

Mihir

- Mihir (meaning 'Sun'), a High Performance Computer (HPC) System has been installed at the National Centre for Medium Range Weather Forecasting (NCMRWF).
- This HPC facility will be India's largest HPC facility in terms of peak capacity and performance.
- The new HPC facility is expected to improve the following services:
 1. Weather forecasts for predicting extreme weather events.
 2. High resolution seasonal/extended range forecasts of active/break spells of Monsoon.
 3. Very high resolution prediction of cyclones with more accuracy and lead time.
 4. Ocean state forecasts like marine water quality forecasts and Tsunami forecasts.
 5. Air quality forecasts for various cities.

INS Karanj

- The Indian Navy has launched the third Scorpene class submarine Karanj.
- It has been constructed by shipbuilder Mazagon Dock Limited (MDL) with collaboration of French shipbuilding major Naval Group (formerly DCNS).
- The submarine will undergo rigorous tests for the next one year before it is commissioned.

Nilgiri Marten

- It is a vulnerable and little known carnivorous animal which is endemic to the Western Ghats.
- Nilgiri Marten looks like a civet or a mongoose and it most prefers higher altitudes.
- The present global population of the Nilgiri Marten is estimated below 1000.
- The animal is placed in schedule 2 of the part 2 of the Indian Wildlife (Protection) Act 1972.
- Recent studies shows that Nilgiri marten is thriving in the Pampadum Shola National Park located on the southern portion of Western Ghats.



Shola forests

- 'Sholas' are patches of evergreen tropical and subtropical moist broadleaf forests.
- It is found in Southern India, particularly in the regions of Nilgiri, Palani Hills and Annamalai Hills.
- The Western Ghats and associated ranges in the states of Karnataka, Kerala and Tamil Nadu.
- The main varieties of Trees in this type of forest are Zenker, bishop wood, Indian mahogany, gular fig tree etc.

Guru Ravidas

- Guru Ravidas was a North Indian mystic poet saint of the bhakti movement believed to be born in Varanasi.
- He taught removal of social divisions of caste and gender, and promoted unity in the pursuit of personal spiritual freedoms.
- He founded 21st-century Ravidassia religion, by a group who previously were associated with Sikhism.
- He is devoted as guru in the regions of Punjab, Uttar Pradesh, Rajasthan and Maharashtra.

Prevention of Atrocities acts

- Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989 is an act of parliament.
- It falls within the provisions of Article 17 of the constitution, enacted for preventing atrocities against members of SC/ST
- It also provide special courts for the trial of such offences as well as relief and rehabilitation of the victims of atrocities.
- The PoA Act extends to the whole of India except Jammu & Kashmir, and responsibility for its implementation rests with State Governments.

Zero budget natural farming project

- To promote organic farming Himachal Pradesh has launched Zero Budget Natural Farming project.
- Zero budget farming is a natural farming technique that uses biological pesticides instead of chemical-based fertilizers.
- In this method the cost of growing and harvesting plants is zero, which makes it highly beneficial for farmers.

60th anniversary of first US satellite into space

United States is celebrating the 60th anniversary of the launch of the first spacecraft sent into space.

A two-metre long satellite carrying a scientific instrument, was launched from Cape Canaveral in Florida on 31 January 1958. Explorer 1 was around two metres in length. Within that the science instrument took up about 95cm.

The main instruments were a cosmic-ray detection package; internal, external and nose-cone temperature sensors; a micrometeorite impact microphone; a ring of micrometeorite erosion gauges; and two transmitters. There were two antennas in the body of the satellite and its four flexible whips that formed a turnstile antenna. Electrical power was provided by batteries that made up 40% of the total weight.

Overall, Explorer 1 was not the first object launched into space, as almost a year earlier the USSR successfully put a small metal satellite, Sputnik 1, into orbit. A month later, they also successfully launched a second, Sputnik 2.

India is world's 3rd largest steel producer

As per the latest data released by World Steel Association, India is the world's third-largest steel producer.

Key facts:

- India remained the world's third-largest steel producer for the third year in a row in 2017. India had grabbed the third slot in steel production in 2015 from the US after long been holding the fourth slot.
- In 2017, China and Japan have occupied top two positions respectively.

About the World Steel Association:

What is it? Worldsteel is a non-profit organisation with headquarters in Brussels, Belgium. A second office in Beijing, China, opened in April 2006.

Background: The World Steel Association (worldsteel) was founded as the International Iron and Steel Institute on 10 July 1967. It changed its name to the World Steel Association on 6 October 2008.

Representation: Worldsteel represents over 160 steel producers (including 9 of the world's 10 largest steel companies), national and regional steel industry associations, and steel research institutes. Worldsteel members represent around 85% of world steel production.

Goals of Worldsteel:

- To act as the focal point for the steel industry providing global leadership on all major strategic issues impacting the industry, particularly focusing on economic, environmental and social sustainability.

- Deliver benchmarking analysis and drive global improvement initiatives in the areas of environmental protection, technology, safety and people development.
- Promote global market development opportunities for steel and promote steel to the world at large.
- Provide on a timely basis world-class economic data and analysis on the global steel industry and its value chain, as well as assessments on life cycle aspects of steel.
- Increase awareness, understanding and support for the steel industry amongst all external stakeholders and key target audiences worldwide.
- Promote market competition that is free of government interventions preventing fair trade.

Thar Link Express

Thar Link Express, the solitary rail link between India and Pakistan has received an extension for three more years from Islamabad.

About the Thar Link Express:

The Thar Link Express connects Khokhrapar in Pakistan and Munabao in Rajasthan. The agreement to run the Thar Link Express was signed in 2006 and is one of the cheapest means of transport between the two rival countries. The rail link facilitates people-to-people contacts which Pakistan believes are essential for improving relations between both the countries.