

CURRENT AFFAIRS NOTES - PART I

1. NASA'S INSIGHT LANDED ON MARS

InSight, short of Interior Exploration using Seismic Investigations is a Mars Lander. It is designed to study the Red Planet Mars.

Mars was formed 4.5 billion years ago.

It is the first outer space robotic explorer to study in-depth the "inner space" of Mars.

The study will tell us about the early formation of rocky planets in our solar system- Mercury, Venus, Earth and Mars.

This mission is part of NASA's Discovery Program.

InSight was launched on May 5, 2018

It landed on November 26, 2018

landed site: Elysium Planitia

Mission Duration: 1 Mars year and 2 Earth years

2. G20

The Group of twenty is an international forum for the governments and central bank governors from 19 countries and European Union.

It was founded in 1999

The aim was International Financial Stability

G20 has expanded the scope in 2008.

Now heads of government as well as finance ministers and foreign ministers too have periodic meetings. It seeks to address issues that go beyond the responsibilities of any one organization. Collectively, the G20 economies account for around 90% of the gross world product (GWP), 80% of world trade, two-third of the world population and roughly half of the world land area.

The group's chair rotates annually among the members and is selected from a different regional grouping countries.

The current chair of the G20 is Argentina.

The 2019 chair will be Japan, which will host the 2019 G20 Osaka summit.

List of the Members of G20.

ARGENTINA, AUSTRALIA, BRAZIL, CANADA, CHINA, EUROPEAN UNION, FRANCE, GERMANY, INDIA, INDONESIA, ITALY, JAPAN, MEXICO, RUSSIA, SAUDI ARABIA, SOUTH KOREA, TURKEY, THE UNITED KINGDOM AND THE UNITED STATES.

Spain is a permanent guest invitee.

3. AMERICA – CHINA TRADE WAR

China and United States are engaged in a trade war.

Each country raising a dispute on tariffs placed on goods traded between them.

United States has alleged that China is violating intellectual property rights.

The US administration is using Section 301 of Trade Act of 1974 to prevent what it claims are unfair trade practices and theft of intellectual property.

US says it is harming interest of US. US says the harm caused has the value of \$ 225-600 billion a year.

The US believes Chinese Laws undermine intellectual property rights by forcing foreign companies to engage in joint ventures with Chinese Companies, which then

gives the Chinese companies access and permission to use, improve, or copy their technologies.

The US also alleges that China has instituted numerous non-tariff barriers which has insulated sectors of the Chinese economy from international Competition.

4. GLOBAL TEMPERATURE RISES-2018 TEMPERATURES TO BE AMONG 4th HOTTEST ON RECORD

UN Metrological Organization said, 'Global temperatures are on course for a 3.5 degree Celsius rise this century, far overshooting a global target of limiting the increase to 2 C or less'.

Greenhouse gas concentrations are going up. We are using fossil fuel resulting in more emission of greenhouse gases. It is vital to limit the rise in global temperatures to 2-degree C to avert more extreme weather, rising sea levels and the loss of plant and animal species. Limiting to 1.5 degree would have a far greater benefit.

5. EXCEEDSAT 1 SATELLITE

SpaceX successfully launched India's first privately built satellite ExseedSAT-1 (along with 63 other satellites from 18 countries).

ExseedSAT-1 has been built at a cost of less than ₹ 2 Cr.

ExseedSAT-1 is an open radio transponder that works on ham radio frequencies. It is a polar satellite.

The mini communication satellite weighing just a kg. with double the size of a Rubik's cube is made up of aluminium alloy.

The satellite is the brain child of a Mumbai-based startup Exseed Space, looks to serve the amateur radio community.

The satellite with a life span of five years will allow people to receive signals on 145.9 Mhz frequency with the help of a TV tuner.

6. HYSIS SATELLITE

HySIS satellite lifted off at 9.57 Hrs on November 29, 2018 from the First Launch Pad of Satish Dhawan Space Centre, Sriharikota

HySIS = Hyper spectral Imaging Satellite

Objective: to study the Earth's surface in visible, near infrared and shortwave infrared regions of the electromagnetic spectrum

TYPES OF SATELLITES

Rohini was the first satellite by ISRO by SLV-3

ISRO made two more launch vehicles

Polar Satellite Launch Vehicle (PSLV)

Geosynchronous Satellite Launch Vehicle (GSLV)

PSLV is launching Satellite to Polar Orbits

GSLV is launching Satellite into Geostationary Orbits

Polar Orbit: A polar orbit is one in which a satellite passes above or nearly above both poles of planet (i.e. Earth, Moon or Sun) on each revolution. A satellite in a polar orbit will pass over the equator at a different longitude on each of its orbits.

Polar satellites are used for earth mapping, weather satellite.

GSLV

35,786 km above Earth's equator and following the direction of Earth's rotation. Communications satellites and weather satellites are often placed in geostationary orbits.

An object in such an orbit appears motionless at a fixed position in the sky.

The satellite makes one rotation in 23 hours 56 minutes and 4 seconds.

7. DIBANG WILD LIFE SANCTUARY

Dibang Valley of Arunachal Pradesh is at the height of 3,630M. Tiger has been found there. This is the highest spot at which the tigers have been sighted in India. In Bhutan tiger was sighted at the height of 4200M. Total area of Dibang is 4,149 square kilometers.

8. 'IBC' ADDRESS RS.3 LAKH CRORE STRESSED ASSETS IN LAST 2 YEARS

The Insolvency and Bankruptcy Code (IBC) has helped to resolve stressed assets worth Rs.3 Lakh crore in the past two years. IBC helped quick disposal of cases at National Company Law Tribunal.

IBC was launched in December 2016.

Banks could recover ₹ 1.1 Lakh Crore from loan defaulters.

More than 9,000 cases were referred to NCLT of which almost half have been disposed of, while 85% of the cases were resolved at the preadmission stage.

9. TOWER OF PISA STRAINTENED

The Leaning Tower of Pisa is free standing bell tower of the cathedral of the Italian city of Pisa.

The tilt was unintended.

The tower is situated behind the Pisa Cathedral and is the third oldest structure in the city's Cathedral Square, after the cathedral and the Pisa Baptistery.

The tower's tilt began during construction in the 12th century, caused by an inadequate foundation on ground too soft on one side to properly support the structure's weight.

The tilt increased over time. Now it is stabilized. The tilt has been partially corrected now.

The height of the tower is 55.86 m. from the ground on the low side and 56.67 m on the high side.

The tower has 296 steps.

Weight: 14,700 metric tons

outer diameter at the base: 15.484 m

In 1990 the tower leaned at an angle of 5.5 degrees after remedial work it was reduced to 3.97 degrees. It has been further corrected by 4cm of tilt in the two decades to 2018.

There are seven bells one for each note of the musical major scale.

10. RBI SURPLUS FUNDS

In 2017-18, the size of RBI's balance sheet was `36.2 lakh crore.

The currency notes it prints make up more than half its liabilities.

Reserve accounts for 26%.

Reserves are invested mainly in foreign and Indian government securities and gold. RBI holds a little over 566 tons of gold, which along with its forex assets make up almost 77% of its assets.

SOMETIMES, THE FINANCE MINISTRY AND RBI DISAGREE ON WHAT LEVEL OF RESERVE RBI MUST HOLD TO BE CONSISTENT WITH ITS OPERATION. The CURRENCY & GOLD REVALUATION ACCOUNT (CGRA) makes up the biggest share- it was ` 6.9 Lakh crore in 2017-18. This represents the value of the gold and foreign currency that RBI holds on behalf of India.

Last year the CGRA INCREASED BY 30.5% largely because of the depreciation of the rupee against the US dollar and due to an increase in the price of gold.

THE CONTINGENCY FUND - is a specific provision meant for meeting unexpected contingencies that arise from RBI's monetary policy and exchange rate operations. In both cases RBI intervenes in the relevant markets to adjust liquidity or prevent large fluctuations in currency value.

The CF in 2017-18 was ₹ 2.32 Lakh crore.

RBI surplus - This represents the amount RBI transfers to the government. RBI does not pay income tax.

RBI transfer surplus to the government after meeting its need. The larger the provision made to CF the lower the Surplus.

11. NEW NORMS FOR NH TAG

At present, the road transport ministry decides the NH tag for any road after it receives a request from a state government and there are no set norms for this.

The norms for any road to get the NH tag would include at least 5000 vehicles flow daily and its direct connectivity to an existing NH. The total length of NH is 1.29 Lakh km.

Another 54,000 km have got in principle approval.

12. SBI TO SELL 3 BAD LOAN ACCOUNTS TO RECOVER RS. 2111 CRORE

SBI has put up for Sale three of its non-performing loan accounts to recover dues of ₹ 2111 Cr.

An e-auction will take place on December 13 for the sale of these three accounts:

- Sona Alloys Pvt. Ltd
- MCL Global Steel Pvt. Ltd.
- Jayaswal Neco Industries

Who will Purchase:

Banks, Asset Reconstruction Companies (ARCs), Non-Banking Financial Companies (NBFCs), Financial Institutes (FI) etc.

Earlier SBI had e-auctioned 11 NPA accounts on Nov.22. The units had ₹ 1019 Cr. Due to Bank.

SBI had NPA of 9.95% of the gross advances as on September 30, 2018.

13. GENETICALLY EDITED BABIES

A Chinese scientist has claimed to have created genetically edited babies. He has claimed that he altered the embryos of seven couples during fertility treatment, with one pregnancy resulting this month. The twin girls born apparently had their genes edited to prevent future possible infection from HIV, the AIDS virus.

The research of this type is serious violations of academic ethics. We don't know the full implications of inheritable gene editing.

If such experiments lead to undesirable or debilitating effects on the selected human embryos that would constitute a serious violation of human rights.

Second, if such gene editing becomes successful, there are concerns it will open an undesirable door to eugenics, creating classes of genetic haves and have-nots in society.

Therefore, this research should be limited through global consensus.

14. KARTARPUR CORRIDOR

Gurudwara Darbar Sahib in Kartarpur is in Pakistan located on the banks of the Ravi. It is the Guru Nanak's final resting place

Guru Nanak's 550th birth anniversary is in 2019

Both Pakistan and India will construct Road on their side connecting to Gurudwara called as Corridor

The corridor on Indian side will begin from Dera Baba Nanak in Gurdaspur to the International border with Pakistan.

Pakistan portion of road will be 2.5 km, India side 1.5 km (upto Gurudwara it will be 4.3 km)

Present route is via Lahore covering 125 km long journey

15. GSAT-11 LAUNCHED

The country's heaviest satellite Gsat 11 weighing 5,854 kg was launched from the European spaceport in French Guiana at 2.07 am on Wednesday 4 December 2018.

Arianespace's Ariane 5 rocket successfully lifted off with communication satellite Gsat-11.

29 minutes after the lift off, Gsat11 separated from the rocket and was placed in the geo-transfer orbit.

Gsat-11 is a high-throughput satellite that carries 40 transponders in the Ku-band and Ka-band frequencies and is capable of 'providing high bandwidth connectivity' with 14 gigabit per second (GBPS) data transfer speed.

The satellite's designed life time is more than 15 years.

Gsat 11 provides high data rate connectivity for users over India using spot beams

It provides broadband connectivity to Gram Panchayats under BharatNet Project, as part of Digital India Programme

Gsat-11 also supports high data applications for enterprise network and consumer broadband applications

Gsat-11 is the third in a series of four high throughput satellites (Gsat-19, Gsat-29 Gsat-11 and Gsat-20)

These satellites will provide the country broadband connectivity of over 100 giga bits per second (GBPS) and will link rural areas and bridge the digital divide under the Digital India programme.

While Gsat 19 was launched in June last

A spot beam is a satellite signal that is specially concentrated in power so that it covers only a limited geographical area on earth. The narrower the beam more is the power.

16. INDIA'S EFFORTS TO TACKLE CLIMATE CHANGE

India doing well to achieve Paris Agreement Targets

Paris Agreement: limit the rise in global temperatures to 1.5 degree C above pre-industrial levels

India's NDC (Nationally Determined Contribution) is closest to 1.5 limit as compared to G20 nations

How it has happened:

- Green policies
- National Electricity Plan
- Target increase in forest cover from 24% to 33%
- India has lowest emissions per capita from transportation in G20
- Increase in Solar Power Production

17. MARY KOM

Mary Kom 35 years old has become the most successful woman boxer in history

She fights in 48kg category

She has won 6 world titles

She defeated Ukraine's Hanna Okhota 22 with a 5-0 verdict in her favour.

The event light flyweight 10th AIBA Women's World Boxing Championship

Her first gold was in 2002

She is mother of three, from Manipur and now Rajya Sabha MP also

18. NATIONAL GREEN TRIBUNAL FINED DELHI GOVERNMENT

NGT fined Delhi Govt. 25 Crore for failing to take action to curb pollution in the capital despite clear instructions.

NGT Chairperson: Justice Adarsh Kumar Goel

NGT had given the direction to Govt. to control the practice of open burning in industrial area around Mundka in West Delhi.

19. QATAR TO PULL OUT OF OPEC

OPEC is the Organization of Petroleum Exporting Countries

Members 15 Nations formed in 1960

Qatar, Saudi Arabia, Iran, Indonesia, Venezuela, Iraq, Libya, Nigeria, Algeria, UAE, Kuwait, Ecuador, Angola, Gabon

The group decides about output of oil production to control the price level

Qatar is not agreeing to cut down the production

Qatar produces only 6Lakh barrel/day 2% of total production

Qatar is the world's largest exporter of liquified natural gas and wants to increase it from 77 million tons of gas per year to 110 million tons.

20. SENTINELESE

The Sentinelese are indigenous people who inhabit North Sentinel Island in the Bay of Bengal in India

They are considered one of the world's last uncontacted peoples.

They belong to the broader class of Andamanese people

They are hostile to outsiders and have killed people who approached or landed on the island.

North Sentinel Island is declared as tribal reserve and prohibited travel within 4.8 km of the island. Even photography is strictly prohibited.

Other reclusive tribes of Andaman and Nicobar Islands are Great Andamanese, the Onge, the Shompen and Jarawa

US national John Allen Chau was killed in North Sentinel Island by members of protected Sentinelese tribe.

Recently in June 2018, 29 Andaman & Nicobar Islands were opened up to promote tourism and overall development.

Government may reimpose Restricted Area Permit restrictions on the ground of safety of primitive tribes.

21. PRIVATE EQUITY

Private Equity investments in the last five years growing as the returns have gone up from 8% to 22%

PE investments have gone up in consumer goods, financial services, health care, IT, BPO, & telecom

Private Equity are funds by Limited partnerships and wealthy individuals. They are not publicly traded.

It is used in debt financing to purchase companies restructure them and sell them at a higher value

Corporate Tax is less for Debt investment
