



# Council of Scientific and Industrial Research

## Why in News

Recently, the Prime Minister chaired a meeting of the [Council of Scientific and Industrial Research \(CSIR\) Society](#) through video conference.

- Earlier [CSIR Floriculture Mission](#) was approved for implementation in 21 States and Union Territories of India.
- It is also planning to [undertake genome sequencing](#) of a sample of nearly 1000 Indian **rural youth to determine unique genetic traits, susceptibility (and resilience) to disease.**

## Key Points

### ▪ About:

- It is the **largest research and development (R&D) organisation in India.** It has a **pan-India presence** and has a dynamic network of **37 national laboratories, 39 outreach centres, 3 Innovation Complexes and 5 units.**
- It is **ranked 37<sup>th</sup> among 1587 government institutions worldwide** and is the only Indian organization among the top 100 global government institutions, according to the **Scimago Institutions Ranking World Report 2021.**
  - CSIR holds the **7<sup>th</sup> rank in Asia and leads the country at the first position.**
- The **Prime Minister** is the **President** (Ex-officio) and the **Union Minister of Science and Technology** is the **Vice President** (Ex-officio).

### ▪ Funding:

- CSIR is funded by the **Ministry of Science and Technology** and it operates as an autonomous body through the [Societies Registration Act, 1860.](#)

### ▪ Established:

- September 1942.

### ▪ Located:

- New Delhi.

### ▪ Objectives:

- **Scientific and industrial/applied research of national importance.** It covers a wide spectrum of streams such as: Radio and space physics, oceanography, [biotechnology](#), [nanotechnology](#), information technology, etc.
- It **provides significant technological intervention** in many areas with regard to societal efforts which include the environment, health, drinking water, food, housing, energy, farm and non-farm sectors.

### ▪ Some Initiatives:

- **Covid-19:**

- CSIR has set up **five technology verticals** for addressing the emerging situation due to **pandemic**:
  - Digital and Molecular Surveillance.
  - Rapid and Economical Diagnostics.
  - Repurposing of Drugs, Vaccine and Convalescent Plasma Therapy.
  - Hospital Assistive Devices and PPEs (Personal Protective Equipment).
  - Supply Chain and Logistics Support Systems.
- **Strategic:**
  - **Head-Up-Display (HUD):** It developed indigenous Head-Up- display (HUD) for Indian Light Combat Aircraft, **Tejas**. HUD **aids the pilot in flying the aircraft and in critical flight maneuvers including weapon aiming.**
- **Energy & Environment:**
  - **Solar Tree:** It occupies **minimum space to produce clean power.**
  - **Lithium Ion Battery:** India's **first lithium ion battery fabrication facility** based on indigenous novel materials for making 4.0 V/14 h standard cells has been established.
- **Agriculture:**
  - **Samba Mahsuri Rice Variety:** It developed a **Bacterial Blight Resistant Rice.**
  - **Rice Cultivar (Muktashree):** A rice variety has been developed which **restricts assimilation of Arsenic within permissible limits.**
  - **White-fly resistant Cotton variety:** Developed a **transgenic cotton line** which is resistant to whiteflies.
- **Healthcare:**
  - **Genomics and other omics technologies for Enabling Medical Decision - GOMED:** It has been developed by the CSIR which provides a platform of disease genomics to solve clinical problems.
- **Food & Nutrition:**
  - **Ksheer-scanner:** It detects the **level of milk adulteration** and adulterants in 45 seconds at the cost of 10 paise.
  - **Double-Fortified Salt:** Salt **fortified with iodine and iron** having improved properties developed and tested for **addressing anaemia in people.**

**Source: PIB**