WHO released "Hooking the Next Generation: How the Tobacco industry captures young customers" Report

Report was jointly released by World Health Organization (WHO) and STOP, a global tobacco industry watchdog to mark World No Tobacco Day (WNTD) on 31st May.

WNTB Theme for 2024: Protecting children from tobacco industry interference.

Kev findings

- Globally, an estimated 37 million children aged 13-15 years use tobacco.
- ▶ 85% of 15-30-year olds were exposed to electronic-cigarette advertising across multiple media platforms.
 - Electronic-cigarettes are battery-operated devices that produce aerosol by heating a solution containing nicotine, which is addictive substance in combustible cigarettes.

Why Tobacco Industry is targeting youth?

- To find replacement consumers and generate a lifetime of profits.
- Lack of understanding regarding repercussions of smoking and peer influence gets them easily addicted to tobacco consumption.

Tactics used by Tobacco Industry to target youth

- ▶ Releasing new products like e-cigarettes, heated tobacco products, nicotine pouches etc.
- Lowering prices of disposable e-cigarettes, engaging in "buy one, get one free" promotions.
- Marketing in digital spaces, including gaming platforms etc.

Impact of Tobacco Consumption

- Kills more than 8 million people each year due to risk of heart disease, lung disorders, cancer etc.
- As per WHO, smoking costs world's economies more than US\$ 1 trillion annually in healthcare expenditure and lost productivity.

Initiatives taken to control Tobacco Consumption

- India: National Tobacco Control Programme, Cigarette and Other Tobacco Products Act 2003, Prohibition of Electronic Cigarettes Act, 2019 etc.
- Global: WHO Framework Convention on Tobacco Control, 2003 (India ratified it in 2004), WHO's MPOWER measures etc.



Monitor tobacco use and prevention policies



Protect people from tobacco smoke



Offer help to quit tobacco use



Warn about the dangers of tobacco



Enforce bans on tobacco advertising, promotion and sponsorship



Raise taxes on tobacco

IIT Madras based Startup Agnikul Cosmos Launched World's First Rocket with single piece 3D-Printed Engine

The Rocket Agnibaan SOrTeD (SubOrbital Technological Demonstrator) is India's first semi-cryogenic engine-powered rocket launch flight that was designed and manufactured indigenously through 3-D Printing or additive manufacturing.

This test flight aims to demonstrate in-house and home-grown technologies, gather crucial flight data and ensure optimal functioning of systems for Agnikul's orbital launch vehicle, the 'Agnibaan'.

About Agnibaan Rocket

- Agnibaan is a two-stage rocket with a capacity to carry payloads ranging from 30kg to 300 kg to a height of 700 km.
- It can access both low-and high-inclination orbits and is completely mobile, designed for accessing more than 10 launch ports.
- It was launched from India's first privately developed launchpad called 'Dhanush' established by Agnikul at Sriharikota in Andhra Pradesh.
- ▶ Its Semi-Cryogenic Engine (SCE) i.e. Agnilet utilizes a propellant combination of Liquid Oxygen (LOX) and Kerosene.
 - SCE uses a fuel that is storable at higher temperatures compared to cryogenic engines, which makes handling and storage simpler while offering high performance.
 - Cryogenic engines use liquid hydrogen as fuel and liquid oxygen as oxidizer at extremely low temperatures.
 - ISRO is developing semi-cryogenic propulsion systems for enhancing payload capability of Launch Vehicle Mark-3 and for future launch vehicles.

Other Initiatives taken for Privatising Space Sector

- ▶ 100% FDI in space sector is allowed in components and systems/ sub-systems for satellites, ground segment, and user segment.
- India space policy 2023 suggests that private sector is a critical stakeholder in entire value chain of space economy.
- Indian National Space Promotion and Authorization Centre (IN-SPACe) facilitate private sector engagement in space activities.







UN Global Supply Chain Forum (UN-GSCF) called for resilience amid world trade disruptions

The inaugural edition of the UN-GSCF was hosted by UN Trade and Development (formerly UNCTAD) and Government of Barbados to address escalating disruptions in global supply chains.

Supply chain resilience is the ability of a supply chain network to withstand disruption and minimize the effects of upheaval on revenues, costs and customers.

Issues affecting supply chains

- Climate change: Climate-induced droughts affected trade flow in the Panama Canal.
- Geopolitical tensions: Escalating attacks on ships in the Red Sea by Houthis and disruptions in the Black Sea caused by the war in Ukraine.
- Interdependencies and disruptions: Vulnerability to various types of disruptions, such as natural disasters, pandemics, etc.
 - ⊕ Complex supply chains create interdependencies, where a disruption at one point can ripple through the entire network, as was witnessed during COVID-19 pandemic.

Key outcomes of the UN-GSCF

- Launched Manifesto for intermodal, low-carbon, efficient, and resilient freight transport and logistics: Emphasizes the urgent need for transforming freight transport to meet global climate targets and enhance socio-economic resilience.
- Digital solutions for resilience: Presented guidelines for developing an electronic single window for trade.
- Launched UNCTAD Trade-and-Transport Dataset: Developed with the World Bank, to contribute to better understanding and optimizing global trade flows.

Initiatives taken to boost Supply Chain Resilience in India

Global

- Supply Chain Resilience Initiative: Launched by Australia, India, and Japan in 2021.
- Indo-Pacific Economic Framework for Prosperity (IPEF): India is a signatory to Pillar-II of IPEF relating to Supply Chain.

Domestic

- Logistics Ecosystem: PM Gati Shakti National Master Plan, the National Logistics Policy (2022), etc.
- Boost to manufacturing: Atmanirbhar Bharat initiative, introduction of PLI schemes in key sectors, liberalized FDI policy, etc.

S&P upgrades India's sovereign rating outlook to positive from stable

Credit Rating firm Standard & Poor's (S&P) Global has revised credit outlook to positive while retaining sovereign credit rating to 'BBB-' for long-term and 'A-3' for short-term unsolicited foreign and local currency.

Revised credit outlook is on account of India's robust economic expansion, broad continuity in economic reforms and fiscal policies, prioritization of fiscal consolidation efforts, and improved quality of government expenditure.

About Sovereign Credit Rating (SCR)

- SCR represent an assessment of a country's or sovereign entity's ability to meet debt obligations, including both capability and willingness to repay debt.
- SCRs are dominated by 3 US-based rating agencies S&P, Moody's, and Fitch.

Significance of SCR

- Borrowing cost: Higher credit ratings indicate lower risk, allowing countries to borrow at lower interest rates.
- Access to capital markets: Higher credit ratings can result in easier access to international capital markets, as investors perceive them as more creditworthy and are more willing to lend to them.
- ▶ Policy implications: To improve credit ratings, Governments often implement prudent fiscal and economic policies.

Issues with SCRs

- ▶ Lack of transparency on methodologies followed by rating agencies.
- Inadequately capture economy's fundamentals (ability and willingness to pay).
- Allegations of bias against emerging economies.

Credit Rating Agencies (CRAs) in India

- In India, CRAs are primarily regulated by SEBI.
 - PFRDA also regulate certain aspects of CRAs under their respective sectoral jurisdiction.
- SEBI (Credit Rating Agencies) Regulations, 1999 provides that agencies are required to disclose their rating criteria, methodology, default recognition policy, and guidelines on dealing with conflict of interest.
- Domestic CRAs registered under SEBI include CRISIL, ICRA, etc.







RBI released 'Framework for Recognising Self-Regulatory Organisations for FinTech Sector' (SRO-FT framework)

FinTech are entities that provide technological solutions for delivery of financial products to consumers or provide regulatory compliance in partnership with traditional financial institutions.

- FinTech have redefined financial services by saving time, enhancing access, and lowering costs. However, they have also raised concerns like customer protection, data privacy, etc.
- Therefore, RBI released SRO-FT framework.

About SRO-FT framework

- SRO is an industry-led entity responsible for establishing and enforcing regulatory standards, promoting ethical conduct, ensuring market integrity, among its members.
- Key highlights
 - SRO-FT to be built on a 'representative' structure to draw collective expertise of its members.
 - SRO-FT should be independent from influence.
 - SRO-FT should not set up entities / offices overseas without prior approval of RBI.
 - SRO-FT should put in place systems for managing 'user harm' instances that come to its notice or are referred to it by RBI or any other stakeholder.
 - User harm includes fraud, unfair practices, unauthorized transactions, etc.
 - SRO-FT should be an entity domiciled / registered in India.
 - SRO-FT could have FinTechs companies domiciled outside India as members.

Need of SRO-FT

- To adhere to industry standards and best practices.
- Empower FTs to conduct responsibly even in absence of formal regulation.
- Help to collaborate to identify and address challenges, foster an environment where innovation flourishes.
- To adapt to rapid technological advancements and evolving market dynamics.
- To usher in self-discipline, and imbibe high levels of internal governance among FTs.

Novel method for mass production of Recombinant Proteins

Researchers at Indian Institute of Science (IISc) have developed a **new process for production of recombinant proteins**.

What are Recombinant Proteins (RPs)?

- ➤ These are modified or manipulated proteins encoded by recombinant DNA (rDNA) for increasing production of proteins, modifying gene sequences, and manufacturing useful commercial products.
 - rDNA is artificially made DNA strand that is formed by combination of two or more DNA molecules.
 - rDNA technology can be used to combine (or splice) or transfer DNA from different species or to create genes with new functions.

Production of Recombinant Proteins

- RPs such as vaccine antigens, insulin and monoclonal antibodies, are mass-produced by growing modified bacterial, viral or mammalian cells in large bioreactors.
 - Most widely used organism is yeast Pichia pastoris (now called Komagataella phaffii) and it utilizes methanol for production of RP.
 - However, methanol is highly flammable and hazardous, requiring stringent safety precautions.
- Researchers have now developed an alternative safer process that relies on a common food additive called mono-sodium glutamate (MSG).
- ➤ Escherichia coli (E.Coli) is also one of the organisms of choice for RP production due to its well-characterized genetics, rapid growth, and high yield production.

Applications of Recombinant Proteins

- **Production of biotherapeutics:** Such as insulin, growth hormones, and monoclonal antibodies.
- **Development of vector vaccines:** Considered safer than traditional vaccines, as they do not contain live pathogens.
- Agricultural: Used in development of genetically modified crops, increase nutritional value of animal feed etc.
- ➤ Environmental: Used in bioremediation (process of using microorganisms to break down pollutants in the environment).

Also in News



Nifty EV & New Age Automotive Index

National Stock Exchange of India Indices launches India's first Electric Vehicle (EV) index i.e. Nifty EV & New Age Automotive Index.

About Index

- It aims to track the performance of companies which form a part of EV ecosystem or are involved in development of new age automotive vehicles or related technology.
- Index has a base date of April 02, 2018 and a base value of 1000.
- Stocks forming a part of the Nifty 500 are eligible to be a part of the index.
- Index will be reconstituted semi-annually and rebalanced on a quarterly basis.



Foreign Direct Investment (FDI)

According to RBI, Gross FDI declined marginally to USD 71 billion in 2023-24 from USD 71.4 billion in 2022-23.

- Net FDI (i.e., net inward FDI minus net outward FDI) flows fell to US\$ 10.6 billion during 2023-24 from US\$ 28.0 billion in 2022-23.
- Singapore, followed by Mauritius and USA, is the largest source of FDI for India.
- Highest FDI inflows are in manufacturing sector, followed by Electricity and Computer Services.

About FDI

▶ It means investment through capital instruments by a person resident outside India in an unlisted Indian company or in 10% or more of post issue paid-up equity capital of a listed Indian company.









Rhinoceros

According to new study, climate change threatens Rhinoceros (Rhinos) with extinction as they are vulnerable to increased heating due to:

- Lack of high surface area to dissipate heat.
- Lack of ability to sweat as they lack sweat glands.

About Rhinos

- There are 5 species of Rhinos: Sumatran rhino, Javan rhino, Black rhino, Greater one-horned rhino (found in India), White rhino.
- Rhinos are 'keystone species' mega-herbivores that help shape entire ecosystems by:
 - Geo-forming reshaping land such as creating natural waterholes.
 - Spreading nutrients, seeds and increasing plant biodiversity.



KAZA Summit

edition Kavango-Zambezi (KAZA) Trans-Frontier of Conservation Area (TFCA) Summit is being held in Zambia.

About KAZA TFCA

- Formally established in 2011.
- It lies in the Kavango and Zambezi river basins where Angola, Botswana, Namibia, Zambia, and Zimbabwe converge.
- Okavango Delta (world's largest inland delta) and Victoria falls (a World Heritage Site and one of the seven natural wonders of the world) lie within the region.



Skill India Digital Hub (SIDH)

National Skill Development Corporation (NSDC) and International Labour Organization announced a strategic partnership to advance skill development and lifelong learning in India.

A key aspect of partnership is implementation of Skill India Digital Hub (SIDH).

About SIDH

- Unified digital platform, developed by Ministry of Skill Development and Entrepreneurship, to skill, reskill and upskill Indian individuals through an online training platform.
- It has a three-layered framework:
 - Trust Layer: Enable verifiable digital skill credentials.
 - Finance/Payment Layer: Enable payment services like direct beneficiary transfer, rewards, scholarships etc.
 - Discovery Layer: Facilitate commerce and enable innovation and entrepreneurship.

Exercise Red Flag 2024

Indian Air Force took part in Red Flag Exercise in Alaska, USA.

About Red Flag Exercise

- It is a multi-national air combat exercise designed to create a comprehensive learning environment by simulating realistic combat scenarios
- Two distinct Red Flag exercise locations in USA i.e. Nellis Air Force Base in Nevada and Eielson Air Force Base in Alaska.
- Nevada exercise is organized by US Air Force Warfare Center, while Alaska exercise is managed by Pacific Air Forces (air component command of US Indo-Pacific Command).



Diadromous Fish

Marine Protected Areas designated to protect Diadromous fish species did not align with their core habitats.

Diadromous Fish

- These species undergo regular migration between saltwater and freshwater environments. Example: Bull Shark, etc.
- They provide important ecosystem services by transporting energy and marine-derived nutrients between freshwater and ocean environments.
- They are a species group that includes both anadromous and catadromous fish.
 - Anadromous fish: Live most of their lives in saltwater but breed in freshwater. Example: Chinook salmon etc.
 - Catadromous fish: Live most of its life in freshwater but breed in saltwater. Example: North American eel etc.
- Threats: Habitat destruction, barriers to migration (e.g. Dams) etc.



Bela Block Printing

Traditional craft Bela Block printing is in danger of dying out with no young takers for it.

About Bela Block Printing

- It is a traditional textile art form that showcases bold and precise designs on textured fabrics.
- It is known for its striking colour combinations and graphic motifs.
- Kachchh in Gujarat remains a significant producer of Bela-style cloth.
- Khatri community is known for practicing this craft.

Places in News



Moldova (Capital: Chişinău)

U.S. pledges \$135 million aid to Moldova to counter Russian influence. Political features

- Landlocked country lying in north-eastern corner of Balkan region of Europe.
- Bordering Countries: Ukraine (north, east, and south) and Romania (west).

Geographical features

- Highest point: Mount Bălănești.
- Major Rivers: Dniester, Prut etc.
- Climate: Moderate winters, Warm summers.
- Natural resources: Lignite, Phosphorites, Gypsum, Limestone etc.

Errata: In 'News Today' dated 19th April, 2024, in 'Also in News' on "World Craft City (WCC)", it was incorrectly mentioned that 'World Crafts Council International (WCCI) is a Kuwait-Based Organisation.'

The correct information is 'The current headquarters for the term (2021-2024) of WCCI is located in Kuwait. However, the Headquarters of WCCI changes according to different terms."































PUNE

JODHPUR

LUCKNOW

PRAYAGRAJ