

**INDIAN ECONOMY****World Milk Day**

Every year, the first day of June is observed as World Milk Day. On the occasion, the Ministry of Fisheries, Animal Husbandry & Dairying announced the launch of the Gopal Ratna Awards and integration of e-Gopala App with UMANG platform.

**UMANG Platform**

- Unified Mobile Application for New-age Governance (UMANG) Mobile App is a unified, secure, multi-channel, multi-platform, multi-lingual, multi-service mobile app launched under the Digital India initiative of the Ministry of Electronics and Information Technology (MeitY) in 2017.
- It is a unified application that can be used to avail a number of pan India e-government services such as: Filing income tax, Employees Provident Fund Organization (EPFO) services, Aadhar, Pension, ePathshala, e- Land Records, Crop Insurance etc.

**Key Points****About:**

World Milk Day was established by the Food and Agriculture Organisation (FAO) in 2001. The day is intended to provide an opportunity to bring attention to activities that are connected with the dairy sector. FAO is one of the specialised agencies of the United Nations that leads international efforts to defeat hunger.

**2021 Theme:** Theme will focus on Sustainability in the dairy sector with messages around the environment, nutrition and socio-economics. In doing so it will reintroduce dairy farming to the world.

**Gopal Ratna Awards:**

- They are National Awards for the Cattle and Dairy sector, the awards have been launched to promote the best herd of Indigenous Breed and practicing best management practices and it will be given in three categories:
  1. Best Dairy farmer.
  2. Best Artificial Insemination Technician (AIT).
  3. Best Dairy Cooperative/ Milk producer Company/ Farmers Producer Organisation.

**e-Gopala (Generation of wealth through Productive Livestock) App:**

- It is a comprehensive breed improvement marketplace and information portal for direct use of farmers.
- It provides solutions on the aspects of:
  1. Managing livestock including buying and selling of disease-free germplasm in all forms (semen, embryos, etc.).
  2. Availability of quality breeding services (Artificial Insemination, veterinary first aid, vaccination, treatment, etc.).

**Other Initiatives Related to the Dairy sector:**

- National Action Plan on Dairy Development 2022: It seeks to increase milk production and double the income of dairy farmers.
- National Animal Disease Control Programme & National Artificial Insemination Programme: It was launched to control and eradicate the Foot & Mouth Disease (FMD) and Brucellosis amongst the livestock in the country.
- Pashu-Aadhar: It is a unique ID on a digital platform for traceability for the animals.
- Rashtriya Gokul Mission: It was launched in 2019 for setting up of 21 Gokul Grams as Integrated Cattle Development Centres.

**Operation Flood (White Revolution)****About:**

- The White Revolution in India was the brainchild of Dr Verghese Kurein. Under him many important institutions were established like the Gujarat Cooperative Milk Marketing Federation Ltd and the National Dairy Development Board (NDDB).
- The White Revolution was started by the NDDB in the 1970s and the bedrock of the revolution has been the village milk producers' cooperatives.

**Phases of the Revolution:**

- **Phase I:** It started from 1970 and lasted for 10 years i.e. till 1980. This phase was financed by the sale of butter oil and skimmed milk powder donated by the European Union through the World Food Program.
- **Phase II:** It lasted for five years from 1981 to 1985. During this phase, the number of milk sheds increased from 18 to 136, milk outlets were expanded to about 290 urban markets, a self-

sustaining system was set up that included 4,250,000 milk producers spread across 43,000 village cooperatives.

- **Phase III:** It also lasted for almost 10 years i.e. 1985-1996. This phase enabled the dairy cooperatives to expand and gave a finishing touch to the programme. It also strengthened the infrastructure required to procure and market increasing volumes of milk.

**Objectives:**

- Increase milk production ("a flood of milk").
- Increase rural incomes.
- Reasonable prices for consumers.

**Significance:**

- It helped dairy farmers direct their own development, placing control of the resources they create in their own hands.
- It has helped India become the largest producer of milk in the world in 2016-17.
- Currently, India is the world's largest milk producer, with 22% of global production.

**INTERNAL SECURITY****Positive Indigenisation List**

The Ministry of Defence (MoD) has notified the second negative import list, now renamed as the 'positive indigenisation list' of 108 items. The 'First Negative Indigenisation' List comprising 101 items was notified in August 2020.

**Key Points****About the Second Positive Indigenisation List:**

- **Procurement:** All the 108 items will now be procured from indigenous sources as per provisions given in Defence Acquisition Procedure (DAP) 2020.
- **Timeline:** It is planned to be implemented progressively with effect from December 2021 to December 2025.
- **Items Included:** It comprises complex systems, sensors, simulator, weapons and ammunitions like Helicopters, Next Generation Corvettes, Airborne Early Warning and Control (AEW&C) systems, Tank Engines, Medium Power Radar for Mountains, MRSAM (Medium Range Surface to Air Missile) Weapon Systems and many more such items to fulfil the requirements of Indian Armed Forces.
- **Potential Benefits:**
  1. It will give a boost to indigenisation with active participation of public and private sector for fulfilling the twin objectives of achieving self-reliance (Atmanirbhar Bharat) and promoting defence exports.
  2. Import substitution of ammunition which is a recurring requirement has been given special focus.
  3. Not only does the list recognise the potential of the local defence industry, it will also invigorate impetus to domestic Research & Development by attracting fresh investment into technology and manufacturing capabilities.
  4. It also provides an excellent opportunity for 'start-ups', as Micro, Small, and Medium Enterprises (MSMEs) will get a tremendous boost from this initiative.

**Other Initiatives Taken to Boost Domestic Production of Defence Equipment:**

- **Increased Capital Acquisition Budget (CAB) for Domestic Sector:** The Ministry of Defence has decided to earmark around 64% of its modernisation funds under the capital acquisition budget for 2021-22, a sum of Rs 70,221 crore, for purchases from the domestic sector. For FY 2020-21, the capital budget allocation for domestic vendors was made at 58%, an amount of Rs. 52,000 crore.
- **Defence Industrial Corridors:** India has inaugurated two defence industrial corridors, one in Tamil Nadu and the other in Uttar Pradesh to boost the flagship "Make in India" programme that in turn would attract investment as well as encourage employment generation. The Central government has increased the Foreign Direct Investment (FDI) limit in the defence sector from 49 to 74% under automatic route and beyond 74% through the government route.
- **Corporatization of the Ordnance Factory Boards:** This was announced for better management, so that they can be listed on the stock market and people can buy their shares.
- **Defence India Startup Challenge:** DISC aims at supporting Startups/MSMEs/Innovators to create prototypes and/or commercialize products/solutions in the area of National Defence and Security. It has been launched by the Ministry of Defence in partnership with Atal Innovation Mission.

- SRIJAN Portal: It is a one stop shop online portal that provides access to the vendors to take up items for indigenization.

**Defence Acquisition Procedure (DAP) 2020**

- It enables the notification of a List of Weapons or Platforms that will be banned for import.
- It focuses on Foreign Direct Investment (FDI) in defence manufacturing and indigenization of the manufacturing prices.
- It also introduces several new ideas such as the need to incorporate artificial intelligence in platforms and systems, use of indigenous software in defence equipment and 'innovation' by Start-ups and MSMEs as a new category of defence acquisition.
- It includes following procurement categories: Buy (Indian – Indigenously Designed Developed and Manufactured), Buy (Indian), Buy and Make (Indian), Buy (Global - Manufacture in India) and Buy (Global). It increases the Indigenous Content (IC) requirement for all projects from 40% to 50% earlier, depending on the category, to 50% to 60%. Only under procurement through Buy (Global), foreign vendors can have 30% IC from Indian companies.

**Way Forward**

- The Ministry of Defence, Defence Research and Development Organisation (DRDO) and Service Headquarters shall take all necessary steps, including hand holding of the industry, to ensure that the timelines mentioned in the list are met.
- It will thereby facilitate an environment for Indian defence manufacturers to create world class infrastructure, assist in the government's 'Make in India' vision to make India self-reliant in defence and develop the capabilities for defence export in the near future.
- The Ministry of Defence is also expected to put out the final version of the 'Defence Production and Export Promotion Policy (DPEPP) 2020'.
- DPEPP is envisaged as an overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.

**INTERNATIONAL RELATION****India-Australia Meeting**

Recently, India and Australia reviewed cooperation in the sectors of agriculture and defence.

**Key Points****In the field of Agriculture:**

- The India-Australia Grains Partnership aims to use Australia's expertise in post harvest management to strengthen rural grain storage and supply chains so as to reduce losses and wastage. National Institute of Agricultural Marketing will be the nodal organisation from India.
- The flagship program of National Innovation for Climate Resilient Agriculture (NICRA) was mentioned and collaboration could be set up with the research organisations of Australia.
- NICRA is a network project of the Indian Council of Agricultural Research (ICAR) launched in February 2011.
- The project aims to enhance the resilience of Indian agriculture to climate change and climate vulnerability through strategic research and technology demonstration.
- The research on adaptation and mitigation covers crops, livestock, fisheries, and natural resource management.

**On Defence Cooperation:**

- Participation of Australia in Exercise Malabar. After the Ladakh confrontation, India extended the invitation to Australia and an Australian contingent participated in the 2020 Malabar exercises.
- Various bilateral defence cooperation initiatives like AUSINDEX, Mutual Logistic Support Arrangement (MLSA) and Defence Science & Technology Implementing Arrangement (DSTIA) were reviewed.
- Expressed an intent to convene the 2+2 Ministerial Dialogue at the earliest. 2+2 Ministerial Dialogue is a format of dialogue where the defense and foreign ministers meet with their counterparts from another country. It is the highest-level institutional mechanism between the two countries.

**India-Australia Ties:**

- On the Covid-19 front, Australia has sent oxygen, ventilators and Personal Protective Equipment (PPE) kits to India as part of an immediate support package.
- The trade Ministers of India, Japan and Australia have formally launched the Supply Chain Resilience Initiative (SCRI).

- Recently, India-Australia Circular Economy Hackathon (I-ACE) was organised.
- Both countries upgraded their relationship to a Comprehensive Strategic Partnership and signed multiple defence agreements in 2020.
- India and Australia co-operate in various multilateral fora.
- 1. Australia supports India's candidature in an expanded UN Security Council.
- 2. Both India and Australia are members of the Quad, Commonwealth, Indian Ocean Rim Association (IORA), ASEAN Regional Forum, Asia Pacific Partnership on Climate and Clean Development, and have participated in the East Asia Summits.
- 3. Both countries have also been cooperating as members of the Five Interested Parties (FIP) in the World Trade Organization context.
- 4. Australia is an important player in Asia Pacific Economic Cooperation (APEC) and supports India's membership of the organisation.
- A Civil Nuclear Cooperation Agreement between the two countries was signed in September 2014.
- The Mutual Legal Assistance Treaty (MLAT) and the Extradition Treaty between India and Australia, which were signed in June 2008, have been ratified by both the Governments.
- Both sides are also likely to explore other options such as a closer intelligence relationship, and in other areas such as high technology and outer space.

### **SOCIAL ISSUE**

#### **PM-CARES for Children Scheme**

The government has announced a special "PM-CARES for Children" scheme for all those orphaned due to Covid-19.

#### **Key Points**

#### **About the 'PM-CARES for Children' Scheme:**

**Eligibility:** Children who have lost both parents or their lone surviving parent or their legal guardian or adoptive parent due to Covid-19. There are a total 577 Covid-19 orphans identified across the country. Also, there has been a rise in cases of child trafficking.

#### **Features of the Scheme:**

- **Corpus of Rs. 10 Lakh:** A corpus of Rs. 10 lakh will be allocated to each of these children from the PM CARES fund. This corpus will be used to give a monthly stipend from 18 years of their age, for the next five years and on reaching the age of 23 years, he or she will get the corpus amount as one lump-sum for personal and professional use.
- **Education to the Children:** The education expenses of younger children will be supported by way of admission to Kendriya Vidyalayas and private schools up to higher secondary level. These children will also be supported during their higher education through either a scholarship equivalent to the tuition fees or educational loans where the interest on the loan will be paid by the PM-CARES fund.
- **Health Insurance:** All children will be enrolled as a beneficiary under Ayushman Bharat Scheme with a health insurance cover of Rs. 5 lakh. The premium amount will be paid by PM-CARES till a child turns 18.

#### **PM-CARES Fund:**

- The government has set up the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM-CARES Fund) to deal with any kind of emergency or distress situation like posed by the Covid-19 pandemic.
- The Fund is a public charitable trust with the Prime Minister as its Chairman. Other Members include Defence Minister, Home Minister and Finance Minister.
- The Fund enables micro-donations as a result of which a large number of people will be able to contribute with the smallest of denominations.
- It will strengthen disaster management capacities and encourage research on protecting citizens.
- Contribution to PM - CARES Fund Qualifies as CSR (Corporate Social Responsibility) Expenditure.

#### **Bal Swaraj COVID-Care**

- The NCPCR has devised an online tracking portal "Bal Swaraj (COVID-Care)" for children in need of care and protection.
- This has been created with a purpose for online tracking and digital real time monitoring mechanism of children who are in need of care and protection.

### **ENVIRONMENT & BIODIVERSITY**

#### **State of Finance for Nature Report**

The UN report, titled State of Finance for Nature, analyzes the investment flow in nature-based solutions (NbS) and identifies the future investment needed to meet the climate change, biodiversity and land degradation targets (set in three Rio Conventions).

**Key Points**

**About the 'Nature-based solutions (NbS)':**

- The NbS refers to sustainable management and use of nature to tackle socio-environmental challenges, which range from disaster risk reduction, climate change and biodiversity loss to food and water security as well as human health.
- NbS creates harmony between people and nature, enables ecological development and represents a holistic, people-centred response to climate change. Thus, NbS underpin the Sustainable Development Goals, as they support vital ecosystem services, biodiversity, and access to fresh water, improved livelihoods, healthy diets and food security (organic agriculture) from sustainable food systems. Also, NbS are an essential component of the overall global effort to achieve the goals of the Paris Agreement on Climate Change.

**Key Findings of Report:**

• **Current Investments:**

1. Approximately USD 133 billion currently flows into nature-based solutions annually (using 2020 as base year). It comprises about 0.10% of global gross domestic product.
2. The funds flow to protect biodiversity and landscapes, mixed with activities such as sustainable forestry.
3. NbS finance is much smaller in scale than climate finance and relies more heavily on public finance.

• **Public vs Private Funds:**

1. Public funds make up 86% and private finance 14% of these investments.
2. The public financial services providers included the government, development finance institutions (DFIs), environmental/climate funds.

• **Top Spenders:**

1. Public sector spending for the same is dominated by the United States and China, followed by Japan, Germany and Australia.
2. Countries such as Brazil, India and Saudi Arabia are likely spending large amounts of money too, but they do not report internationally comparable data.

**Recommendations:**

- **More Investments:** Public and private actors will need to scale up their annual investments by at least four times to meet future climate, biodiversity and land degradation targets. Annual investment should reach USD 536 billion by 2050.
- **Enhancing Cash Flows for Investment:** Reforming taxes, repurposing agricultural policies and trade-related tariffs and harnessing the potential of carbon markets.
- **Smart Investments:** Restoration of natural vegetation and afforestation are essential to meet international targets. The most important component of annual investment needs is the cost of establishing new forests, as it accounts for 80% of total costs.
- **Making Nature-based Solution a part of Government Policies:** Supporting inclusion of nature-based solutions in current nationally determined contribution revisions, national adaptation plans and domestic sectoral legislation. Aligning private finance with public policy for scaling up capital flows to nature to a level that can meet the targets of the three Rio Conventions.
- **System to Track Finances:** There is a need for a comprehensive system and framework for labelling, tracking, reporting and verifying the state of finance for NbS. This would improve data comparability and quality as an input to future decision-making. Further, there is a need to increase positive financial flows by de-risking & incentivizing and reducing harmful financial flows.

**IMPORTANT FACTS FOR PRELIM**

**AmbiTAG**

Recently, Indian Institute of Technology (IIT) Ropar, Punjab has developed a first-of-its-kind IoT (Internet of Things) device – AmbiTag that records real-time ambient temperature during the transportation of perishable products, vaccines and even body organs and blood.

**Key Points**

**About AmbiTAG:**

- This is shaped as a USB (Universal Serial Bus) device.
- It is India's first indigenous temperature data logger for cold chain management.

- It continuously records the temperature of its immediate surroundings from -40 to +80 degrees in any time zone for a full 90 days on a single charge. Most of the similar devices available in the international market record data only for a duration of 30- 60 days.
- It generates an alert when the temperature goes beyond a pre-set limit.
- The recorded data can be retrieved by connecting the USB with any computer.

**Significance:**

- Besides perishable items including vegetables, meat and dairy products, it can also monitor the temperature of animal semen during transit.
- The device will be made available to all companies involved in Covid-19 vaccine transportation from production facilities to the last mile vaccination centers in the country.
- It is a push towards Atmanirbhar Bharat as such devices are being imported by India in a massive quantity from other countries such as Singapore, Hong Kong, Ireland, and China.

**2. Nano Urea Liquid: IFFCO**

Recently, the Indian Farmers Fertiliser Cooperative Limited (IFFCO) introduced the world's first Nano Urea Liquid for farmers across the world.

**Key Points****About:**

- It is a nutrient (liquid) to provide nitrogen to plants as an alternative to the conventional urea.
- It is developed to replace conventional urea and it can curtail the requirement of the same by at least 50%. It contains 40,000 mg/L of nitrogen in a 500 ml bottle which is equivalent to the impact of nitrogen nutrient provided by one bag of conventional urea.
- Conventional urea is effective 30-40% in delivering nitrogen to plants, while the effectiveness of the Nano Urea Liquid is over 80%. Its effectiveness has been tested in over 11,000 farmers' fields for 94 crops like rice and wheat. An average 8% increase in yield has been witnessed.

**Developed At:**

- It has been indigenously developed at Nano Biotechnology Research Centre, Kalol, Gujrat in line with Atmanirbhar Bharat and Atmanirbhar Krishi. India is dependent on imports to meet its urea requirements.

**Significance:****Improves Plant Nutrition:**

- It has been found effective and efficient for plant nutrition which increases the production with improved nutritional quality.
- It will boost a balanced nutrition program by reducing the excess use of Urea application in the soil and will make the crops stronger, healthier and protect them from lodging effect. Lodging is the bending over of the stems near ground level of grain crops, which makes them very difficult to harvest, and can dramatically reduce yield.

**Improves Environment:**

- It will also have a huge positive impact on the quality of underground water, a very significant reduction in global warming with an impact on climate change and sustainable development.

**Increase Farmers' Income:**

- It is easy on the pocket of farmers and will be effective in increasing farmers' income. It will also significantly bring down the cost of logistics and warehousing.

**DAILY ANSWER WRITING PRACTICE**

**Qns. How will the melting of Himalayan glaciers have a far-reaching impact on the water resources of India.**

**Ans:**

**Introduction**

The Himalayas is referred to as the Third Pole. Being the major source of water for the rivers, these glaciers are the lifeline for one-third of the population across the globe.

However, the rapid melting of Himalayan glaciers has put enormous pressure on the weather resource of India.

**Body****Effect of Melting Himalayan Glaciers**

- **Frequent Flooding & Droughts:** Himalayan glaciers provide for a vital regional lifeline to over two billion people through 10 main rivers that originate from the glaciers.

- Given that there are 8,790 glacial lakes in the region, rapid melting of glaciers could lead to floods from glacial lake outbursts. For example in Utrakhand flash floods in 2013 and 2021.
- Glacial melt could result in more streamflow due to high glacial melt but for a short time, after which the flow would start reducing and result in conditions of droughts.
- **Impacting Monsoon:** The Himalayas exerts a significant influence on seasonal shifts in the monsoon circulation and the distribution of rainfall over India.
- The south-west monsoon accounts for 70% of the annual rainfall in India.
- According to IPCC projections, the melting of glaciers could indicate a likely increase in summer rainfall by 4-12% in the near term and 4-25% in the long term.
- Changing monsoon patterns, including increased severity and frequency of storms, could lead to mountain hazards that may destroy critical infrastructure.
- **Destabilize Flow of Indian Rivers:** Increasing glacial melts could destabilize Indian rivers by changing their streamflow.
- The Indian rivers like Ganga and the Brahmaputra are partly fed by glacier melt and partly mainly monsoon-fed rivers
- With the impact on monsoon, this will hamper agriculture that accounts for the largest share of water usage.

### Conclusion

According to a recent IPCC report the Himalayan glaciers are melting and receding at an alarming rate and if adequate steps are not taken to limit global warming, two-thirds of glaciers in the Hindu Kush Himalayas could melt by 2100.

### DAILY QUIZ

Q1. Consider the following statements about the Central Adoption Resource Authority (CARA):

1. It is a statutory body of Ministry of Women & Child Development.
  2. It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.
- It has allowed individuals in a live-in relationship to adopt children from and within India.

Which of the given above statements is/are correct?

- (a) 1 and 3 only      (b) 2 and 3 only      (c) 1 and 2 only      **(d) 1, 2 and 3**

Q2. With reference to 'National Programme on Advanced Chemistry Cell (ACC) Battery Storage', consider the following statements:

1. It has been designed by converging, consolidating and subsuming all ongoing as well as newly proposed activities/programmes related to renewable energy.
2. The Department of Heavy Industry is the national executing agency of this scheme.

Which of the given above statements is/are correct?

- (a) 1 only      **(b) 2 only**      (c) Both 1 and 2      (d) Neither 1 nor 2

Q3. Consider the following statements:

1. The NITI Aayog was formed via a resolution of the Union Cabinet on January 1, 2015.
  2. The Governing Council of NITI comprises Chief Ministers of all States and Lt. Governors of Union Territories (UTs) along with Governors of the states being administered under President's rule.
- Which of the given above statements is/are correct?

- (a) 1 only**  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

Q4. What is "Iron Dome", sometimes seen in the news?

- (a) A defence collaboration between India and Israel  
(b) India's indigenous anti-missile programme  
(c) An American anti-missile system  
**(d) An Israeli air defence system**

Q5. Who is considered as the father of Indian Green Revolution?

- (a) Norman E. Borlaug  
(b) Verghese Kurian  
**(c) M.S. Swaminathan**  
(d) Durgesh Patel