



**Yojna IAS**

C-32 NOIDA SECTOR-02  
UTTAR PRADESH (201301)  
CONTACT No. +8595907569

# CURRENT AFFAIRS



**Date - 17 Feb 2022**

## Earth Observation Satellite: EOS-04

- Recently the Earth Observation Satellite (EOS-04) of the Indian Space Research Organization and two other small satellites (INSPIRESat-1 and INS-2TD) were successfully placed in the desired orbit by PSLV-C52 rocket.
- It was the 54th flight of the Polar Satellite Launch Vehicle (PSLV) and its 23rd most powerful XL-version with six strap-on boosters.

### Earth Observation Satellites:

- Earth observation satellites are satellites equipped with remote sensing technology, which collect information about the physical, chemical and biological systems of the Earth.
- Many Earth observation satellites are deployed in sun-synchronous orbit.
- Other earth observation satellites launched by ISRO include RESOURCESAT-2, 2A, CARTOSAT-1, 2, 2A, 2B, RISAT-1 and 2, Oceansat-2, Megha-Tropiques, Saral and SCATSAT-1, INSAT-3DR, 3D included.

### Three satellites launched:

#### EOS-04:

- EOS-04 weighs 1,710 kg and is designed to provide high quality images in all weather conditions with a mission duration of ten years for applications such as agriculture, forestry and plantation, soil moisture and hydrology, and flood mapping has been done.
- It will complement the data from RESOURCESAT, CARTOSAT and RISAT-2B series satellites, which are already in orbit.

- The first satellite in the series of these satellites – EOS-01 was launched in November 2020 and is still in orbit. EOS-02 will be launched on a new launch vehicle named SSLV (Small Satellite Launch Vehicle), while the launch of EOS-03 failed in August, 2021.
- It will be placed in a Sun-synchronous polar orbit of 529 km. It is a radar-imaging satellite, making it a part of the 'RISAT' series.
- It will replace RISAT-1, which was launched in the year 2012, but has not been functional since the last few years.
- RISAT Synthetic Aperture Radar is used to obtain high-resolution images of the land.
- A major advantage of radar imaging over optical instruments is that it is unaffected by weather, clouds or fog or lack of sunlight.
- It can capture high-quality images in all conditions and at all times, making it perfect for surveillance.

#### **INSPIRESat-1:**

- INSPIRESat-1 is part of a group of satellites planned under the International Satellite Program in Research and Education, which includes the Small-Spacecraft Systems and Payload Center (SSPACE), University of Colorado (US), Nanyang the Technological University (NTU) consists of the Small-Spacecraft Systems and Payload Center (SSPACE), Singapore and the National Central University (NCU), Taiwan.
- INSPIRESat-1 carries two scientific payloads with a mass of 8.1 kg and a one-year mission with the aim of improving the understanding of the dynamics of the ionosphere (part of Earth's upper atmosphere) and the coronal heating processes of the Sun.

#### **INS-2TD:**

- INS-2TD is a technology demonstrator for the first India-Bhutan joint satellite to be launched in March 2022.
- The two countries signed a space agreement last year, under which Bhutansat or INS-2B would be launched by PSLV rocket in March 2022.
- INS-2TD's thermal imaging cameras are for Earth observation, such as estimating land and water surface temperatures and identifying forest and tree cover.

### **India's Space Satellites:**

- India currently has 53 operational satellites, of which 21 are earth observation and the other 21 are communication based.
- Eight are navigation satellites, while the remaining three are science satellites.

## Devika River Project

- Recently it has been informed by the Center that the River Devika Project costing more than 190 crores will be completed by June 2022.

### Devika River Project:

- Work on this project was started in March 2019 under the National River Conservation Plan (NRCP).
- Development of bathing ghats on the banks of Devika river, removal of encroachments, restoration of natural water bodies and development of catchment areas with cremation ground under the project.
- The project includes construction of three sewage treatment plants, a 129.27 km long sewerage network, development of two cremation ghats, security fencing and landscaping, small hydroelectric power plants and three solar power plants.
- Upon completion of the project, pollution of rivers will reduce and water quality will improve.

### Significance of Devika River:

- The Devika River originates from the hill Sudh (pure) Mahadev Temple in Udhampur district of Jammu and Kashmir and flows towards western Punjab (now in Pakistan) where it joins the Ravi River.
- The river also has religious significance because it is recognized by the Hindus as the sister of the river Ganges.
- Devika bridge was inaugurated in Udhampur in June 2020. The purpose of construction of this bridge is to provide smooth passage to army convoys and vehicles apart from dealing with traffic congestion.

### National River Conservation Plan:

- The National River Conservation Plan (NRCP) is a centrally funded scheme launched in the year 1995 with the aim of preventing pollution in rivers.
- Various programs related to river conservation are being conducted under the National River Conservation Plan (NRCP) and the National Ganga River Basin Authority (NGRBA).

- The National Ganga Council, also known as the National Council for Rejuvenation, Conservation and Management of River Ganga, has replaced the National Ganga River Basin Authority (NRGBA).

### **Activities built under NRCP:**

- Direction blocking and direction change work to stop the raw sewage flowing in the river through open drains and divert it for treatment.
- Sewage Treatment Plant / Sewage Treatment Plant to treat diverted sewage.
- Low cost toilets on river banks to prevent open defecation.
- Construction of electric crematoriums and improved wooden crematoriums to preserve the use of wood and ensure proper cremation of dead bodies.
- Improvement of bathing ghats like river bank development works.
- Public awareness and public participation.
- Human Resource Development (HRD), capacity building, training and research in the field of river conservation.
- Other miscellaneous functions depending on location specific conditions including contact with the human population.

## **Lassa fever**

- Recently, three people suffering from Lassa fever died in Britain. These cases have been linked to travel to West African countries.

### **Lassa fever:**

- The virus that causes Lassa fever is found in West Africa and was first discovered in 1969 in Lassa, Nigeria.
- This fever is transmitted by rats and is found mainly in countries in West Africa, including Sierra Leone, Liberia, Guinea and Nigeria, where it (Lassa fever) is endemic.
- Matomys mice have the ability to spread the deadly Lassa virus.

### **Spreading:**

- A person can become infected when he comes in contact with food or household items contaminated with urine or feces of an infected rat (zoonotic disease).
- It can sometimes be spread from person to person through contact with infected bodily fluids or mucous membranes such as eyes, nose or mouth.
- Person-to-person transmission is high in the healthcare landscape.

## Symptoms:

- Its common symptoms include mild fever, fatigue, weakness and headache.
- Severe symptoms include bleeding, difficulty breathing, vomiting, swelling of the face and pain in the chest, back and abdomen.
- The patient may die within two weeks of the onset of symptoms, usually as a result of multi-organ failure.

## Treatment:

- The antiviral drug 'Ribavirin' appears to be an effective treatment for Lassa fever, but should be given immediately in case of illness.

## Medaram Jatra festival 2022

- A budget of Rs 2.26 crore has been allocated by the Ministry of Tribal Affairs for Medaram Jatra festival 2022 and Tribal Culture Festival.
- Medaram Jatra is the second largest fair in India after the four-day Kumbh Mela celebrated by the Koya tribe, the second largest tribal community of Telangana.

## Key points

- Medaram Jatra is also known as 'Sammakka Saralamma Jatra'.
- It is a tribal festival which marks the fight of a mother and daughter, Sammakka and Saralamma, against the rulers against an unjust law.
- It is celebrated in the state of Telangana. It starts from Medaram village of Tadvai mandal of Warangal district.
- Medaram is a remote location in the Ethurnagaram Wildlife Sanctuary, which is a part of Dandakaranya, the largest living forest area in the region.
- It is celebrated once in two years on the full moon day in the month of "Magha" (February).
- People offer Bangaram/Bellam (Jaggery) equal to their own weight to the deities and take a holy bath in the Jampanna Vagu, a tributary of the Godavari River.
- It was declared a state festival in the year 1996.

## Koya Tribe:

- The Koya tribe is the largest tribal tribe of Telangana and is listed as a Scheduled Tribe in Telangana.

- This community is spread over the Telugu speaking states of Telangana and Andhra Pradesh.
- Koyas popularly call themselves as Doralā Sattam (Lords Group) and Putta Dora (Original Lords). Like the Gond tribe, the Koyas call themselves “Koitur” in their dialect.
- The Godavari and Sabari rivers that flow through their native region have a profound impact on the economic, social and cultural life of Koya.

### **Housing and Livelihoods:**

- The Koyas are mainly permanently settled farmers. They grow jowar, ragi, bajra and other coarse cereals.

### **Language:**

- Many people of the Koya tribe have forgotten their ‘Koya language’ and have adopted Telugu as their mother tongue, but the Koya language is still used in some other parts.

### **Religions and Festivals:**

- Lord Bhima, Korra Rajulu, Mamili and Potaraju are important deities of the Koya tribe.
- Their main festivals are ‘Vizzi Pandam’ (Seed Charming Festival) and ‘Kondala Kolupu’ (Festival to please the hill deities). Koya has many religious functionaries who participate in various aspects of their religious life.

## **Swadeep Kumar**