

1. Liquid Nano-urea

Topic: Economy



In News: union minister of chemical and fertilizers reviews progress of nano urea Production and sales for financial year 2022-23.

More on the Topic:

- With the inclusion of Nano Urea in the monthly supply plan of the states by the Department of Fertilizers, its availability and reach to the farmers will increase manifold.
- Ministry of chemical and fertilizers directed the department officials for promotion of Nano urea in mission mode to harness its benefits.

Nano Urea:

- Nano Urea is an innovative Nano fertilizer developed indigenously.
- Nano Urea is a **patented chemical nitrogen fertiliser developed by IFFCO's Nano Biotechnology Research Centre at Kalol** with nano nitrogen particles from 20-50 nm.
- By substituting 45 kg of conventional granulated urea priced at Rs 266 with subsidy (Rs 3966 without subsidy) with a 500-ml bottle of liquid nano-urea, the government can avoid paying for transportation, and storage space, import, and subsidies.
- It is less polluting during production and use than conventional urea because it does not release nitrogen-based greenhouse gases like nitrous oxide into the atmosphere.

Issues with Traditional Granulated Urea:

- Due to its solid essence, it falls into the soil where the crop can easily access all of the nitrogen contained in the granule, which is typically between one and two millimeters in size.
- However, because of burst release, the ammonia escapes into the atmosphere and interacts with the oxygen to form nitrous oxide, a greenhouse gas.

Advantages of Nano-Urea:

- **The plant leaf receives a spray of nano-urea.** These are nanoscale (20–50 nm) particles. They are easily taken by the plant and cause it to release nitrogen.

- Additionally, **they increase the levels of protein, chlorophyll, and nucleotides like RNA or DNA within plant cells** as well as the enzymes responsible for nitrogen metabolism.
- It **might raise the agricultural output of the tested crops** in various agroclimatic zones across India by 7 to 8%.
- It improved the crop's quality and grain protein content.

Source: Indian Express

2. RBI Regulation of Digital Lending

Topic: Economy



In News: The Reserve Bank of India has released norms to regulate digital lending to crack down on the growing number of frauds and unlawful activities.

More on the Topic:

- Following are the norms,
- All loan disbursements and repayments have to be executed only between the bank accounts of the borrower and the regulated entity without any pass-through or pool account of the lending service provider (LSP) or any third party.
- Any fees or charges payable to LSPs in the credit intermediation process shall be paid directly by the regulated entity and not by the borrower.
- Data collected by Digital lending apps should be need based.

Significance of the guidelines:

- Under digital lending, there have been concerns related to unbridled engagement of third parties, mis-selling, breach of data privacy, unfair business conduct, charging of exorbitant interest rates, and unethical recovery practices.
- These practices could be controlled or mitigated by the regulatory norms.

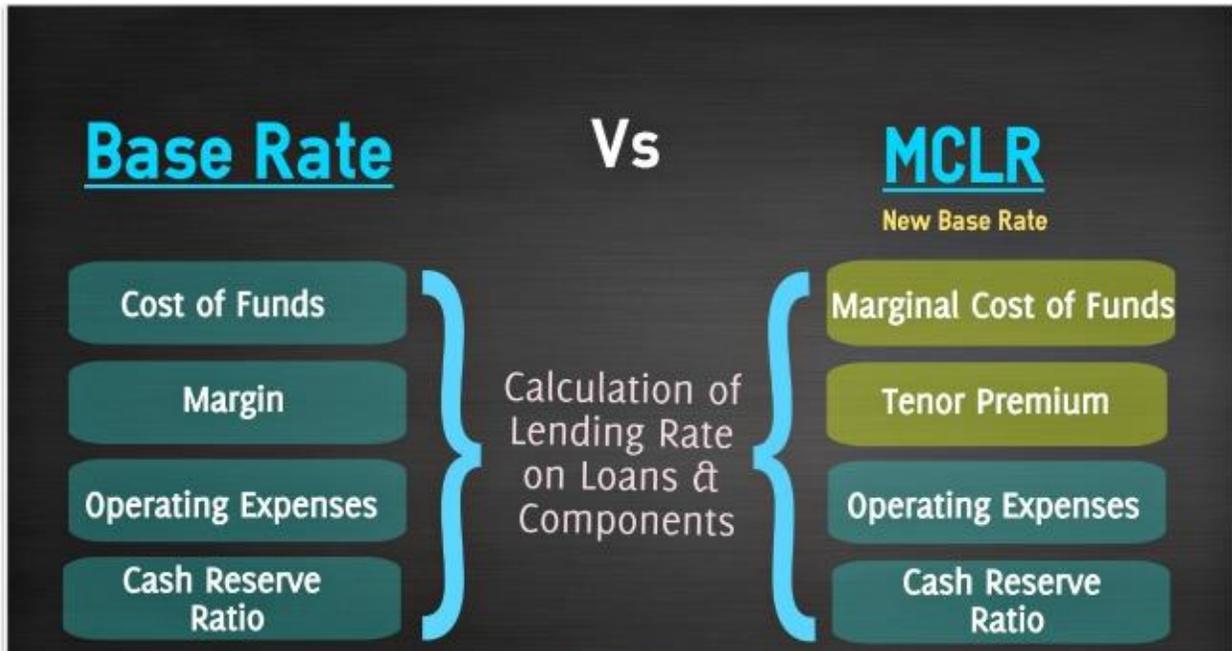
What is Digital Lending:

- Digital Lending involves lending through web platforms or mobile apps, utilizing technology for authentication and credit evaluation.

Source: Indian Express

3. Marginal Cost of Funding Based Lending Rate (MCLR)

Topic: Economy



In News: RBI has said the newer marginal cost of funding based lending rate (MCLR) system is more effective than the erstwhile base rate method.

More on the Topic:

- The paper said that for every 1 percentage point increase by the RBI in its repo rate, the weighted average lending rate by banks for fresh rupee loans moves up by 0.26-0.47 per cent per cent under the MCLR regime as against 0.11-0.19 per cent under the base rate regime.
- Base rate was introduced in July 2010 as a system wherein **banks cannot lend under a stated rate**, while the MCLR came in April 2016 wherein the banks were given a formula to calculate their cost of funding and then conduct monthly reviews of their offerings across various tenors.
- **MCLR refers to the minimum interest rate of a bank below which it cannot lend**, except in some cases allowed by the RBI. Thus, it is an internal benchmark or reference rate for the bank.

- Marginal cost is charged on various factors such as interest rate for various types of deposits, borrowings, and return on net worth.
- Therefore, MCLR is largely determined by the marginal cost of funds and especially by deposit rates and repo rates.

Source: Hindu

4. Baansera bamboo-themed park

Topic: Environment and Ecology



In News: An area of 10 hectares of the Yamuna river floodplain at Delhi is being developed as a theme-based multipurpose area using bamboo as a material in biotic and abiotic form.

More on the Topic:

- Plantation of Bamboo on a large scale will help **address the Capital's problem of air pollution significantly** as the Bamboo plant produces about 30 per cent more Oxygen even as it consumes far less water and enriches the soil.
- Bamboo is a **tall treelike grass of the Poaceae family** with over 1,000 species distributed along the tropical, subtropical and mild temperate regions in Asia, Africa and Americas.
- They can reach up to 30 metres and some species can have growth of as much as 30 cm or more per day.

Source: Indian Express

5. Lumpy Skin disease (LSD)

Topic: Environment and Ecology



In News: The Union Minister for Agriculture and Farmers Welfare has launched the indigenous vaccine Lumpi-ProVaInd (homologous live-attenuated) to protect livestock from Lumpy Skin disease (LSD).

More on the Topic:

- Lumpy skin disease (LSD) is a **viral disease of cattle and water buffalo that causes relatively low mortality**; however, the disease can result in animal welfare issues and significant production losses.
- LSD is caused by virus called the **Capripoxvirus** and is genetically related to the goatpox and sheep pox virus family.
- The disease is **spread primarily by biting insects such as certain species of flies, mosquitoes and possibly ticks**.
- The disease can also be spread by fomites through such things as contaminated equipment and in some cases directly from animal to animal.
- **It does not pose a risk to human health.**

Source: Business Standard

6. New Strategic Arms Reduction Treaty (New START) Treaty

Topic: International Relations



In News: Russia has halted US inspections of nuclear arsenal under New START treaty.

More on the Topic:

- New START (Strategic Arms Reduction Treaty) was the last remaining arms reduction pact between the former Cold War rivals and caps to 1,550 the number of nuclear warheads that can be deployed by Russia and United States of America.
- It entered into force on 5th February, 2011.
- It continues the bipartisan process of verifiably reducing U.S. and Russian strategic nuclear arsenals by limiting both sides to 700 strategic launchers and 1,550 operational warheads.
- Its duration was for ten years that is till 2021, but it was extended by five more years till 2026.

Source: Hindu

7. Nagorno-Karabakh

Topic: Places in News



In News: Armenia and Azerbaijan had blamed each other for the recent clashes that violated a ceasefire over the Nagorno-Karabakh region.

More on the Topic:



- The Nagorno-Karabakh conflict is an ethnic and territorial conflict between Armenia and Azerbaijan over the disputed region of Nagorno-Karabakh, inhabited mostly by ethnic Armenians, but located within the boundaries of Azerbaijan.
- While the area remains in Azerbaijan, it is today governed by separatist Armenians who have declared it a republic called the “Nagorno-Karabakh Autonomous Oblast”

Source: Hindu
