

GOVERNANCE- WELFARE SCHEMES, E-GOVERNANCE, SERVICES ETC.
Government to launch Mahua-based Alcoholic Drink

The central government is set to launch a mahua-based alcoholic beverage 'Mahua Nutribeverage' in the market for the first time.

- The Beverage will come in **six fruit-based flavours** and will be available at the price of Rs. 700 for a 750ml bottle.
- This is the **first time** that the **Ministry of Tribal Affairs** is getting into bottling and sale of alcoholic beverages.

Key Points

- The beverage has a **high nutritional value** and **relatively low alcohol** content (5%).
- It has been developed by the **Indian Institute of Technology (IIT) Delhi** in collaboration with the **Tribal Cooperative Marketing Development Federation of India (TRIFED)**.
 - TRIFED is a **national-level apex organization** functioning under the administrative control of the Ministry of Tribal Affairs.
- TRIFED has signed a memorandum with the **National Research Development Corporation (NRDC)** to undertake the assignment of technology transfer to the suitable entrepreneurs for production and marketing of the beverage.
- The marketing is being undertaken under the **Van Dhan Vikas Karyakram**.
 - It is **Tribal Affairs Ministry's value-addition scheme** which was launched in **Chhattisgarh's Bijapur in 2018**.
 - The nation-wide programme earmarked ₹ 500-600 crore for training tribal clusters to add value to their produce and sell it in a packaged format, aiming to increase their income manifold.
 - The products marketed under the scheme include only those that need **primary-level processing**, including handicrafts, textiles, food items, jams and pulps and jewellery.
- Besides mahua, other tribal staples such as **tamarind and amla** will be de-seeded and brought to the market in the form of candies and jams.

Mahua

- Its scientific name is **Madhuca indica**.
- It is a prominent forest tree in tribal areas of **Bastar (Chhattisgarh)** and plays an important role in the rural economy.
- The mahua flowers are a **rich source of sugars** and are said to contain **vitamins, minerals and calcium**.
- The flowers are fermented and distilled yielding spirituous liquor also known as '**country beer**'.
- An **estimated 90% of the annual production** of Mahua flower is used in the process of brewing beverages.

SCIENCE AND TECHNOLOGY
National Mission on Interdisciplinary Cyber Physical Systems

The **Indian Institute of Technology (IIT) Ropar, Punjab** is setting up a **Sectoral Application Hub in Technologies for Agriculture and Water**.

Key Points

- The hub is being set up under the **National Mission on Interdisciplinary Cyber Physical Systems (NMICPS)** and is granted by Union Government's **Science and Engineering Research Board**.
- The application hub will bring solutions for **stubble management, water quality improvement and mapping of hazardous substances in water**.
- The hub **aims** at carrying out translational research and work with concerned departments to develop prototypes, products and implementations.

National Mission on Interdisciplinary Cyber Physical Systems

- It was **launched in 2018** and is implemented by the **Department of Science & Technology** for a period of five years.
- NMICPS covers entire India which includes Central Ministries, State Governments, Industry and Academia.

Objectives:

- It is a **comprehensive mission** which would address technology development, application development, human resource development & skill enhancement, entrepreneurship and start-up development in **Cyber-Physical System (CPS)** and associated technologies.

- The mission **aims** at establishing 15 Technology Innovation Hubs (TIH), six Application Innovation Hubs (AIH) and four Technology Translation Research Parks (TTRP).
- These Hubs & TTRPs will connect to Academics, Industry, Central Ministries and State Government in developing solutions at reputed academic, R&D and other organizations across the country in a hub and spoke model.
- ❖ The Hubs & TTRPs have **four focused areas** namely:
 - Technology Development.
 - HRD & Skill Development.
 - Innovation, Entrepreneurship & Start-ups Ecosystem Development.
 - International Collaborations.

Cyber-Physical Systems

These systems integrate sensing, computation, control and networking into physical objects and infrastructure, connecting them to the Internet and to each other.

Few Potential applications:

- Driverless cars that communicate securely with each other on smart roads.
- Sensors in the home to detect changing health conditions.
- Improving agricultural practices.
- Enabling scientists to address issues arising out of climate change.
- Advances in cyber-physical systems will enable capability, adaptability, scalability, resiliency, safety, security and usability that will far exceed the simple embedded systems of today.

BIODIVERSITY AND ENVIRONMENT

CPCB Notifies Contaminated Sites

- According to the **Central Pollution Control Board (CPCB)**, there are 128 sites in India contaminated by **toxic and hazardous substances**.
- **West Bengal led the list** with 27 sites followed by **Odisha at 23**.

Incidents of Contamination

- **Oil contamination** due to leakage of underground oil pipelines of Bharat Petroleum Corporation Limited in Tamil Nadu.
- **Pesticide and heavy metal contamination** in creeks at Eloor, Kerala.
- **Chromium contamination** at Rania, Ranipet, Tamil Nadu, and Lohianagar, Uttar Pradesh.
- Improperly disposed **electronic waste** lying on the banks of river Ramganga, Moradabad.
- **Mercury contamination** of the soil at Kodaikanal, Tamil Nadu, and Ganjam, Odisha.

The Central Pollution Control Board

- CPCB is a statutory organisation which was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974.
- It was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.
- It serves as a field formation and also provides technical services to the Ministry of Environment and Forests of the provisions of the Environment (Protection) Act, 1986.
- Principal Functions of the CPCB, as spelt out in the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981
- To promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution.
- To improve the quality of air and to prevent, control or abate air pollution in the country.

India's Record

- Independent organisations have warned that **India has a poor track record** in dealing with chemical accidents.
- According to **ToxicsLink**, an organisation that deals with hazardous waste disposal, there have been four major chemical accidents recorded, on average, every month between 2016-2019 and several accidents are not duly recorded.
- A committee constituted by the NGT in a report on the state of the management of hazardous waste (HW) in India noted that the **inventory was not very comprehensive**.

INDIAN ECONOMY

Impact of COVID-19 Outbreak

Stock markets in India crashed on 9th March, 2020 as **Sensex** and **Nifty** indices saw their biggest ever fall in absolute terms.

- The Sensex dropped 1,942 points or 5.17% to 35,635 and the Nifty dropped 538 points to 10,451, wiping out as much as Rs 6.8 lakh crore of investor wealth.
- According to the **Securities and Exchange Board of India (SEBI)**, volatility in stock market is due to **perceived economic fallout from COVID-19** and **steep fall in global crude prices**.
 - Oil prices also crashed on the same day after the collapse of the Organization of the Petroleum Exporting Countries (OPEC) supply cut agreement with Russia.
 - The price of Brent crude oil fell almost 30% to \$31.14 a barrel, its biggest single fall since the start of the first Gulf war (1990-91).

Perceived Economic Fallout From COVID-19

- **Fall in economic activities globally:** Falling Chinese exports, faster than expected pace of shrinking of the Japanese economy, increasing cases of Coronavirus outside China, and disruption of global supply chains, have contributed to the panic in the financial markets worldwide.
- **Investment Outflow:** Selling of securities by foreign institutional investors have contributed to the sharp selloff in Indian markets.
 - A sell-off occurs when a large volume of securities are sold in a short period of time. This leads to decline in the price of the security.
 - **Foreign Institutional Investors (FIIs)** refer to outside companies investing in the financial markets of India.
- **Yes Bank Crisis:** The **Yes Bank crisis** has raised concerns over the stability of the country's banking system, adding to the woes of domestic investors.

Fall in Global Crude Prices

- Top crude oil producers Saudi Arabia and Russia have begun a price war. Saudi Arabia slashed its oil prices after it failed to convince Russia to support sharp crude oil production cuts.
- A three-year supply pact between members of the **Organization of the Petroleum Exporting Countries (OPEC)** and Russia collapsed after Russia refused to support deeper oil cuts to cope with the substantial fall in demand caused by the impact of coronavirus on travel and economic activity.
- **Immediate Impact**
 - In the Sensex pack, the **Oil and Natural Gas Corporation Limited (ONGC)** was the worst performer, losing over 16%.
 - State-owned Oil Marketing Companies (OMCs) have reduced the prices of sensitive petroleum products such as petrol and diesel by 30 paise and 25 paise a litre respectively across major cities.
- **Long-Term Impact**
 - The fall in the prices of crude oil goes well for the Indian economy as **India imports more than 80% of its oil requirements**.
 - The savings on oil imports is estimated to be around US \$30 billion in the Financial Year 2021 if there is no significant uptick in global demand. This will help in arresting the rising inflation in the country.
 - However, according to some experts, very low prices imply less growth for emerging countries like India, thus impacting negatively.

Government's Move to Boost Agri-exports

- The central government has identified **21 agricultural products**, including honey, potatoes, grapes, soya beans and groundnuts, in which Indian exports could benefit from trade restrictions against Chinese goods.
 - Some countries have imposed restrictions on Chinese goods in response to the outbreak of COVID-19.
- The total value of China's global exports of these products amounted to \$5488.6 million in 2018. India exported \$4,445.9 million worth of these commodities in the same period and could now have a chance to grab part of China's market share.

INDIAN HERITAGE AND CULTURE

Attukal Pongala

The annual "Attukal Pongala", one of the largest all-women religious congregations began recently amid the **COVID-19 virus** threat.

Key Points

- Pongala is a **ten-day- long festival** of **Attukal Bhagavathy Temple**.
- The festival commences with the musical rendering of the story of the **Goddess (Kannaki Charitam) during the "Kappu Kettu ceremony"**.
- The story invokes the presence of Kodungallur Bhagavathy and the **slaying of the Pandyan King**. This festival commemorates the victory of Good over Evil, by the slaying of Pandyan King.
- The event of the Goddess annihilating the Pandyan King is accompanied by much sound and fury of the temple drums and "Vaykurava" by devotees, immediately followed by the lighting of the hearths for the preparation of the offering for the Goddess.

Pongala

- **Pongala**, which means '**to boil over**', is the ritual in which women prepare sweet payasam (a pudding made from rice, jaggery, coconut and plantains cooked together) and offer it to the Goddess or '**Bhagavathy**'.
- The pongala is cooked in pots – preferably **earthen**.

Attukal Bhagavathy temple

- This temple is dedicated to **Goddess Bhagavathy**.
- Also known as "**the Sabarimala of Women**", this temple attracts the biggest set of women devotees for the annual Attukal Pongala festival.
- Attukal Devi temple and its main festival Attukal Pongala reached **Guinness Book of World Records** of largest annual gathering of women, when 1.5 million (15 Lakhs) women offered pongala on February 23, 1997 and on March 10, 2009, when over 2.5 million people took part in it.
- The temple is built with elements of **Kerala architectural style and Tamil architectural style as well**.
- The main building also comprises Goddess Kali, Goddess Parvathy, Lord Shiva, Goddess Sri Rajarajeswari and several others.

Kerala Architectural Style

- It displays certain variation on plan and elevation from its counterparts on the eastern coast of south India.
- These variations are mainly owing to **distinct climatic conditions** and the employment of different building materials along with the native systems of beliefs and culture.
- Kerala temples have a distinct style of their own by the **lavish use of wood, stone and metals**.
- Wood is used for making Temples because of rich forest cover.
- The base structure of the temple is made using **granite and laterite**.
- The roof may have **one, two or even three stories**.
- The shape of the roof depends on the plan of the sanctum below.
- The steep and needle like roof is made of wood and is covered with copper plates in order to **protect the inner skeletal framework from the vigorous monsoons**.

IMPORTANT FACTS FOR PRELIM

National Institute of Health & Family Welfare (NIHFW)

- Recently, the **43rd Annual Day** of the **National Institute of Health & Family Welfare (NIHFW)** was organised.
- On the occasion, the Union Health Minister emphasized that **synergy and cooperation between institutions** needed to counter India's Public Health challenges.

Key Points

- The National Institute of Health & Family Welfare (NIHFW) is situated in Delhi and was **established in 1977**.
- NIHFW is the premier organisation under Ministry Of Health and Family Welfare for capacity building through training of health professionals, frontline health workers such as **Accredited Social Health Activists (ASHAs)** and **Auxiliary Nurse Midwife (ANMs)** and other central and state officers & healthcare staff.

Accredited Social Health Activist

- An Accredited Social Health Activist (ASHA) is a community health worker instituted by the Ministry of Health and Family Welfare (MoHFW) as a part of the National Rural Health Mission (NRHM). The mission began in 2005.
- ASHAs must primarily be female residents of the village that they have been selected to serve, who are likely to remain in that village for the foreseeable future.

Auxiliary Nurse Midwife

- Auxiliary nurse midwife, commonly known as ANM, is a village-level female health worker in India who is known as the first contact person between the community and the health services.
- ANMs are regarded as the grass-roots workers in the health organisation pyramid.
- Their services are considered important to provide safe and effective care to village communities.
- The role may help communities achieve the targets of national health programmes.

Foundation Day of National Archives of India

- Recently, on the occasion of **130th Foundation Day of National Archives of India**, an exhibition “**Jallianwala Bagh**” was inaugurated, to mark the **Jallianwala Bagh massacre centenary**.

Key Points

- The present exhibition is primarily presented with the help of original and digital copies of archival documents relating to the Jallianwala Bagh Massacre available in National Archives of India.
- This is an attempt to portray the relentless struggle of the Indian people against the British tyranny through our record holdings.

National Archives of India

- The National Archives of India is an attached office under the Ministry of Culture. It was established on 11 March 1891 at Kolkata (Calcutta) as the Imperial Record Department.
- Following the transfer of the capital from Calcutta to Delhi in 1911, the present building of the National Archives of India was constructed in 1926 which was designed by Sir Edwin Lutyens.
- The transfer of all records from Calcutta to New Delhi was completed in 1937. It is the nodal agency for the implementation of the Public Records Act, 1993 and Public Record Rules, 1997.

DAILY ANSWER WRITING PRACTICE

Qns. Despite having several measures to reduce the vulnerability of farmers in India, the farm sector and farmers continue to suffer losses. Suggest some measures that can be taken to improve their conditions. (250 words)

Ans. Farm Sector employs the majority of India's economic force and to reduce vulnerabilities of those dependent on it, a target of doubling farmer's income by 2022 has been envisaged by India through various means like **PM-KISAN, Fasal Bima Yojana, reforms in the marketing sector, direct benefit transfer** etc. Still, various challenges lie ahead.

Challenges

- The disparity in sector's expenditure and growth drivers like despite higher growth in livestock and fisheries sector, only moderate to low expenditure was recorded.
- Low expenditure in research and development, nearly 0.4% of GDP.
- Operational and Structural issues with Farmers and Producers Organisation due to numerous Acts and Agencies.
- Low participation of the private sector.
- Lack of affordable technologies and small scale investment avenues.
- Lack of convergence and congruity among regulatory organisations, especially at state level.

Measures to overcome vulnerabilities

- PM-KISAN will encourage farmers to invest some or all part of the income support in productive assets for achieving the multiplier effect in the sector.
- Expenditure on Research and Development needs to be raised to 1% of GDP.
- Blockchain-based e-marketplace will lead to better and accurate price discovery, leading to rising income of farmers and expanded market for agro-based products.
- Extending CSR to the farm sector with focus on small investments in clean and affordable sustainable technologies and solutions will attract private investment along with increasing farm efficiency and productivity.
- Subsuming regulations under a single organisation like National Agricultural Development Council at national level and Farmers Welfare Organisations at state level.

Conclusion

Not limiting to these measures there is a need for a mix of measures ensuing price, market, insurance, investment, environment and social aspect of the sector.

DAILY QUIZ

1. Consider the following statements with respect to National Institute of Health & Family Welfare (NIHFW)
 1. It is an autonomous organization, under the Ministry of Health and Family Welfare.
 2. It was established by merging National Institute of Health Administration and Education (NIHAE) and the National Institute of Family Planning (NIFP).
 3. It acts as an 'apex technical institute' as well as a 'think tank' for the promotion of health and family welfare programmes in the country.
 Which of the statement(s) given above is/are correct?
 - a. 2 only
 - b. 1 and 2 only
 - c. 1 and 3 only
 - d. 1, 2 and 3**
2. Consider the following statements with respect to AWSAR Initiative
 1. It aims to disseminate Indian research stories among the masses in an easy to understand and interesting format to a common man.
 2. It is an initiative conceptualized and supported by National Council of Educational Research and Training (NCERT).
 Which of the statement(s) given above is/are incorrect?
 - a. 1 only
 - b. 2 only**
 - c. Both 1 and 2
 - d. Neither 1 nor 2
3. Consider the following statements with respect to ICONSAT 2020
 1. It is a nano satellite built by the Indian Space Research Organisation (ISRO).
 2. It will be launched using the Polar Satellite Launch Vehicle (PSLV).
 Which of the statement(s) given above is/are correct?
 - a. 1 only
 - b. 2 only
 - c. Both 1 and 2
 - d. Neither 1 nor 2**
4. Consider the following statements with respect to Kisan Rail Scheme
 1. Under the scheme, the centre envisages setting up of a national cold supply chain to transport highly perishable goods including milk, fish and meat.
 2. The scheme has been proposed to be set up by the Indian Railways through a public-private-partnership (PPP) arrangement.
 Which of the statement(s) given above is/are correct?
 - a. 1 only
 - b. 2 only
 - c. Both 1 and 2**
 - d. Neither 1 nor 2
5. SAREX-2020 is an exercise conducted by?
 - a. SAARC
 - b. ASEAN
 - c. BIMSTEC
 - d. None of the above**