theIASHub

MAY
10

CRUX 10

10 News. 10 Sources. One Place

THE HINDU | ET | BS | TOI | The Indian EXPRESS | livemint | pib | DownToEarth FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH | Science Reporter | विज्ञान एवं प्रौद्योगिकी मन्त्रालय MINISTRY OF SCIENCE AND TECHNOLOGY



Table of Contents

1. Multilateral Development Bank
2. ETAC
3. Preterm Births in India
4. Laser Induced Graphene
5. Indrajaal
6. mRNA Vaccine
7. Copernicus Programme
8. Antimicrobial Packaging
9. Gopal Krishna Gokhale
10. Rabindranath Tagore

TIMES OF INDIA

Page 21

MULTILATERAL DEVELOPMENT BANKS

(Syllabus: GS Paper 3 - Economy)

'Multilateral development bank reforms are broad & complex'

TIMES NEWS NETWORK

New Delhi: Lawrence Summers and N K Singh, the co-chairs of the expert group on strengthening multilateral development banks (MDBs), have said that the reform issues and challenges are broad and complex, and reaching an agreement around a set of measures will not be easy for shareholders, given their divergent views.

In a blog post on the ICRIER website, the co-chairs, however, said that the shareholders of MDBs have signalled their interest in reforms to make them 21st century ready. "New cross-border challenges — climate change, pandemics, fragility, migration — require new finance capacity and new approaches. The total flow of support from the World Bank and other MDBs to developing countries was $192 billion in 2022. While this is a substantial figure, it is a third less than the share of developing country GDP attained in 2009 (during the global finance crisis), even as the need for investments in assuring that development is sustainable has greatly increased," they said.



Lawrence Summers (L) and N K Singh, the co-chairs of the expert group on strengthening multilateral development banks

While inviting suggestions, the expert group said it wants solutions that must recognise the interests of all countries, and not pit some against others. "MDBs cannot fill all finance gaps. Rather their finance and other forms of support must be targeted to maximise impact and to unlock even larger flows from other sources," the co-chairs said as they raced to finalise their report by the end of June.

Context: The co chairs of the expert group on strengthening **multilateral development banks (MDBs)** have said that the reform issues and challenges are broad and complex, and reaching an agreement around a set of measures will not be easy for shareholders, given their divergent views.

- Under the **aegis of India's G20 Presidency,** a G20 Expert Group on Strengthening Multilateral Development Banks (MDBs) has been constituted.

MDB

- **About**: MDB is a financial institution **established by multiple member countries and falls under international law.** E.g., International Monetary Fund, World Bank, Asian Development Bank etc.
- **Focus area**: How can **World Bank and other bodies contribute towards climate finance**, critical for developing and LDCs to make a smooth transition to lower carbon emissions without compromising on growth.
- **Objectives of MDB**: Stabilizing the **global financial system** during the time of crisis; Providing long-term financing; Providing lower-cost financing
- **Issues**: Currently, MDBs are **dominated by developed Countries** (WB by USA, IMF by EU and ADB by Japan); they impose conditionality in loans; there is a lack of Transparency and Accountability.

ECONOMIC TIMES

Page 10

ENERGY TRANSITION ADVISORY COMMITTEE

(Syllabus: GS Paper 3 - Infrastructure)

'No Decision on Banning Diesel Vehicles in Cities'

Our Bureau

New Delhi: The government hasn't taken a decision on accepting the Energy Transition Advisory Committee (ETAC) report's recommendation that called for a ban on diesel-powered vehicles in big cities by 2027, the petroleum ministry said on Tuesday.

"Report of the Energy Transition Advisory Committee #ETAC has been received by the ministry of petroleum and natural gas (MOPNG). The government of India is yet to accept ETAC Report," the ministry said on Twitter.

"The suggestions of ETAC relate to multiple ministries & a range of stakeholders including States. Consultations with various stakeholders on the #report are yet to be initiated," it said. "ETAC has made wide-ranging and forward-looking recommendations for shift to Low Carbon Energy. ETAC has a futuristic outlook."

The petroleum ministry's advisory committee has recommended a big shift to electrification in mobility and policy initiatives to reduce the use of fossil fuels.

"Diesel-driven four-wheelers may be eliminated as soon as possible. Therefore, a ban on diesel-powered four-wheelers in all million-plus cities and all towns with high pollution has to be enforced in five years, i.e. by 2027," the committee said in its report, adding that no diesel-powered city buses should be added in urban areas.

Ministry's advisory panel has recommended a big shift to electrification in mobility and policy initiatives to reduce use of fossil fuels

Only electric city delivery vehicles should be registered from 2024 so that in the next 10 years, 75% of the city delivery vehicles can be electric in all the million-plus cities, the committee said.

The panel also recommended the share of railways rise to 50% in national freight in 15 years from 23% now.

Panel's Stance

A big shift to electrification in mobility to reduce the use of fossil fuels

Ban on diesel-powered four-wheelers in all million-plus cities & towns

Only electric city delivery vehicles should be registered from 2024

Share of railways should rise to 50% in national freight in 15 yrs

Context: The government hasn't taken a decision on accepting the **Energy Transition Advisory Committee (ETAC)** report's recommendation that called for a ban on diesel powered vehicles in big cities by 2027.

ETAC

- **About**: The Energy Transition Advisory Committee was **formed by Ministry of Petroleum and Natural Gas.**
  - It is **headed a former Secretary** of Petroleum Ministry.
- **Functions:** The committee primarily focus on biofuel and green hydrogen of all the clean energies. It will create plans to **improve their supply chains.**
- **Objectives**:
  - To help India **achieve its net zero emission** target by 2070.
  - To **create an energy transition road map** (within 6 months).
  - To create a step - by - step plan for **moving from fossil fuels to green energy.**
- **Significance**: During the Leader's Summit on Climate, **India announced to achieve net zero emission target by 2070**. In order to achieve this, the oil companies were directed to create plans focusing on improving their clean energy portfolio.
  - The committee is to **review these plans**. It will also suggest alternatives. Also, the committee will provide suggestions in creating the plans.
  - The committee will **guide the oil companies** in launching their transition plans.
  - For instance, Hindustan Petroleum, Indian Oil and Bharat Petroleum recently announced to set up 22,000 charging stations jointly.

INDIAN EXPRESS Page 9

PRETERM BIRTHS IN INDIA

(Syllabus: GS Paper 2 - Health)

India among top 5 countries where babies born too soon: study

ANURADHA MASCARENHAS
PUNE, MAY 9

EVERY TWO seconds, a baby is born too soon. Every 40 seconds, one of those babies dies.

Almost half of all pre-term births (babies born before the 37th week of pregnancy) in 2020 happened in five countries – India, Pakistan, Nigeria, China and Ethiopia – according to a new report released by the United Nations (UN) agencies and partners on Tuesday. Together they accounted for 45 per cent of babies born too soon around the world, exposing them to a high mortality risk. This indicates a "silent emergency" for children's survival and health.

An estimated 13.4 million babies were born pre-term in 2020 with nearly one million dying from complications. This is equivalent to around one in 10 babies as per the report titled 'Born too Soon: Decade of Action on Pre-term Birth", put together by WHO, United Nations Children's Fund and Partnership for Maternal, Newborn and Child Health (PMNCH) – the world's largest alliance for women, children and adolescents.

In 2020, Bangladesh had the highest estimated pre-term birth rate (16.2 per cent), followed by Malawi (14.5 per cent) and Pakistan (14.4 per cent). India and South Africa, at an estimated 13 per cent each, were among the top five countries with high pre-term birth rates. The total pre-term birth numbers for the five countries are alarming indeed as India tops the list with 30.16 lakh births, Pakistan is at 9.14 lakh, Nigeria at 7.74 lakh and China at 7.52 lakh. The report includes updated estimates from WHO and UNICEF.



An estimated 13.4 million babies were born pre-term in 2020, says report by UN agencies. *File*

What's causing pre-term births in India? Clearly the infrastructure for neonatal care needs to be more expansive and last-mile. Explaining the findings, Dr Surender Singh Bisht, secretary general of the National Neonatology Forum (NNF), said, "In rural areas, there used to be a common complaint of lack of access to health care but initiatives like special newborn care units, improved labour rooms and efficient deliveries have helped save many pre-term babies. But they are still not as expansive." The government has launched many programmes such as the India Newborn Action Plan and Rashtriya Bal Suraksha Karyakram and has set up many Speciality Newborn Care Units (SNCUs) across the country.

Dr VC Manoj, president-elect of NNF, said, "Several factors like lifestyle changes, chronic diseases and IVF pregnancies are associated with increased pre-term births in urban centres." Dr Bisht concurred. "Reduced fertility levels and assisted pregnancies are also not without the risk of pre-term births."

As for the region-wise break-up of pre-term births in India, a report published on June 28 last year in PloS-Global Public Health showed that West Bengal reported 16 per cent of such births, Tamil Nadu 14 per cent and Gujarat 9 per cent.

Overall, the report finds that pre-term birth rates have not changed in any region in the world in the past decades. The global pre-term birth rate was 9.9 per cent in 2020, compared to 9.8 per cent in 2010. There was also no change in pre-term birth rates in any region, including the highest-burden regions (southern Asia logging in 13.3 per cent in 2010 and 13.2 per cent in 2020, and sub-Saharan Africa at 10.1 per cent in both 2010 and 2020). In fact, these two regions collectively account for over 65 per cent of pre-term births globally.

At a webinar, Dr Anshu Banerjee, director for Maternal, Newborn, Child and Adolescent Health and Ageing at WHO, said every woman must be able to access quality health services before and during pregnancy to identify and manage risks and avoid a pre-term birth.

According to Dr Sachin Shah, president, Indian Academy of Paediatrics – Intensive Care (Pune chapter), it is important to encourage quality care at special newborn care units and train mothers in practising kangaroo care for low birth weight infants. This essentially means prolonged skin-to-skin contact with the mother and frequent breastfeeding.

Context: Almost half of all **preterm births (babies born before the 37th week of pregnancy)** in 2020 happened in five countries - India, Pakistan, Nigeria, China and Ethiopia - according to a new report titled 'Born too Soon: Decade of Action on Preterm Birth", put together by WHO, United Nations Children's Fund and Partnership for Maternal, Newborn and Child Health (PMNCH) - the world's largest alliance for women, children and adolescents.

- Together they **accounted for 45 percent of babies born too soon around the world,** exposing them to a high mortality risk.
- **India and South Africa**, at an estimated 13 per cent each, were among the **top five countries** with high preterm birth rates.

Causes of preterm births in India

- In rural areas, there used to be a common complaint of **lack of access to health care** but initiatives like special newborn care units, improved labour rooms and efficient deliveries have helped save many preterm babies.
    - But they are **still not as expansive.**
- Several factors like **lifestyle changes, chronic diseases and IVF pregnancies** are associated with increased preterm births in urban centres.
- **Reduced fertility levels and assisted pregnancies** are also not without the risk of preterm births.
- Clearly the **infrastructure for neonatal care needs** to be more expansive and last-mile.
- The government has launched many programmes such as the **India Newborn Action Plan and Rashtriya Bal Suraksha Karyakram** and has set up many Speciality Newborn Care Units (SNCUs) across the country.

Preterm birth

- When a child is born alive but too early i.e. **before the 37 weeks of the pregnancy** are completed, it is referred to as a preterm birth.
- 1/10th of births across the world is a preterm birth.
- India has **a high prevalence of preterm birth**, with 1 in every 6-7 child being born preterm.

Stillbirth

- When a **child dies after 22 weeks of pregnancy** it is referred to as a stillbirth. This **can occur before the birth or during the birth.**
- In 2021, there were some 1.9 million stillbirths across the world.
- In India, 2021, saw 2,86,482 stillbirths.

THE HINDU Page 6

LASER INDUCED GRAPHENE

(Syllabus: GS Paper 3 - Sci & Tech)

BITS-Pilani Hyderabad develops illness-detecting mask with sensor

V. Geetanath
HYDERABAD

That a face mask can protect against COVID-19 and other respiratory diseases is well established. Now, it can also be used as a non-invasive device to check one's health as has been successfully demonstrated by researchers at the Micro-Electro-Mechanical Systems, Microfluids and Nanoelectronics Lab on the BITS-Pilani Hyderabad campus.

The team, including research scholar P. Ramya Priya, professor Sanket Goel and associate professor Satish Kumar Dubey designed and developed a Kirigami-based stretchable, flexible Laser induced Graphene (LIG) a 3-D carbon nanomaterial, for real-time attachments with surgical masks.

LIG is a widely used material for monitoring vital physiological signs such as breath rate (BR) or respiratory rate (RR), body temperature, pulse rate, and blood oxygen saturation.

Researchers used the sensor attached to a gas mask to analyse the breath pattern of the subject seated on a chair by validating the change in resistance during inhalation and exhalation. The rate of breathing generally varies based on age unless the person is diseased. Fitness of a person can be determined by Breath Index or simply, by measuring RR and BR, said Mr. Goel.

The sensor can be placed over the mouth and nose without causing any irritation while ensuring stable working.

Applications in various scenarios have been carried out demonstrating potential in healthcare, disease diagnosis, e-skin, and so on with the detection capacity being less than one second.

The project was carried out under the aegis of Department of Science & Technology- Biomedical Device and Technology Development and has been accepted for publication in 'IEEE Sensors Journal'.

Context: The BITS-Pilani Hyderabad campus team designed and developed a **'Kirigami' based stretchable, flexible Laser induced Graphene (LIG)** a 3-D carbon nanomaterial, for real-time attachments with surgical masks.

Laser induced Graphene

- LIG is a widely used material for **monitoring vital physiological signs such as breath rate (BR) or respiratory rate (RR),** body temperature, pulse rate, and blood oxygen saturation.
- **Monitoring breath rate** is considered as a parameter to detect diseases like cardiac arrest, asthma, pneumonia, pulmonary edema, and of course, COVID-19.
- The product is customisable and can be used to develop various sizes and patterns of **'Kirigami' (Japanese art of paper cutting giving a 3D element)** based structures for patients across age groups and demographics.
- The sensor can be placed over the mouth and nose **without causing any irritation** while ensuring stable working.
- The sensor has **potential in wearable/flexible healthcare technology** owing to its high sensitivity, flexibility, and cost-effectiveness.
- It could **help in the early detection of illnesses** like heart disease, bronchitis, asthma, pneumonia, chronic obstructive pulmonary disease (COPD), sleep apnea syndrome (SAS), and lung cancer, thereby saving many lives, he explained.
- The sensor c**ould be used in a wide range of settings**, such as fabric masks, surgical masks, oxygen masks, etc., making it suitable for evaluating symptoms of COVID-19 and other respiratory ailments.

BUSINESS STANDARD

Page 3

INDRAJAAL

(Syllabus: GS Paper 3 - Sci & Tech)

Grene Robotics enhances anti-drone capabilities

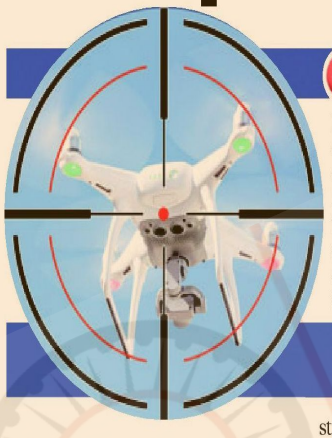
AJAI SHUKLA
New Delhi, 9 May

In 2021, a small Hyderabad-based firm, Grene Robotics, introduced the Indrajaal, which it billed as the world's only comprehensive, autonomous, anti-drone security system. Each Indrajaal system covers areas as large as 4,000 square kilometres. On Tuesday, Grene Robotics went a step further, completing the acquisition of command, control, communications, computers, intelligence, surveillance, reconnaissance, and targeting (C4ISRT) platform from Apogee C4I LLP — a first-of-its-kind indigenous defence technology company.

Currently, many anti-drone systems are treated as if drones are the only low radar cross section (RCS) threat in the tactical battle area. Numerous systems qualify as low-RCS weapons, including loitering munitions, smart bombs, rocket showers, nano and micro drones, etc.

However, existing air defence systems are not geared to address low-RCS threats. Grene Robotics believes that all low RCS threats should be grouped and dealt with using a single system.

"Indrajaal is the world's only anti-drone system that can defend against all classifications and all levels of autonomous drones. With the integration of Apogee's advanced deep-tech platform, we aim at bolstering Indrajaal's anti-drone capabilities further," said Kiran Raju, founder and chief executive officer, Grene Robotics.



> Indrajaal is the world's only anti-drone system that can defend against all classifications and all levels of autonomous drones. With the integration of Apogee's advanced deep-tech platform, we aim at bolstering Indrajaal's anti-drone capabilities further
>
> KIRAN RAJU | Founder and CEO, Grene Robotics

"We have funded all our operations ourselves over several years. As far as innovation for defence excellence (iDEX) is concerned, we won an iDEX challenge three years ago. Next-generation threat identification was the problem statement we attempted under the airspace management segment," said Raju.

With funding sources inadequate, Grene Robotics has continued looking for funds within its resources for the past 14 years. As part of this, it has strategically acquired deep-tech intellectual property from Apogee C4I to enhance its drone and anti-drone defence programme.

This move is expected to significantly strengthen Grene Robotics' capabilities in the defence sector. It will also lead to greater implementation on a national and international level, establishing Grene Robotics as a global leader in counter-drone security systems.

"The combined capabilities of Grene Robotics and Apogee C4I will help set a new industry standard for anti-drone solutions, future-proofing protection against emerging low-RCS threats," said Wing Commander M V N Sai (retired), director of emerging technologies, Grene Robotics.

According to Vamsi Vellanki, who handles finances for Grene Robotics, the global anti-drone market will reach US $12.6 billion by 2030, with a compound annual growth rate of 27.65 per cent from 2022 to 2030.

Context: In 2021, a small Hyderabad-based firm, Grene Robotics, introduced the **Indrajaal**, which it billed as the world's only comprehensive, autonomous, anti drone security system.

- Now, Grene Robotics went a step further, completing the acquisition of **command, control, communications, computers, intelligence, surveillance, reconnaissance, and targeting (C4ISRT) platform** from Apogee C4I LLP - a first-of-its-kind indigenous defence technology company.
- Currently, many anti-drone systems are treated as if drones are the only low **radar cross section (RCS)** threat in the tactical battle area.
- Numerous systems qualify as low-RCS weapons, including loitering munitions, smart bombs, rocket showers, nano and micro drones, etc.
- However, **existing air defence systems are not geared to address low-RCS threats.** Grene Robotics believes that all low RCS threats should be grouped and dealt with using a single system.

Indrajaal

- **About**: The drone defence dome has the **capability to autonomously protect an area of 1000-2000 sq km against the aerial threats** by assessing and acting on aerial threats such as Unmanned Aerial Vehicles (UAVs), loitering munitions, and Low-Radar Cross Section (RCS) targets.
- **Salient features of Indrajaal:**
  - Real-time situational awareness
  - Integrated and Intelligent meshed network
  - Integrated all current weapons suite and infrastructure
  - Honeycombed cell structure for seamlessly built
  - Synergic combination of 9-10 technologies
  - 24×7 persistent and autonomous monitoring, action and tracking

LIVE MINT

Page 1

mRNA VACCINE

(Syllabus: GS Paper 3 - Sci & Tech)

mRNA booster: Panel seeks data

Priyanka Sharma
priyanka.sharma@livemint.com
NEW DELHI



Gennova has been told to submit safety data of phase-3 trials across 90 days. ISTOCK

Gennova Biopharmaceuticals Ltd, the first Indian company to develop an mRNA vaccine for covid-19, must submit safety data of phase-3 trials across 90 days, experts at a top drug safety panel decided after the company applied to use it as a booster dose in heterologous mode.

Last year, the Pune-based company's Gemcovac-19 was cleared for use in homologous mode, where the same shot is used for first and second doses.

Now, it plans to use the Omicron-specific vaccine as a booster in heterologous mode usage as the second dose when the first dose is Serum Institute of India Ltd's Covishield or Bharat Biotech Ltd's Covaxin. It has presented its proposal for the grant of permission for a Lyophilized mRNA vaccine for covid against the Omicron variant as a single booster dose. Gennova submitted phase-II clinical trial data for all 140 subjects,

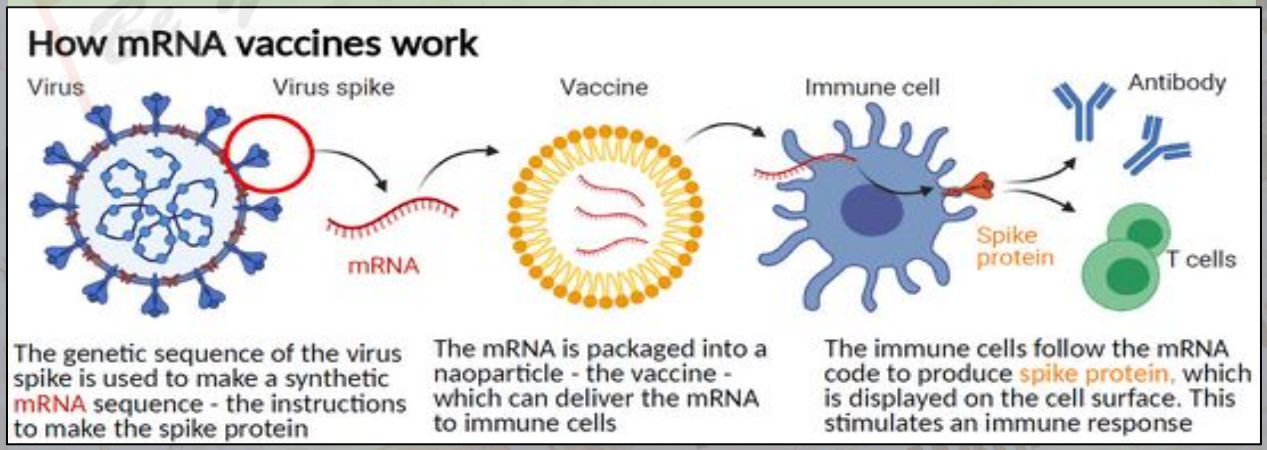
TURN TO PAGE 6

Context: Gennova Biopharmaceuticals Ltd, the first Indian company to develop an **mRNA vaccine** for covid-19, must submit safety data of phase-3 trials across 90 days, experts at a DGCI panel decided after the company applied to use it as a booster dose in heterologous mode.

- The **Drug Controller General of India (DCGI)** establishes standards for the manufacturing, sales, import, and distribution of drugs in India.

mRNA Vaccines

- mRNA vaccines **trick the body into producing some of the viral proteins** itself.
- They work by using mRNA, or messenger RNA, which is the molecule that essentially **puts DNA instructions into action.**
- Inside a cell, mRNA is used as a template to **build a protein.**

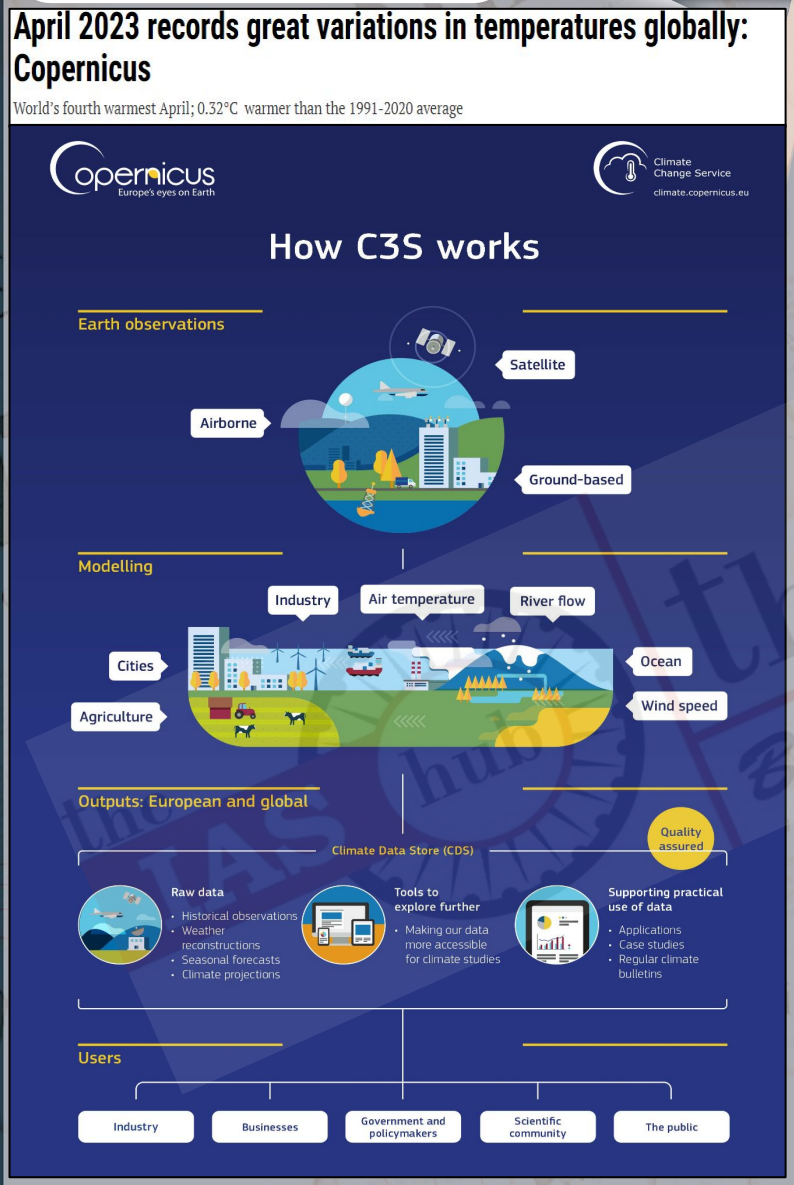


DTE

MAY 10

COPERNICUS PROGRAMME

(Syllabus: GS Paper 3 - Sci & Tech)



Context: 2023 saw the fourth warmest April globally, according to a new analysis by **Copernicus Climate Change Service (C3S)**, the European Union's Earth observation programme.

- **April 2023 was also wetter than normal** for west to east from Ireland, Great Britain and France, across central Europe to the Italian peninsula, the Balkans and the Black Sea.

Copernicus programme:

- **About**: It is the most ambitious E**arth observation programme** to date.
  - It was previously known as the **Global Monitoring for Environment and Security programme.**
  - This initiative is **headed by the European Commission (EC)** in partnership with the European Space Agency (ESA).
- **Objectives**: It will **provide accurate, timely and easily accessible information** to improve the management of the environment, understand and mitigate the effects of climate change and ensure civil security.
- **Services provided by Copernicus fall into 6 categories:** Land management, the marine environment, the atmosphere, emergency response, security and climate change.

DTE

MAY 10

ANTIMICROBIAL PACKAGING

(Syllabus: GS Paper 3 - Sci & Tech)

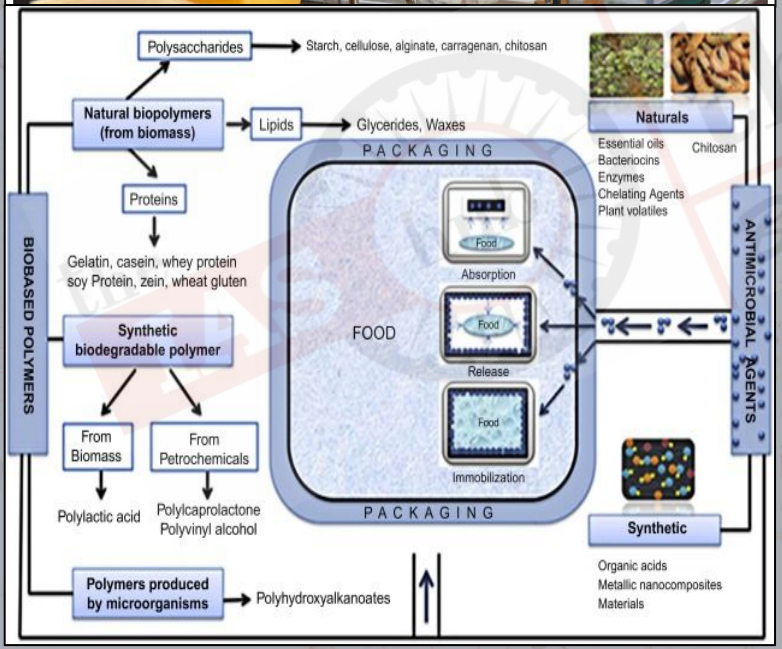
Health-conscious consumers, busy lifestyles driving up market value of antimicrobial packaging: Report

Valuation may reach $11.5 billion this year; Asia-Pacific to be most lucrative market

By Nandita Banerji

Published: Monday 08 May 2023





Context: Demand for **antimicrobial packaging** is accelerating thanks to the growing demand for packaged food, according to a new market analysis.

- The growth of the **healthcare, automotive and building & construction industries** is driving the demand for antimicrobial plastics.

Antimicrobial packaging

- **About**: Antimicrobial films are systems **used to reduce, inhibit, or retard spoilage microorganisms' growth** in food products, thus preventing food spoilage and decay.
  - The **antimicrobial films' efficiency** depends on antimicrobial agents - natural and synthetic, based on their sources, and their effectiveness against microorganisms.
- **Two types of antimicrobial films include:**
  - **Systems with an antimicrobial agent** that migrates to the surface of the food
  - Systems that **do not need compound migration** to be active
- **Antimicrobial components**: The primary antimicrobial components used in food packaging include synthetic organic materials such as **ethylene diamine tetraacetic acid (EDTA),** fungicides, parabens, and other chemicals.
  - However, current developments indicate the use of natural antimicrobials such as chitosan, lysozyme, and so on that are expensive but are safe for food contact.
- **Application of antimicrobial packaging include:**
  - Minimally processed deli meat and seafood
  - Frozen then thawed fruits and vegetables
  - Cheese and dairy-based products
  - Baked goods and others

PIB

MAY 10

GOPAL KRISHNA GOKHALE

(Syllabus: GS Paper 1 - Personalities)

PM pays homage to Gopal Krishna Gokhale on his birth anniversary

Context: The Prime Minister has paid homage to **Gopal Krishna Gokhale** on his birth anniversary.

- **Gopal Krishna Gokhale was born in Kotluk in District Ratnagiri** in modern-day Maharashtra to Krishna Rao Gokhale and his wife Valubai on **May 9th, 1866.**

Gopal Krishna Gokhale

- Gokhale was a **social reformer who formed a sectarian organization** to work for the relief of the underprivileged in India. He led the moderate nationalists in the early years of the Indian Independence movement.
- In 1889, Gokhale **joined the INC** motivated by his mentor, social reformer M G Ranade.
- He was elected as **Honorary Secretary of the Sarvajanik Sabha,** Pune in 1890.
- In 1893, Gokhale became the **Secretary of the Bombay Provincial Conference** and in 1895, he served as the Joint Secretary of the INC along with Tilak.
- In 1905, Gokhale **established the Servants of India Society** for expanding education to Indians. He wanted Indians to receive an education that would instil in them a civic and patriotic sense of duty.
- Gopal Krishna Gokhale was the **president of Indian National Congress Session** in Banaras in 1905.
- In 1908, Gokhale **founded the 'Ranade Institute of Economics'**. He discouraged the untouchability and caste-system, pleaded for the liberation of women and supported the cause of female education.
- Gokhale visited Mahatma Gandhi in South Africa in 1912 on the latter's request. He famously **mentored to the father of the nation,** who returned to India at Gokhale's request.
- Gokhale also **started newspapers, 'Mahratta' and 'Jnanaprakash'.**
- Gopal Krishna Gokhale was moderate who believed in working with the colonial government to bring about social reforms in society.
- Bal Gangadhar Tilak called him **'Diamond of India.'**
- **Works/Institutions he was associated with:**
  - Servants of Indian Society
  - Sarvajanik Sabha Journal
  - Ranade Institute of Economics
  - The Hitavada
- Gopal Krishna Gokhale **died on 19 February 1915 aged 48.**

PIB

MAY 10

RABINDRANATH TAGORE

(Syllabus: GS Paper 1 - Personalities)

PM pays tributes to Gurudev Tagore on his Jayanti

Context: The Prime Minister has paid tributes to **Gurudev Tagore** on his Jayanti.

- **Rabindranath Tagore** was born on 7 May 1861.

Rabindranath Tagore:

- Tagore was primarily known as **a writer, poet, playwright, philosopher and aesthetician, music composer and choreographer,** founder of a unique educational institution - **Visva- Bharati** and a painter.
- He published his first poems aged 16 under the pen-name **'Bhanusimha'.**
- He had spoken at the **World Parliament for Religions** in the years 1929 and 1937.
- He wrote the **National Anthems of India and Bangladesh.**
- He left his imprint on art and played a role in transforming its practices and ushering into modernism.
- Between 1928 and 1940, Rabindranath painted more than 2000 images. He never gave any title to his paintings.
- Expressionism in European art and the primitive art of ancient cultures inspired him.
- In 1913, he became the first Indian to receive a Nobel Prize in Literature for his novel **'Geetanjali'.**
- Rabindranath Tagore **wrote the song Banglar Mati Banglar Jol** (Soil of Bengal, Water of Bengal) to unite the Bengali population after Bengal partition in 1905.
- He also wrote the famed **Amar Sonar Bangla** Which helped ignite a feeling of nationalism amongst people.
- He started the **Rakhi Utsav** where people from Hindu and Muslim communities tied colourful threads on each other's wrists.
- **Tagore rejected violence** from the British as well and renounced the knighthood that had been given to him in by Lord Hardinge in 1915 in protest of the violent Amritsar massacre in which the British killed at least 1526 unarmed Indian citizens.
- He believed that "**Freedom**" does not simply mean political freedom from the British; True freedom means the ability to be truthful and honest with oneself otherwise autonomy loses all of its worth.
- It was Tagore who first referred to Gandhiji as **'Mahatma'** , Gandhiji in turn addressed Tagore as **'Gurudev'**.

Secure Top Rank with theIAShub Courses

Prelims 2023 Courses

01 Prelims Crash Course Score Enhancement Program (SEP)

02 INA Current Affairs (Prelims)

03 TACKLE - Prelims Test Series

04 Geography - Prelims Crash Course

Quality Enrichment Courses (Mains 2023)

01 Quality Enrichment Program (QEP)

02 Science of Answer Writing (SAW)

Prelim Cum Mains 2024 Courses

01 NEEV GS Foundation 2024/25

02 INA Current Affairs Pre Cum Mains - 2024

FREE Download PDF

Login to theiashub.com

- Aaj Ka Quality Enrichment (Toppers' Favourite PDF)
- News-CRUX-10 (10 News. 10 Sources. One Place)
- Monthly Editorials (The Hindu & Indian Express)
- Daily Quiz (Prelims)
- Government Schemes & Ministry Wise Year End Review
- Free Enrichment PDFs (Tailor Made Crisp Study Material)



Log On To Our Unique
Free Answer Writing Sessions with Toppers (FAST) Portal
& Start Practicing!

SCAN HERE

9560082909

t.me/theiashub

/mkyadav

www.theiashub.com

www.theiashub.com