
1. Essential Commodities Act 1955

Why in News?

- Recently, Union Home Secretary wrote to all chief secretary to ensure the availability of essential goods by invoking Essential Commodities Act 1955.

About Essential Commodities Act 1955:

- It is used by the Government to regulate the production, supply and distribution of a whole host of commodities it declares 'essential' in order to make them available to consumers at fair prices.
- It includes list of items such as drugs, fertilisers, pulses and edible oils, and petroleum and petroleum products.
- The Centre can include new commodities as and when the need arises, and take them off the list once the situation improves.
- Under the Act, the government can also fix the maximum retail price (MRP) of any packaged product that it declares an "essential commodity".

How does the Law Works?

- If the Centre finds that a certain commodity is in short supply and its price is spiking, it can notify stock-holding limits on it for a specified period.
- The States act on this notification to specify limits and take steps to ensure that these are adhered to.
- Anybody trading or dealing in a commodity, be it wholesalers, retailers or even importers are prevented from stockpiling it beyond a certain quantity.
- A State can, however, choose not to impose any restrictions. But once it does, traders have to immediately sell into the market any stocks held beyond the mandated quantity. This improves supplies and Brings Down Prices.
- State agencies can conduct raids to get everyone to toe the line and the errant are punished. The excess stocks are auctioned or sold through fair price shops.

2. Global Initiative on Sharing All Influenza Data (GISAID)

Context:

- Recently, India has shared nine whole genome sequences of the novel coronavirus (SARS-CoV-2) with the Global Initiative on Sharing All Influenza Data (GISAID), which have been shared by the Pune-based National Institute of Virology.

About GISAID:

- It is a public platform started by the WHO in 2008 for countries to share genome sequences.
- It is created as an alternative to the public domain sharing model.
- Its sharing mechanism took into account the concerns of Member States by providing a publicly accessible database designed by scientist for scientist, to improve the sharing of influenza data.
- It's database access agreement ensures that contributors of genetic sequence data do not forfeit their intellectual property rights to the data.
- In 2010 the **Federal Republic of Germany** became the official host of the GISAID platform.
- In 2013 the **European Commission** recognized GISAID as a research organization and partner in the PREDEMICS consortium, a project on the Preparedness, Prediction and the Prevention of Emerging Zoonotic Viruses with Pandemic Potential using multidisciplinary approaches.

About Genomic Sequencing:

- It is a technique that allows us to read and interpret genetic information found within DNA or RNA.
- The **SARS-CoV2 genome**, as it is formally known, has about **30,000 base pairs**, somewhat like a long string with 30,000 places where each one of these occupy one of four chemicals called **nucleotides**.
- The long string, with its unique combination of nucleotides, is what uniquely identifies the virus.
- It helps the researchers to understand how the virus is evolving as it spreads. So far, there are over 1,000 COVID-19 genomes that have been published worldwide.

Advantages of Genomic Sequencing:

- ✓ It helps track the transmission route of the virus globally.
- ✓ It can determine how quickly the virus is adapting as it spreads.
- ✓ It identifies targets to therapies.
- ✓ It is required to understand the role of co-infection.

3. Biofortified Carrot

Why in News?

- Vallabhai Vasrambhai Marvaniya, a farmer scientist from Junagadh district, Gujarat developed Madhuban Gajar and is benefitting more than 150 local farmers in the area.

Highlights:

- Madhuban Gajar, a biofortified carrot variety with high β -carotene and iron content developed by a farmer scientist from Junagadh district, Gujarat is benefitting more than 150 local farmers in the area.
- It is being planted in an area of over 200 hectares in Junagadh, and the average yield, which is 40-50 t/ha, has become the main source of income to the local farmers.
- The variety is being cultivated in more than 1000 hectares of land in Gujarat, Maharashtra, Rajasthan, West Bengal, Uttar Pradesh during the last three years.
- The Madhuban Gajar is a highly nutritious carrot variety developed through the selection method with higher β -carotene content (277.75 mg/kg) and iron content (276.7 mg/kg) dry basis and is used for various value-added products like carrot chips, juices, and pickles.
- Among all the varieties tested, beta-carotene and iron content were found to be superior.
- In trials conducted by the National Innovation Foundation, it was found that the Madhuban Gajar carrot variety possesses a significantly higher root yield (74.2 t/ha) and plant biomass (275 gm per plant).
- This variety was developed by farmer-scientist Shri Vallabhai Vasrambhai Marvaniya.
- During 1943, he found that a local carrot variety was profoundly used for fodder to improve the quality of milk.
- He selectively cultivated this variety and sold this carrot in the market at a good price. Since then, he, along with family, is working for the conservation and development of this cultivar.
- In the 1950s, he started cultivating this on a large-scale.
- He also started distributing the seeds to other farmers in his village and adjoining areas in the 1970s.
- During 1985, he started selling the seeds on a large scale.
- Shri Marvaniya was conferred with a National Award by the President of India during the Festival of Innovation (FOIN) – 2017.
- He was also conferred with Padma Shri in the year 2019 for his extraordinary work.

4. iGOT e-learning Platform

Why in News?

- The Department of Personnel and Training, under the Government of India, launches a digital platform to train all healthcare and COVID-19 warriors of India.

Highlights:

- The e-learning platform is for all front-line workers to equip them with the training and updates in coping with the coronavirus pandemic.
- Appropriate training will also prepare them for the subsequent stages of the pandemic.
- The target group is Doctors, Nurses, Paramedics, Hygiene Workers, Technicians, Auxiliary Nursing Midwives (ANMs), Central & State Govt. Officers, Civil Defence Officials, various Police Organisations, National Cadet Corps (NCC), Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme (NSS), Indian Red Cross Society (IRCS), Bharat Scouts & Guides (BSG) and other volunteers.



iGOT Platform:

- The platform delivers curated, role-specific content to each learner at his place of work or home and to any device of his choice.
- iGOT platform is designed to population scale, and will provide training to around 1.50 crore workers and volunteers in the coming weeks.
- To begin with, nine courses on iGOT have been launched on topics like Basics of COVID, ICU Care and Ventilation Management, Clinical Management, Infection Prevention through PPE, Infection Control and Prevention, Quarantine and Isolation, Laboratory Sample Collection and Testing, Management of COVID 19 Cases, COVID 19 Training.
- Through its customized approach COVID warriors can learn about critical areas from this one-stop source and respond to the prevailing and emergent situations, by keeping themselves updated in a real-time manner.
- The platform is well equipped to cater to the demands of unlimited requests of learning at any time anywhere.
- The platform can be accessed by following an easy to use manual for desktop and mobile versions, thereby making it accessible for all.

5. Mahua flowers

Why in News?

- Trading in mahua flowers (*Madhuca longifolia*) in summers is one of the major sources of livelihood of tribal people in Odisha. However, the lockdown has hurt the trade and disrupted Tribal Economy.



Mahua Flowers:

- Mahua (*Madhuca longifolia*) is a multipurpose tropical tree mainly cultivated or harvested in the wild in Southern Asia for its edible flowers and oil seeds.
- Mahua is indigenous to India, Sri Lanka, Nepal and Myanmar.
- It is a frost resistant species that can grow in marginal areas of dry tropical and subtropical forests up to an altitude of 1200-1800 m.
- The leaves of Mahua are fed on by the moth *Antheraea paphia*, which produces tassar silk, a form of wild silk of commercial importance in India.
- They are also fermented to produce the alcoholic drink mahua, a country liquor.