

1. Green Bonds and Green Washing

Topic: Economy



In News: To prevent greenwashing by issuers of green debt securities, SEBI has set out criteria that must be strictly adhered to.

More on the Topic

- Sebi broadly defines a **green debt security (Green bond)** as one that is issued for the purpose of raising capital to be used for the cause of sustainable development or furthering energy efficiency.
- A bond is a **fixed income instrument** that represents a loan made by an investor to a borrower (typically corporate or governmental).
- Bonds traditionally paid a fixed interest rate (coupon) to investors.
- In 2007, green bonds were **launched by few development banks such as the European Investment Bank and the World Bank.**
- Subsequently, in 2013, corporates too started participating, which led to its overall growth.
- Green bonds have been crucial in **increasing financing to sunrise sectors like renewable energy**, thus contributing to India's sustainable growth.

About Green Washing:

- The term 'greenwashing' refers to falsely claiming that a company's products, services, or business operations are more environmentally friendly than they actually are.
- Companies which engage in 'greenwashing', mislead the market participants who buy these securities.

Highlights from the SEBI Guidelines:



- An issuer of green bonds **shall not use misleading labels, hide trade-offs, or, cherry pick data from research** to highlight green practices, while obscuring others that are unfavourable.
- Issuers should ensure that **they continuously monitor the transition to a more sustainable form of operation.**
- Funds raised through green bonds are not used for purposes that would not fall under the **definition of 'green debt security' under the non-convertible securities (NCS) regulations.**
- Issuer shall not make untrue claims giving **false impression of certification** by a third-party entity.
- Issuer shall quantify **negative externalities associated with utilization of the funds** raised through green bonds.

Purposes Listed in non-convertible securities (NCS) regulations:

- investment in **renewable and sustainable energy, such as wind, solar, and bioenergy.** Investing in public transportation, energy efficient buildings, biodiversity conservation, sustainable waste management, and climate change adaptation also fit the description.
- Other areas where green bonds can be invested include **sustainable land use, sustainable forest and agriculture, afforestation, and sustainable water management.** Sebi has also listed other new categories from time to time on its website.

Source: Indian Express

2. Red Sanders

Topic: Environment and Ecology





In News: A factsheet prepared by TRAFFIC, a global wildlife trade monitoring organisation has revealed that Red Sanders is under severe pressure from illegal logging and harvesting in India.

More on the Topic:

- The report has recorded 28 incidents of Red Sanders confiscation, seizure, and specimen from the wild being exported from India.
- These consignments were exported to China (53.5%), Hong Kong (25.0%), Singapore (17.8%) and the United States of America (3.5%) from 2016 to 2020.
- **Red Sanders Pterocarpus santalinus, or red sandalwood**, is an endemic tree species with distribution restricted to the Eastern Ghats of India.
- The species found in Andhra Pradesh and growing up to a height of 10 to 15 metres, is reported to be one of India's most exploited tree species.

The Demand for Red Sanders:

- The species, Pterocarpus santalinus, is **an Indian endemic tree species, with a restricted geographical range in the Eastern Ghats.**
- The species is **endemic to a distinct tract of forests in Andhra Pradesh.**
- Red Sanders **usually grow in the rocky, degraded and fallow lands with Red Soil and hot and dry climate.**
- Its **heartwood is in demand in both domestic and international markets** and is used to make furniture and handicrafts.
- The red dye obtained from the wood is used as a colouring agent in textiles and medicines.

Important Conservation Efforts:

- Listed under **Schedule IV of The Wildlife Protection Act and Endangered as per IUCN Red List.**
- in 2016 the **Andhra Pradesh Forest Act, was amended via A.P. Act No.15 of 2016, to give special status of protection to Red Sanders.**
- Red Sanders offences were made cognisable and non-bailable, and the punishments related to it were enhanced.

Source: Down to Earth



3. e-Rupee - The central Bank Digital Currency

Topic: Economy



In News: Reliance Retail becomes first retailer to start accepting payments in RBI's e-Rupee.

More on the Topic:

- **e-RUPI is basically a digital voucher** which a beneficiary gets on his phone in the form of an SMS or QR code. It is a pre-paid voucher, which he/she can go and redeem it at any centre that accepts its.
- For example, if the Government wants to cover a particular treatment of an employee in a specified hospital, it can issue an e-RUPI voucher for the determined amount through a partner bank.
- The employee will receive an SMS or a QR Code on his feature phone / smart phone. He/she can go to the specified hospital, avail of the services and pay through the e-RUPI voucher received on his phone.
- Thus e-RUPI is a **one time contactless, cashless voucher-based mode of payment that helps users redeem the voucher without a card, digital payments app, or internet banking access.**
- e-RUPI should not be confused with Digital Currency which the Reserve Bank of India is contemplating. Instead e-RUPI is a person specific, even purpose specific digital voucher.

How is e-RUPI advantageous to the Consumer ?

- e-RUPI does not require the beneficiary to have a bank account, a major distinguishing feature as compared to other digital payment forms. It ensures an easy, contactless two-step redemption process that does not require sharing of personal details either.
- Another advantage is that e-RUPI is operable on basic phones also, and hence it can be used by persons who do not own smart-phones or in places that lack internet connection.

What are the benefits of e-RUPI for the sponsors:



- e-RUPI is expected to play a major role in strengthening Direct-Benefit Transfer and making it more transparent. Since, there is no need for physical issuance of vouchers, it will also lead to some cost savings as well.

What benefits accrue to the Service Providers?

- Being a prepaid voucher, e-RUPI would assure real time payments to the service provider.

Who has developed the e-RUPI ?

- The National Payments Corporation of India (NPCI), which oversees the digital payments ecosystem in India, has launched e-RUPI, a voucher-based payments system to promote cashless transactions.
- It has been developed in collaboration with the Department of Financial Services, Ministry of Health & Family Welfare and National Health Authority.

Source: PIB

4. Lab Grown Diamonds

Topic: Science and Technology



In News: Indian Institute of Technology Madras (IIT Madras) will be provided a grant of Rs 242 Crore over a period of five years to undertake research on Lab Grown Diamonds (LGD).

More on the Topic:



- This research will be focused on driving indigenisation of the LGD manufacturing process.
- Lab-grown diamonds are diamonds that are **produced using specific technology which mimics the geological processes that grow natural diamonds.**
- They are not the same as “diamond simulants” – LGDs are chemically, physically and optically diamond and thus are difficult to identify as “lab-grown.”
- While materials such as Moissanite, Cubic Zirconia (CZ), White Sapphire, YAG, etc. are “diamond simulants” that simply attempt to “look” like a diamond, they lack the sparkle and durability of a diamond and are thus easily identifiable.
- However, differentiating between an LGD and an Earth Mined Diamond is hard, with advanced equipment required for the purpose.

How are LGDs produced?

- There are multiple ways in which LGDs can be produced. The most common (and cheapest) is the “**High pressure, high temperature**” (HPHT) method.
- As the name suggests, this method requires **extremely heavy presses that can produce up to 730,000 psi of pressure under extremely high temperatures (at least 1500 celsius).**
- Usually **graphite is used as the “diamond seed”** and when subjected to these extreme conditions, the relatively inexpensive form of carbon turns into one of the most expensive carbon forms.
- Other processes include “**Chemical Vapor Deposition**” (CVD) and **explosive formation** that creates what are known as “detonation nanodiamonds”.

Uses of LGDs?

- LGDs are **most often used for industrial purposes**, in machines and tools. Their hardness and extra strength make them ideal for use as cutters.
- Furthermore, pure synthetic diamonds have high thermal conductivity, but negligible electrical conductivity.
- This combination is invaluable for electronics where such diamonds can be used as a **heat spreader for high-power laser diodes, laser arrays and high-power transistors.**
- As the Earth’s reserves of natural diamonds are depleted, LGDs are slowly replacing the prized gemstone in the jewelry industry.

Source: IE

5. Carrying Capacity

Topic: Environment and Ecology



In News: Taking suo-motu cognisance of a media report that has warned of a Joshimath-like situation in Mussoorie town, the National Green Tribunal (NGT) has issued directions to the Uttarakhand Government to conduct a study of the specific carrying capacity of the hill station.

More on the Topic:

- The NGT observed that unplanned construction beyond carrying capacity is “a warning for Mussoorie” and “its subsurface material is being displaced due to large-scale construction activities.”

Carrying Capacity:

- It is defined as the total number of individuals of a species that can live in an ecosystem under certain conditions.
- More recently the concept has been expanded beyond ecology by including **economic, social, and infrastructure imperatives**.
- Urban Carrying Capacity (UCC): It provides a theoretical foundation for determining the maximum potential population that could be supported without environmental degradation, based on the inherent limitations of a city.

- The population must stay without degrading the natural social, cultural and economic environment for present and future generations.
- It becomes difficult for the population to survive beyond the environment's carrying capacity for very long.

Source: Business Standard

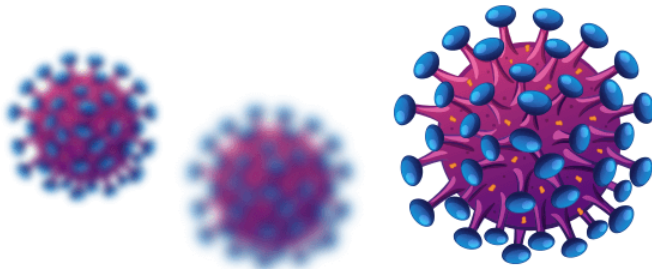
6. Dar-es-Salaam Declaration for Action

Topic: Health

WHAT IS HIV?

Human Immunodeficiency Virus (HIV)

is a virus that attacks cells that help the body fight infection.



There's no cure, but it is **treatable** with medicine.



In News: Through Dar-es-Salaam Declaration for Action, African nations have pledged to End AIDS in Children by 2030.

More on the Topic:

- The declaration was adopted at the first ministerial meeting of the Global Alliance to end AIDS in Children. The Alliance was formed during the International AIDS Conference in Canada last July (2022).
- Main focus will be on ensuring that life-saving antiretroviral (ARV) medication reaches children.
- Currently, around the world, a child dies from AIDS-related causes every five minutes, (UNAIDS data)

The work will centre on four pillars:

- early testing and treatment; ensuring that pregnant and breastfeeding women do not pass the virus on to their babies; preventing new HIV infections among pregnant and breastfeeding adolescent girls and women; and “addressing rights, gender equality and the social and structural barriers that hinder access to services”.

Source: Business Standard

7. Malawi’s Cholera Fight

Topic: Health

Cholera disease infographics

Common symptoms



In News: WHO has deployed emergency medical teams to support Malawi’s cholera fight.

More on the Topic:

- Malawi has been battling the cholera outbreak for months now, with reports that the outbreak has spread to nearly all part of the country.
- More than 1,000 people have died from the disease since March 2022.
- Cholera is **an extremely virulent disease that can cause severe acute watery diarrhoea.**
- It is caused by infection of the intestine with the **bacterium Vibrio cholerae.**
- It takes between 12 hours and 5 days for a person to show symptoms after ingesting contaminated food or water (2).
- **Cholera affects both children and adults and can kill within hours if untreated.**
- A person may get cholera by drinking water or eating food contaminated with the cholera bacterium.



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- **The disease can spread rapidly in areas with inadequate treatment of sewage and drinking water.**
- Currently there are three WHO pre-qualified oral cholera vaccines (OCV), Dukoral, Shanchol, and Euvichol-Plus.
- All three vaccines require two doses for full protection.

Source: Business Standard
