like **solar**, **hydro** and biomass (**Biofuels**) together with nuclear which can greatly contribute in achieving zero emissions.
- **Comparison:**
  - **Japan** saw the **negative effects of nuclear energy** (bombing at Hiroshima and Nagasaki) yet it has drafted an energy plan, to **generate 20% to 22%** of their total energy consumption as **nuclear energy** and to reduce CO2 emissions by 2030.
  - **Germany** had also planned to **cut GHG emissions by 2020** which has allotted huge amounts of production of renewable energy.
  - **India,** in order to decarbonise the energy consumption, needs a **30-fold increase in renewable energy, 30-fold increase in nuclear energy** and **doubling of thermal energy** which would make **70% of energy carbon free.**
- **Actions Required:**

  Different levels of consumption strategy need to be observed by different countries **based on their HDI** so that they can actively contribute towards low/zero emissions. **For example:**
  - Countries with **high HDI,** should reduce their energy consumption since it may not affect their HDI, much. They should also decarbonise their electricity generation.
  - Countries with **moderate HDI** should focus on non-fossil electricity consumption.
  - Countries with **low HDI** should be able to provide subsidised sources of cleaner energy to their citizens.
- **Concerns and Solutions:**
  - **Management of nuclear waste,** that is produced during energy generation, is a major **concern.**
  - To **tackle** the problem, India adopts the policy of **'Nuclear Recycle Technology'.**
    - Under it, the **nuclear fuel-** Uranium, Plutonium etc, once used for generation of energy, is **reused as a resource** material by the commercial industries to be recycled.
    - **More than 99% of nuclear waste is reused** as the waste management program in India prioritises recycling.

Source: PIB

Smart Meters

Why in News

According to the **Energy Efficiency Services Limited (EESL),** the Smart Metering Programme (SMP) is helping electricity distribution companies (discoms) generate 95% of billing efficiency during the lockdown.

- The discoms using smart meters have seen 15-20% average increase in monthly revenue per consumer.
- EESL, a Public Sector Undertaking (PSU) under the **Ministry of Power,** Government of India, is the designated agency to implement the smart metering programme in India.

Key Points

- **Smart Meter National Programme:**
  - It is being implemented to deploy smart meters across the country.
  - Under this programme, a total of 12,06,435 smart meters have been installed till date to enhance consumer convenience and rationalise electricity consumption.
- **Smart Meters -** Advanced meter devices having the **capacity to collect information about energy, water, and gas usage at various intervals and transmitting the data through fixed communication** networks to utility, as well as receiving information like pricing signals from utility and conveying it to consumers.
- **Innovation:** With electricity demand expected to rise by 79 % in the next 10 years, India is on a path of transforming its energy mix with innovation.
- **Reduction in AT&C Losses:**
  - To meet energy needs, along with enhancing energy production, the nation also needs to cut Aggregate Technical and Commercial (AT&C) losses to below 12% by 2022, and below 10% by 2027.
  - Smart meters minimize human intervention in metering, billing and collection, and help reduce theft by identifying loss pockets.
- **Smart Meters are part of the Smart Grid:**
  - Smart grid includes the creation of Advanced Metering Infrastructure (AMI).
  - **AMI** describes the whole infrastructure from **Smart Meter to a two way-communication** network to control center equipment and applications that enable the gathering and transfer of energy usage information in near real-time.

Benefits of Smart Meters

- **Operational Benefits:** It incentivises energy conservation by checking data-entry errors and billing efficiencies, and cutting the costs of manual meter reading through a web-based monitoring system.
- Smart meters deployed **can also switch to prepaid mode.**
- **Benefits to Customers**
    - It enhances consumer satisfaction through **better complaint management, system stability, reliability and transparency.**
    - The new meters have the Time of Day (ToD) tariff feature which allows consumers to reschedule electricity usage to the off-peak hours and reduction in the bill amount significantly.

Challenges

- **High Capital Costs:** A full scale deployment of smart meters requires expenditures on all hardware and software components,network infrastructure and network management software, along with costs associated with the installation and maintenance and information technology systems.
- **Integration:** Samrt Meter is a complex system of technologies that must be integrated with utilities' information technology systems, including Customer Information Systems (CIS), Geographical Information Systems (GIS), Outage Management Systems (OMS),Mobile Workforce Management (MWM), Distribution Automation System (DAS), etc.
- **Standardization:** Interoperability standards need to be defined, which set uniform requirements for technology, deployment and general operations.
- **Release of Radiation:** Unlike the electronic meter, the smart meter allows ‘communication’ among the consumer and the meter, hence there is probability of release of radiation.

Source:TH

Portable Device to Detect Adulteration in Milk

Why in News

Recently, researchers at the Indian Institute of Science (IISc), Bengaluru have developed a **low-cost device to detect the presence of melamine** (adulterate) in milk and dairy products.

Key Points

- The techniques currently used to detect the presence of melamine are time-taking and typically require expensive and sophisticated equipment and highly trained personnel.
- With the help of a newly developed **fluorometer device**
    - Researchers were able to **detect up to 0.1 parts per million (ppm)** of melamine in water and milk, which is much lower than the acceptable limit of 1 ppm.
    - The detection also took **just four minutes.**
- **Functioning:**
    - Copper nanoparticles are added to the specified DNA (double stranded) template of the milk and the sample is tested using the fluorometer.
    - Researchers observed that the **presence of melamine in the sample disrupted the synthesis of copper nanoparticles** on **double stranded DNA** and caused a **reduction in the intensity of fluorescence,** which was detected by the fluorometer.

        These copper nanoparticles possess a **property called fluorescence** in which a material emits light of a different wavelength (colour) when a particular wavelength of light falls on it.
- **Fluorometer:**
    - It is a device used **to measure parameters of visible spectrum fluorescence** i.e. intensity and wavelength.
    - These parameters are used to identify the presence and the amount of specific molecules in a medium. E.g
        - The fluorometer can be used to detect **biomolecules and proteins** using the copper nanoparticles.
        - The device can also be modified to detect other substances such as **lead and mercury.**
    - Fluorometer can also be deployed as a **screening tool for environmental and food quality testing.**
- Earlier, **Food Safety and Standards Authority of India (FSSAI)** had imposed a **ban on all milk and milk products from China** in September 2008.

    In April 2019, **FSSAI had recommended the extension of the ongoing ban** till labs at Indian ports are equipped for melamine testing.
- India is the **world's largest producer and consumer of milk.**

Melamine

- Melamine is an **organic base chemical** most commonly found in the form of **white crystals rich in nitrogen.**
- It is widely used in plastics, adhesives, countertops, dishware, whiteboards.

- **Used as adulterate:**
  - To increase milk volume, water is added, as a result of this dilution the milk has a lower protein concentration.
  - Companies normally check the protein level through a test measuring nitrogen content.
  - The addition of melamine increases the nitrogen content of the milk and therefore its apparent protein content.
- Melamine poisoning can lead to **kidney-related diseases and also kidney failure.**

Source: IE

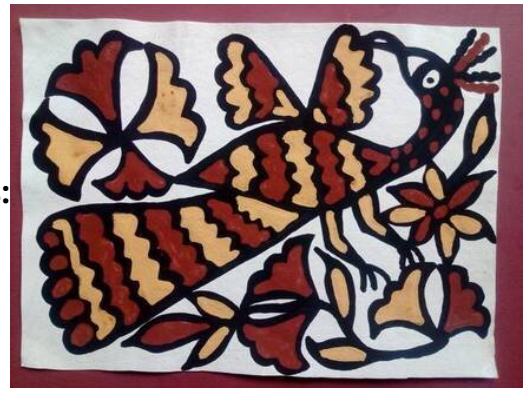
GI Tag to Two Products

Why in News

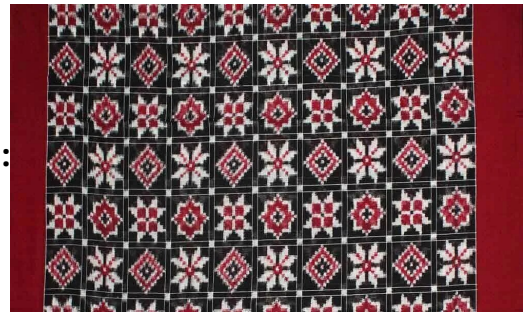
Recently, **Jharkhand's Sohrai Khovar painting** and **Telangana's Telia Rumal** have been given the **Geographical Indication (GI) tag.**

Key Points

- **Sohrai Khovar Paintings:**



  - The Sohrai Khovar painting is a **traditional and ritualistic mural art.**
    A **mural** is any piece of artwork painted or applied directly on a wall, ceiling or other permanent surfaces.
  - It is being practised by local tribal women during local harvest and marriage seasons using **local, naturally available soils of different** colours in the area of **Hazaribagh district of Jharkhand.**
  - Style features a **profusion of lines, dots, animal figures and plants,** often representing religious iconography i.e.visual image and symbols.
  - It has been **painted on the walls of important public places** in Jharkhand, such as the Birsa Munda Airport in Ranchi.

- **Telia Rumal:** 
    - Telia Rumal cloth **involves intricate handmade work with cotton loom** displaying a variety of designs and motifs in three particular lours — red, black and white.
    - It is an art of Ikat tradition using **natural vegetable dyes.**
        Ikkat is a dyeing technique used to pattern textiles .
    - **Uniqueness:** Telia Rumal can only be **created using the traditional handloom process** and not by any other mechanical means as otherwise, the very quality of the Rumal would be lost.
    - The telia fabrics were **used by nobles** (Nizam's dynasty) in Hyderabad. The fabric was exported to Persian Gulf, Middle East, Aden, East Africa, Singapore and Burma.

Geographical Indication Status

- GI is an indication **used to identify goods having special characteristics originating from a definite geographical territory.**
- The **Geographical Indications of Goods (Registration and Protection) Act, 1999** seeks to provide for the registration and better protection of geographical indications relating to goods in India.
    - The Act is administered by the Controller General of Patents, Designs and TradeMarks- who is the Registrar of Geographical Indications.
    - The **Geographical Indications Registry is located at Chennai.**
- The registration of a geographical indication is **valid for a period of 10 years.** It can be renewed from time to time for a further period of 10 years each.
- It is also a **part of the World Trade Organisation's Trade-Related Aspects of Intellectual Property Rights (TRIPS).**
- Recent Examples: **Tirur Vetilla** (Kerala), **Dindigul Lock and Kandangi Saree** (Tamil Nadu), **Odisha Rasagola** etc.

Source:TH

"RESTART" Conference

Why in News

A digital conference on **'Rebooting the Economy through Science, Technology, and Research Translations (RESTART)'** was organised on the occasion of the **National Technology Day (May 11).**

- The conference was organized by the **Technology Development Board (TDB),** an autonomous organization of the Department of Science and Technology (DST) along with the **Confederation of Indian Industry (CII).**
- **CII** is a non-government, not-for-profit, industry-led and industry-managed organization.

Key Outcome

- **Strengthen Medicines & Medical Technologies:**
  - Experts are of the opinion that the **Covid-19** pandemic is a great opportunity for R&D and needs to be used for strengthening **'Medicines & Medical Technologies for better preparedness to face future Pandemics'.**
  - The crisis has unfolded some of the best medical advancements and innovations, like drug discovery, vaccines, and diagnostic tools, etc. as well as ways to preserve electronic health records.

    Example: Aarogya Setu app, BiPAP ventilators, **use of combination of drugs to** treat Covid-19.
  - Technologies such as **appropriate face masks** and best practices like **physical distancing** need to be made a part of life.
- **Use of Advanced Materials:**
  - Novel materials such as smart materials, special purpose alloys, engineering polymers & blends, graphene, composites, etc. **will be the key to revamping the industry's product lines** in the future.
  - To tackle pandemics like Covid-19, research **needs to quickly switch over from being capital intensive to knowledge-intensive and should be brought closer to industry.**
- **Advanced Manufacturing Technologies for Sustainable Future**
  - In addressing short term and long-term challenges, advanced technologies provide avenues to the industry to re-stimulate innovation, sustainability and employment.
  - Covid-19 has forced the Industries to go for **digital transformation.**
  - The world is moving towards **mass customization and mass specialization** today, and technology like **3-D printing** plays a major role in it.
- **Global Innovation & Technology Alliance:**

  In today's pandemic scenario, virtual collaboration is the key to connect globally to fight against the common challenge of Covid-19, and collaboration between countries must continue with much vigour.

National Technology Day

- India observes its National Technology Day on **11th May** every year.
  It is the day India successfully tested nuclear bombs in Pokhran on May 11, 1998.
- It was first observed in 1999, and **aims to commemorate the scientific and technological achievements of Indian scientists, engineers.**
- It is organised every year by the Technology Development Board of India. The focus this year is **'Rebooting the economy through Science and Technology.'**

Key Terms

- **Capital intensive and Knowledge intensive**
  - The term "capital intensive" refers to business processes or industries that require large amounts of investment to produce a good or service.
  - Knowledge Intensive includes reliance on professional knowledge for business services. Here the workers need a lot of education, skills, and experience in order to work effectively.
- **Mass customization:** It allows a customer to design certain features of a product while still keeping costs closer to that of mass-produced products.

Source: PIB

CHAMPIONS Portal for MSME

Why in News

Recently, the **Ministry of Micro, Small and Medium Enterprises** (MSME) has launched **CHAMPIONS portal.**

Key Points

- The CHAMPIONS stands here for **Creation and Harmonious Application of Modern Processes for Increasing the Output and National Strength.**

- It is a **technology driven Control Room-Cum-Management Information System** which utilises **modern information and communication technology** (ICT) **tools.**
    - In addition to ICT tools including telephone, internet and video conference, the system is enabled by **Artificial Intelligence**, **Data Analytics** and **Machine Learning.**
    - It is also fully **integrated** on a real time basis with the Government of India's main grievances portal **Centralized Public Grievances Redress and Monitoring System (CPGRAMS)** and the Ministry's other web based mechanisms.
    - The entire ICT architecture is created in house with the help of the **National Informatics Centre.**
- A network of control rooms is created in the **Hub & Spoke Model.**
    - The **Hub** is situated in **New Delhi** in the Secretary MSME's office.
    - The **spokes** will be in the **States** in various offices and institutions of the Ministry.
- **Aim:** To assist Indian MSMEs march into the big league as National and Global CHAMPIONS by **solving their grievances and encouraging, supporting, helping and hand holding** them.
- **Three basic objectives:**
    - **Support:** To help the MSMEs in this difficult situation in terms of finance, raw materials, labour, permissions, etc.
    - **Explore:** To help them capture new opportunities like manufacturing of medical accessories and products like Personal Protection Equipments (PPEs), masks, etc.
    - **Promote:** To identify the sparks, i.e., the bright MSMEs who can not only withstand but can also become national and international champions.

Source: PIB

Covid Mat

Why in News

Recently, the Kerala State Coir Corporation announced that it will launch **'Covid Mat' (disinfecting floor mat).**

Key Points

- This is an attempt to prevent pathogens from entering houses, offices, shops, and institutions via feet/footwears.

    The mat will sanitise the feet to prevent the spread of **Covid-19** virus.

- Two types of Covid Mat will be launched — one for households and other for institutions.
- The Sree Chitra Tirunal Institute for Medical Sciences and Technology (Kerala) is involved in testing the disinfectant to ensure that it would not create any skin problems and other issues.
- **Functioning:**
    - The concept is to put **fibre mat/BC20 mat** in a holding tray made of rubber or plastic. The disinfectant will be poured over the mat until saturated.
    - When a person, barefoot or wearing shoes, steps on the mat, the disinfectant will sanitise it.
    - The water and disinfectant will have to be replaced every three days.
- **BC20 mat:** These are the Bio Combination mats i.e. made through biological/chemical substances.
- The new product is set to give a boost to the coir industry reeling under the impact of Covid-19.

    The commercial production of COVID mats will generate sufficient jobs for weavers.

Source:TH
