

1. India's first 5G test bed

Topic: Science and Technology

In News: Prime Minister has inaugurated the country's first 5G testbed recently.

More on the Topic:

- It intends to enable startups and industry players to test and validate their products locally and reduce dependence on foreign facilities.
- In the absence of a 5G testbed, startups and other industry players were required to go abroad to test and validate their products for installation in a 5G network.
- The testbed facility will be available at 5 different locations.
- The 5G testbed has been developed as a multi-institute collaborative project by eight institutes led by IIT Madras.



About Testbeds:

- A testbed is a platform for conducting rigorous, transparent, and replicable testing of scientific theories, computational tools, and new technologies.
- The term is used across many disciplines to describe experimental research and new product development platforms and environments.

About 5G:

- The fifth-generation mobile network is popularly known as 5G.
- It is the next generation of mobile internet connection and offers much faster data download and upload speeds.
- Through greater use of the radio spectrum **it will allow far more devices to access the mobile internet at the same time.**

Significance:

- 5G is the next level of mobile network that will shape the Fourth Industrial Revolution, or Industrial 4.0.
- 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultra low latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users.
- Higher performance and improved efficiency empower new user experiences and connects new industries.

Source: Indian Express

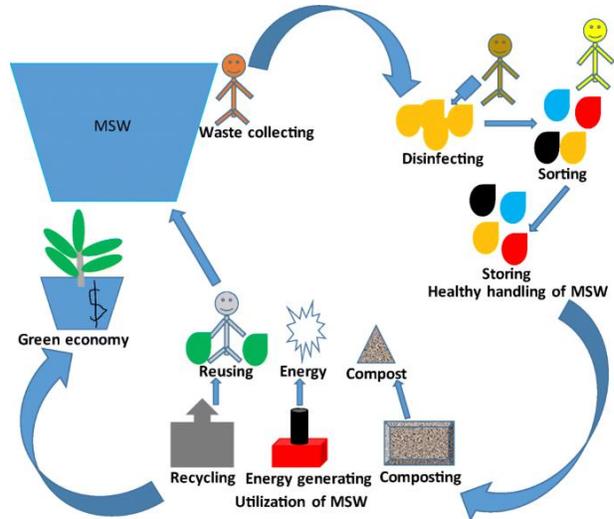
2. 'Circular Economy in Municipal Solid and Liquid Waste' Report

Topic: Economy

In News: Housing and Urban Development Ministry has published the report 'Circular Economy in Municipal Solid and Liquid Waste'.

More on the Topic:

- Key highlights are as following:
- India generates **approx. 1.45 lakh tonnes of solid waste on a daily basis** and **35 per cent of it is said to be a dry waste.**
- Approx. 26,000 tonnes of plastic waste is generated daily and only 15,600 tonnes of plastic waste is recycled, while the remaining 9,400 tonnes are left uncontrolled and unchecked. These uncontrolled wastes are then sent to landfills or water bodies.
- When it comes to wet waste, about 75,000 tonnes of wet waste is generated on a daily basis and around 32 per cent of this is left untreated.
- It has been estimated that **if municipal solid, wet and construction wastes are treated properly, they can generate nearly Rs 30,000 crore revenue per annum** and create employment opportunities for more than one crore people by 2025.



Recommendations:

- Report also suggested **to introduce a tax for dumping municipal waste in landfills.**
- In order to encourage the recycling of waste products government should **reduce the GST and other taxes on the products that are made out of recycled materials to 5 per cent.**
- **Mandatory use of 25% of recycled materials in non-food grade packaging** to ensure recycling.
- **Cement Kilns have the potential to use 25% RDF- non recyclable combustible dry waste replacing coal.**

Source: Indian Express

3.Side Effects of Fortified Rice

Topic: Health

In News: Distribution of fortified rice may harm Adivasi population of Jharkhand.

More on the Topic:

- The government has approved the Centrally Sponsored Pilot Scheme on "Fortification of Rice & its Distribution under Public Distribution System" for a period of 3 years beginning in 2019-20.
- Iron-fortified rice distribution has shown **adverse health impact among Adivasi populations** suffering from sickle-cell anaemia and thalassemia.
- **Thalassemia, sickle cell anaemia and malaria patients already has excess iron in the body.**
- Tb patients are unable to absorb iron.
- If the patients with above mentioned diseases consume fortified rice **their immunity and normal physiological functions may get impaired.**
- Jharkhand's sickle cell anaemia and Thalassemia patient numbers are twice the national average.

About Fortification:

- Food fortification or enrichment is the process of adding micronutrients to food. It can be carried out by food manufacturers, or by governments as a public health policy which aims to reduce the number of people with dietary deficiencies within a population.

Source: Indian Express

WHAT IS FORTIFIED RICE?

Fortification is the practice of deliberately increasing the content of an essential micronutrient, i.e. vitamins and minerals (including trace elements) in food to improve its nutritional quality and provide a public health benefit with minimal risk to health



➤ The fortification factor does not last for more than **45 days**, so it isn't advisable to store fortified rice for long

➤ According to National Family Health Survey, **78.7%** children and **75%** in the district are anaemic and suffer from malnutrition

➤ In the first phase, fortified rice will be distributed in Badangi, Bobbili, Ramabhadrapuram and Terlam mandals

4. Global Report on Assistive Technology (GReAT)

Topic: Report and Indices

In News: First Global Report on Assistive Technology (GReAT) was released recently.



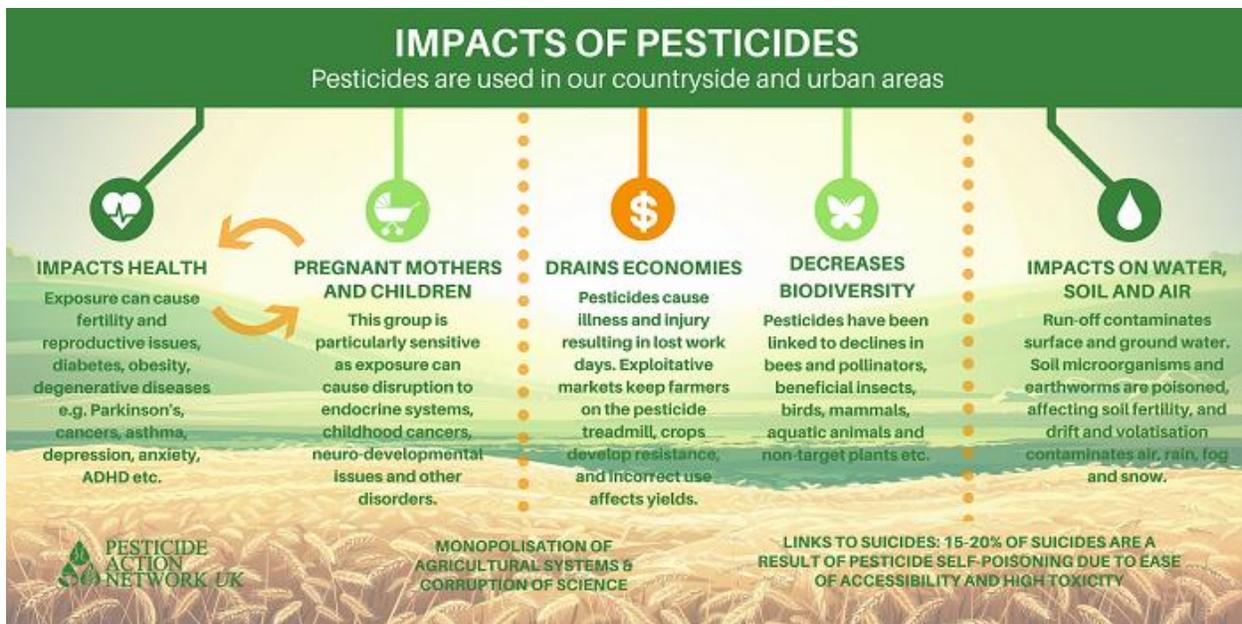
More on the Topic:

- The GReAT report was developed in response to the World Health Assembly resolution on improving access to assistive technology adopted in May 2018.
- The global impact of the **WHO-UNICEF Global Report on Assistive Technology** will be unprecedented.
- According to the report, almost one billion children and adults with disabilities and older persons in need of assistive technology denied access.
- Affordability is the major barrier to access. Around two thirds of people with assistive products reported out-of-pocket payments for them.

Source: Business Standard

5. Endosulfan

Topic: Environment and Ecology



In News: Supreme Court directed Kerala government to distribute Endosulfan victims compensation.

More on the Topic:

- Endosulfan pesticide was used widely on crops like cashew, cotton, tea, and fruits till 2011, after which its production and distribution were banned due to several reports of ill-effects on humans.
- According to the special cell’s report, it was widely used in the Kasaragod district of Kerala from 1978 to 2001.
- The apex court’s direction came on a contempt petition filed by eight victims.
- Endosulfan may affect **the central nervous system, blood, resulting in irritability, convulsions and renal failure.**
- The environmental risk assessment suggests that exposure to endosulfan could result in **both acute and chronic risks of concern for terrestrial and aquatic organisms.**
- Exposure to endosulfan has resulted in both **reproductive and development effects** in nontarget animals, particularly birds, fish and mammals.

Source: Hindu

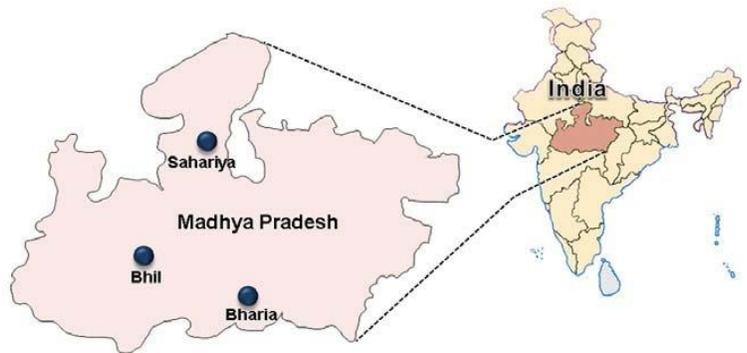
6. Madhya Pradesh’s Sahariya tribe

Topic: Culture

In News: The rising food inflation is hurting the weakest the most in India; Sahariyas are one of the most affected.

More on the Topic:

- Sahariya Adivasis are classified as a **‘Particularly Vulnerable Tribal Group’** by the government.
- The Sahariya live in around eight districts of MP.
- The tribe has been battling **acute poverty and malnutrition for long.**
- Now, the record increase in prices of food items means that basic staples like pulses and vegetables are out of their reach on most days, thus making them even more vulnerable.
- The Sahariya migrate to work as agricultural labourers in different areas of MP, Rajasthan and Uttar Pradesh during the sowing and harvesting seasons of paddy, wheat, mustard and potato.
- During the remaining 6-7 months, they try to live off their earnings or try to find work in their villages.



- They speak **Munda language**.

Source: Hindu

7. National Start up Advisory Council

Topic: Governance

In News: 4th meeting of National Start up advisory council was held recently.

More on the Topic:

- Department for Promotion of Industry and Internal Trade (DPIIT) had constituted the National Startup Advisory Council.
- It is intended to advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large scale employment opportunities.
- Besides the ex-officio members, the council has several non-official members, representing various stakeholders such as founders of successful startups, veterans who have grown and scaled companies in India, persons capable of representing interests of investors, incubators and accelerators into startups, representatives of associations of stakeholders of startups and representatives of industry associations.



Source: Hindu
