

25 April 2020: PIB Summary & Analysis

1. Biggest operation for distribution of pulses underway

What's in News?

In order to distribute one kg of pulses to about 20 crore households for three months in the country, a massive **operation for transport and milling of pulses is underway**.

Details:

- In order to meet the protein needs of people during this on-going crisis due to the [COVID-19 pandemic](#), the Central government had decided to provide one kg of milled and cleaned pulses to each [National Food Security Act](#) (NFSA) household for three months.
- This is being carried out under the PM Garib Kalyan Anna Yojana (PMGKAY).

Read more about [PM Garib Kalyan Yojana \(PMGKY\)](#).

2. Rohtang Pass

What's in News?

Border Roads Organisation clears Rohtang Pass three weeks in advance despite COVID-19 lockdown.

Rohtang Pass:

- It is the arterial road connecting **Lahaul and Spiti district** of **Himachal Pradesh** from the rest of the country.
- It is present on the **Pir Panjal Range of the Himalayas**.
- **River Ravi** rises west of **the Rohtang pass in the Kullu Hills** of Himachal Pradesh.

3. INST scientists find low-cost metal-free nanomaterial towards disinfection of garments under visible light exposure

What's in News?

- Scientists at the Institute of Nano Science and Technology (INST) have found a low-cost **metal-free nanomaterial for visible light microbial disinfection** which can be an **alternative to silver and other metal-based materials**.
 - INST is an autonomous institute under the Department of Science and Technology.

Details:

- The scientists have tested **carbon nitride quantum dots (g-CNQDs)** for **visible-light-driven antibacterial activity** and found it to be efficient.
- These nanomaterials possess **enhanced biocidal activity** attributed to larger surface area of g-CNQDs having more reactive sites and optical absorption both in the ultraviolet and visible regions.
- The g-CNQDs have the ability to **generate Reactive Oxygen Species (ROS)**. The ROS rapidly interact and damage the immediately available biological macromolecules such as lipids present on the cell membrane or envelope and proteins present on the cellular surface, towards inactivation of the microorganism.
- The **mechanism of inactivation is non-specific to a particular pathogen, as lipid and protein are major components of the inhabitants of the microbial world.**
- The scientists are exploring ways of incorporating doped and undoped carbon nitride-based materials into cloth fabrics that can continuously produce reactive oxygen species (ROS) under optimal humidity and temperature for the antimicrobial activity.
- It was explained that aerosol droplets generated during sneezing have enough moisture that might help in ROS mediated disinfection of any infectious agents in the droplet, once it comes into contact with the nanomaterial sewn fabric under sunlight or ambient white light exposure.
- The **dependence on visible light is also advantageous over regular ultraviolet mediated disinfection**, which requires cautious handling of the UV light-emitting devices.

Advantages:

- The team has suggested it to be a viable anti-bacterial alternative to metal/non-metal semiconductors and expensive silver, thus making it cost-effective.
- It is also **biocompatible with mammalian cells.**

4. 8th webinar of 'Dekho Apna Desh'

What's in News?

The Ministry of Tourism organised the 8th webinar of "Dekho Apna Desh" series on "North East India - Experience the Exclusive Villages".

Prelims Facts - Assam:

- The bell metal industry of Assam is the **second-largest handicraft sector after bamboo craft.**
 - Bell metal is an **alloy of copper and tin.**
 - The craftsmen of this industry are referred to as '**Kahar**' or '**Orja**'.
- **Sualkuchi** is situated on the northern banks of the Brahmaputra.
 - It is one of the **world's largest weaving villages where 74% of the households are engaged in weaving exquisite silk fabrics** ranging from the golden Muga to the ivory white Pat and the light beige Eri or Endi silk. It is famous for its centuries-old heritage of weaving.
 - People here support the concept of **Ahimsa Silk breeding** where silk is obtained without killing the silk worms.
 - It is a noble step towards creating an **eco-friendly environment.**
- The endangered species of the **greater adjutant stork** finds an exclusive home in **Dadara.**
 - It is called **Hargila in Assamese.**
 - It is the world's most endangered of the stork species.
- **Manas National Park** in Banskari (140 kms from Guwahati) is a **UNESCO Natural World Heritage Site.**
- **Majuli is one of the largest river islands of the world.**

- It is situated in the midst of the river Brahmaputra.
- Majuli is a hub of **Assamese neo-Vaishnavite culture**, initiated around the 15th century by the revered Assamese saint **Srimanta Sankardeva** and his disciple **Madhavdeva**.
- It is known as the **cradle of Assamese civilization**.

