CENTRE FOR AMBITION
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CURRENT AFFAIRS

MAY -2018

'GobarDhan' scheme

Context: Ministry of Drinking Water and Sanitation has launched the 'GobarDhan' scheme for Nation. The government is also planning to create an online platform for trading cow dung and agricultural waste under the scheme.

What is the GOBAR-DhanYojana?

The Galvanizing Organic Bio-Agro Resources Dhan (GOBAR-DHAN) scheme was first announced by Finance Minister ArunJaitley during his budget speech on February 1. The scheme would focus on managing and converting cattle dung and solid waste in farms to compost, biogas and bio-CNG. It will help in keeping the village clean while increasing the income of farmers and cattle herders.

Benefits of the scheme:

- This is hugely helpful for the country as India is home to the highest cattle population in the world, close to 300 million in number, with a daily output of 3 million tonnes of dung.

- The Scheme will encourage the farmers to consider dung and other waste not just as a waste but as a source of income.

- It will provide many benefits to the rural people. It will be easier to keep the village clean and sanitized, livestock health will improve and farm yields will increase.

- Biogas generation will increase self-reliance in energy utilized for cooking and lighting.

- Farmers and cattle herders will be helped in augmenting their income. There will be novel opportunities for newer jobs linked to waste collection, transportation, biogas sales etc.

- The scheme also provides a stable fuel supply in the market for oil companies and accessible credit in the market through government schemes and banks for entrepreneurs.

New Shepard rocket and space capsule

Context: Blue Origin, the US aerospace company owned by Amazon founder Jeff Bezos, has launched its suborbital New Shepard rocket and space capsule. The mission marked the company's first test flight of the year and second flight of the New Shepard 2.0 spacecraft.

About New Shepard system:

- The New Shepard system is a fully reusable vertical takeoff, vertical landing (VTVL) space vehicle. The system consists of a pressurized capsule atop a booster.

- The name New Shepard makes reference to the first American astronaut in space, Alan Shepard, one of the original NASA Mercury Seven astronauts.

- New Shepard 2.0 space capsule is designed to fly commercial payloads and up to 6 passengers on suborbital space flights for science and tourism. The capsule features giant windows to give future passengers a stunning view of their launch into space.

GRACE-FO mission

Context: NASA is set to launch a pair of new spacecraft that will observe our planet's ever-changing water cycle, ice sheets and crust. The Gravity Recovery and Climate Experiment Follow-On (GRACE-FO) mission, a partnership between NASA and the German Research Centre for Geosciences (GFZ), will take over where the first GRACE mission left off when it completed its 15-year mission in 2017.

About GRACE- FO mission:

- The Gravity Recovery and Climate Experiment Follow-on (GRACE-FO) mission is **a partnership between NASA and the German Research Centre for Geosciences (GFZ)**.

- GRACE-FO is a successor to the original GRACE mission, which began orbiting Earth on March 17, 2002. The GRACE missions measure variations in gravity over Earth's surface, producing a new map of the gravity field every 30 days.

- GRACE-FO will carry on the extremely successful work of its predecessor while testing a new technology designed to dramatically improve the already remarkable precision of its measurement system.

- GRACE-FO will continue the work of tracking Earth's water movement to monitor changes in underground water storage, the amount of water in large lakes and rivers, soil moisture, ice sheets and glaciers, and sea level caused by the addition of water to the ocean. These discoveries provide a unique view of Earth's climate and have far-reaching benefits to society and the world's population.

Supreme Court asks high courts to fast-track trial under POCSO Act

Context: The Supreme Court has issued a slew of directions to all high courts of the country regarding trial in sexual assault cases involving children.

Guidelines:

- All high courts must ensure that the cases of sexual assault of children are fast-tracked and decided by special courts.

- High courts should instruct the trial courts not to grant unnecessary adjournments during trial of cases under the Protection of Children from Sexual Offences (POCSO) Act.

- High courts may constitute a committee of three judges to regulate and monitor the trials of sexual assault cases of children.

- The State police chiefs should constitute special task forces to investigate cases.

Background:

Nearly 32% of cases filed under the POCSO Act, which deals with sexual abuse of minors, were pending police investigation at the end of 2016 while 89% were pending trials.

POCSO Act:

The Protection of Children from Sexual Offences Act (POCSO Act) 2012 was formulated in order to effectively address sexual abuse and sexual exploitation of children.

Role of police: The Act casts the police in the role of child protectors during the investigative process. Thus, the police personnel receiving a report of sexual abuse of a child are given the responsibility of making urgent arrangements for the care and protection of the child, such as obtaining emergency medical treatment for the child and placing the child in a shelter home, and bringing the matter in front of the CWC, should the need arise.

Safeguards: The Act further makes provisions for avoiding the re-victimisation of the child at the hands of the judicial system. It provides for special courts that conduct the trial in-camera and without revealing the identity of the child, in a manner that is as child-friendly as possible. Hence, the child may have a parent or other trusted person present at the time of testifying and can call for assistance from an interpreter, special educator, or other professional while giving evidence. Above all, the Act stipulates that a case of child sexual abuse must be disposed of within one year from the date the offence is reported.

Mandatory reporting: The Act also provides for mandatory reporting of sexual offences. This casts a legal duty upon a person who has knowledge that a child has been sexually abused to report the offence; if he fails to do so, he may be punished with six months' imprisonment and/or a fine.

Definitions: The Act defines a child as any person below eighteen years of age. It defines different forms of sexual abuse, including penetrative and non-penetrative assault, as well as sexual harassment and pornography. It deems a sexual assault to be "aggravated" under certain circumstances, such as when the abused child is mentally ill or when the abuse is committed by a person in a position of trust or authority like a family member, police officer, teacher, or doctor.

National Telecom Policy

Context: The draft National Digital Communications Policy 2018 has been released by the Department of Telecom (DoT).

The draft policy has outlined three major missions which it aims to achieve by 2022:

- Connect India under which it aims to create robust digital communications.

- Propel India under which the government aims to harness the power of emerging digital technologies, including 5G, artificial intelligence (AI), Internet Of Things (IoT), etc.

- Secure India which aims to safeguard the digital sovereignty of India with a focus on ensuring individual autonomy and choice, data ownership, privacy and security.

Key features:

Major goals:

The policy has outlined goals such as providing broadband for all, creating 4 million additional jobs in the digital communications sector, apart from enhancing the contribution of the digital communications sector to 8% of India's gross domestic product (GDP) from less than 6% in 2017.

Data protection:

In the wake of the Facebook-Cambridge Analytics data scandal, the government aims to now establish a comprehensive data protection regime for digital communications that safeguards the privacy, autonomy and choice of individuals and facilitates India's participation in the global digital economy.

National Broadband mission:

The policy has announced goals such as deployment of 5 million public Wi-Fi Hotspots by 2020 and 10 million by 2022 through a National Broadband Mission.

Fibre First Initiative:

The policy aims to implement a 'Fibre First Initiative' to take fibre to the home by according telecom optic fibre cables the status of public utility.

Infrastructure convergence:

The government also aims to enable infrastructure convergence of IT, telecom and broadcasting sectors by amending the Indian Telegraph Act, 1885 and other relevant acts for the purpose of convergence in coordination with respective ministries.

Boost to investments:

In order to attract investments of $100 billion in the digital communications sector and increase India's contribution to global value chains, the government will review levies and fees including license fee, universal service obligation fund (USOF) levy and concept of pass through revenues in line with principles of input line credit apart from rationalising spectrum usage charges (SUCs) to reflect the costs of regulation and administration of spectrum.

Light touch licensing regime:

The DoT will also establish light touch licensing regime for the proliferation of public data offices (PDOs) and Public Data Office Aggregators for providing internet access through Wi-Fi hotspots.

Renewable energy technologies:

The Policy talks of incentivising the use of renewable energy technologies in the communications sector, including utilisation of small cell fuel batteries, lithium-ion batteries or other similar technologies.

DNA profiling Bill

Context: The Supreme Court has considered the submission of the Centre that it would move a Bill in the upcoming Parliament session for DNA profiling to enable authorities to maintain records of unidentified and unclaimed dead bodies or missing persons.

Background:

The government was responding to a PIL petition on the use of DNA profiling for identifying unclaimed bodies, especially to match them with old cases of missing persons.

Human DNA Profiling Bill:

The Centre's Human DNA Profiling Bill, 2015, was prepared by the Department of Biotechnology and the Hyderabad-based Centre for DNA-Fingerprinting and Diagnostics. Several organisations and individuals, however, raised concerns that the bill gave sweeping powers to government to mine the database and use it for purposes beyond just solving crime.

Highlights of the Human DNA Profiling Bill:

- The bill proposes to allow collection of samples from private parts of human body for DNA profiling and data preservation with the approval of a regulatory body.

- It suggests that a National DNA Profiling Board and a National DNA Bank be set up in Hyderabad, with every state having a regional DNA data bank. The DNA Data Bank would maintain records of samples found at crime scenes, or from suspects, offenders, missing persons, volunteers, etc.

- The bill also makes it clear that no DNA Laboratory shall undertake DNA profiling without the prior approval of the DNA Board.

- If a foreign country requests DNA profiling, the DNA Bank will coordinate through CBI or a concerned department.

- The bill mandates that the DNA profiles or samples be kept confidential, and they should be used only for establishing identity of a person and nothing else.

- Government investigation agencies and judiciary, among others, can seek information from Data Banks. For unauthorized use of data, a stringent punishment is provided.

WHO global air pollution database

Context: WHO recently released global air pollution database in Geneva. WHO monitored 4,300 world cities for their air pollution levels in terms of PM 2.5 levels in the year 2016. The PM2.5 includes pollutants like sulfate, nitrate and black carbon, which pose the greatest risk to human health.

Why should India be worried?

- As per the database, 14 out of 15 most polluted cities in the world are from India and the top 14 cities are from India only.

- Kanpur is the most polluted city which came on top with PM 2.5 concentration of 173 micrograms per cubic metre.

- Other Indian cities that registered very high levels of PM2.5 pollutants were Kanpur, Faridabad, Gaya, Patna, Agra, Muzaffarpur, Srinagar, Gurgaon, Jaipur, Patiala and Jodhpur followed by Ali Subah Al-Salem in Kuwait and a few cities in China and Mongolia.

- The national Capital climbed down from the fourth spot, where it appeared in WHO 2015 data, to the sixth spot only.

Level of threat from air pollution worldwide:

- According to a study which drew off the most-recent data 2016 data, 9 out of 10 people are exposed to dangerously high levels of pollutants around the world which leads to the risk of cancer and cardiovascular diseases.

- Air pollution levels were the highest in the eastern Mediterranean and southeast Asia. Here, in some of the areas, the airborne toxins were five times the limits set by the WHO. These toxins affected the poor and most vulnerable.

- Air pollution is the reason behind a dozen of diseases which often prove to be lethal. Almost 7 million deaths were caused by household and outdoor pollution in the previous year.

Ujjwala:

The WHO report has made a special mention of Prime Minister Modi's 'Ujjwala' scheme to provide LPG connections to women from Below Poverty Line (BPL) households. The report said, "While the latest data shows ambient air pollution levels are still dangerously high in most parts of the world, countries also show some positive progress."

Various efforts by the government:

- In November last year, the toxic smog in Delhi forced the Indian Medical Association to declare a public health emergency, advising citizens to stay indoors, and for schools to be shut. The fog, according to experts, was a "deadly mixture of vehicular pollution, construction and road dust and stubble burning."

- In January this year, the Supreme Court asked the central government to look into the problem of air pollution on a nationwide basis and not confine it to Delhi-NCR only, saying reports suggested that many cities like Raipur, Patna, Allahabad were more polluted.

- To combat air pollution, the government in March this year finalised a Comprehensive Action Plan (CAP), "specifically" for Delhi-NCR. The plan has a number of measures including actions to reduce vehicular emissions and control dust from constructions.

Exercise Vijay Prahar

Context: Formations of South Western Command are carrying out Exercise VIJAY PRAHAR in the Mahajan Field Firing Ranges close to Suratgarh in Rajasthan. The month-long exercise is essentially to practice the troops in penetrative manoeuvres across the obstacle ridden terrain under a nuclear umbrella.

Aim: The exercise is aimed to orchestrate wide spectrum of threats which are planned to be tackled through high tempo joint air and land operation involving hundreds of aircrafts, thousands of tanks and artillery pieces supported by real time intelligence, surveillance, reconnaissance and just in time logistic support.

Pradhan Mantri Vaya Vandan Yojana (PMVVY)

Context: The Union Cabinet has given its approval for extending the investment limit from Rs 7.5 lakhs to Rs 15 lakhs as well as extension of time limits for subscription from 4thMay 2018 to 31stMarch, 2020 under the PradhanMantriVayaVandanYojana (PMVVY) as part of Government's commitment for financial inclusion and social security.

About PMVVY:

- PMVVY is a Pension Scheme exclusively **for the senior citizens aged 60 years and above**.

- The Scheme can be purchased offline as well as online through Life Insurance Corporation (LIC) of India which has been given the sole privilege to operate this Scheme.

Key features of the scheme:

- Scheme provides an assured return of 8% p.a. payable monthly (equivalent to 8.30% p.a. effective) for 10 years.

- Pension is payable at the end of each period, during the policy term of 10 years, as per the frequency of monthly/ quarterly/ half-yearly/ yearly as chosen by the pensioner at the time of purchase.

- The scheme is exempted from Service Tax/ GST.

- On survival of the pensioner to the end of the policy term of 10 years, Purchase price along with final pension installment shall be payable.

- Loan upto 75% of Purchase Price shall be allowed after 3 policy years (to meet the liquidity needs). Loan interest shall be recovered from the pension installments and loan to be recovered from claim proceeds.

- The scheme also allows for premature exit for the treatment of any critical/ terminal illness of self or spouse. On such premature exit, 98% of the Purchase Price shall be refunded.

- On death of the pensioner during the policy term of 10 years, the Purchase Price shall be paid to the beneficiary.

Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)

Context: In a major boost to the expansion of healthcare infrastructure in the country, the Union Cabinet Chaired by Prime Minister ShriNarendraModi has approved the continuation of PradhanMantriSwasthyaSurakshaYojana(PMSSY) beyond 12thFive Year Plan to 2019-20.

About PMSSY:

- The PradhanMantriSwasthyaSurakshaYojana (PMSSY) was announced in 2003 with objectives of correcting regional imbalances in the availability of affordable/ reliable tertiary healthcare services and also to augment facilities for quality medical education in the country.

- It is a central sector scheme.

- The scheme has two components: Setting up of new AIIMS and upgradation of government medical colleges.

Significance of the scheme:

Setting up of new AIIMS would not only transform health education and training but also address the shortfall of health care professionals in the region. Construction of new AIIMS is fully funded by the Central Government. The Operations & Maintenance expenses on new AIIMS are also fully borne by the Central Government.

Employment Generation:

- Setting up new AIIMS in various states will lead to employment generation for nearly 3000 people in various faculty & non-faculty posts in each of the AIIMS. Further, indirect employment generation will take place due to facilities & services like shopping centre, canteens, etc. coming in the vicinity of new AIIMS.

- The upgradationprogramme is carried out in selected Government Medical Colleges (GMCs) by agencies appointed by the Government of India under the direct supervision of the Central Government. Post-Graduate seats and additional faculty posts as per norms will be created and filled up in these GMCs by the respective State/UT Governments.

- The construction activity involved for creation of the physical infrastructure for the various new AIIMS and Government Medical Colleges' upgradation projects being undertaken under the scheme is also expected to generate substantial employment in the construction phase as well.

Green Revolution – KrishonnatiYojana

Context: The Cabinet Committee on Economic Affairs has given its approval for the Umbrella Scheme, "Green Revolution – KrishonnatiYojana" in agriculture sector beyond 12th Five Year Plan for the period from 2017-18 to 2019-20.

- The Umbrella scheme comprises of 11 Schemes/Missions. These schemes look to develop the agriculture and allied sector in a holistic and scientific manner to increase the income of farmers by enhancing production, productivity and better returns on produce.

Key objectives of the scheme:

- Betterment of agricultural base.

- Doubling of farmers' earnings.

- Development of appropriate agriculture infrastructure.

- Adequate market for sale of produce.

The Schemes that are part of the Umbrella Schemes are:

- Mission for Integrated Development of Horticulture (MIDH).

- National Food Security Mission (NFSM).

- National Mission for Sustainable Agriculture (NMSA).

- Submission on Agriculture Extension (SMAE).

- Sub-Mission on Seeds and Planting Material (SMSP).

- Sub-Mission on Agricultural Mechanisation (SMAM).

- Sub Mission on Plant Protection and Plan Quarantine (SMPPQ).

- Integrated Scheme on Agriculture Census, Economics and Statistics (ISACES).

- Integrated Scheme on Agricultural Cooperation (ISAC).

- Integrated Scheme on Agricultural Marketing (ISAM).

- National e-Governance Plan (NeGP-A).

PradhanMantri Jan VikasKaryakram (PMJVK)

Context: The Cabinet Committee on Economic Affairs has approved the proposal for renaming and restructuring of Multi-sectoral Development Programme (MsDP) as PradhanMantri Jan VikasKaryakram (PMJVK). CCEA has also approved its continuation during the remaining period of the 14th Finance Commission.

Background:

Multi-sectoral Development Programme (MsDP) was launched in the year 2008-09 in 90 identified Minority Concentration Districts (MCDs) having at least 25% minority population and below national average with respect to one or both of the backwardness parameters with the objective of developing assets for socio-economic and basic amenities.

- MsDP has been identified as one of the Core of the Core Schemes under National Development Agenda in the Report of the Sub-Group of Chief Ministers on Rationalization of Centrally Sponsored Schemes, which was constituted by NITI Aayog.

- MsDP has been designed primarily to address the developmental gaps/deficits in identified backward minority concentration areas by topping up of existing Centrally Sponsored Schemes of various Central ministries/departments without any change in the norms, guidelines and the funding pattern.

About PMJVK:

- The Programme aims to address development deficits in the identified minority concentration areas. The identification of minority concentration areas has been done on the basis of presence of substantial population of notified Minority Communities based on Census, 2011.

- The restructured programme would provide better socio economic infrastructure facilities to the minority communities particularly in the field of education, health & skill development as compared to the present situation, which would further lead to lessening of the gap between the national average and the minority communities with regard to backwardness parameters.

Beti Bachao Beti Padha oprogramme

Context: The Ministry of Women and Child Development recently held a National Conference of 244 Districts under BetiBachaoBetiPadhao (BBBP) in New Delhi. The Nodal Officers of 244 Districts, State Nodal Officers and Senior officers were part of the conference.

About BBBP:

- BetiBachaoBetiPadhao (BBBP) Scheme was launched in January, 2015. The scheme is aimed at promoting gender equality and the significance of educating girls.

- The Scheme is targeted at improving the Child Sex Ratio through multi sectoral interventions including prevention of gender biased sex selection and promoting girls' education and her holistic empowerment.

- It is **a tri-ministerial effort** of Ministries of Women and Child Development, Health & Family Welfare and Human Resource Development.

Concerns:

- The low and falling child sex ratio in the country is a matter of policy concern, not only because it violates the human rights of unborn and infant girls but also because it deprives the country of the potential economic and social contribution of these 'missing women'.

- In addition, there may be longer-run adverse impacts from a marriage market squeeze caused by an excess supply of male relative to female youth. Already, states like Haryana and Punjab, where the sex ratio has been extremely distorted for several decades, have been experiencing bride trafficking.

World Gold Council

Context: As per WGC's 'Gold Demand Trends' report, the global gold demand fell by 7% to 973 tonne during the January-March period this year as compared to the same period last year mainly due to a decline in investment demand.

Highlights of the report:

- ETF inflows were down year-on-year.

- Investment in gold bars and coins was down.

- Jewelry demand was flat.

- Central banks bought more gold.

- Gold supply up 3 percent year-on-year.

About World Gold Council:

- The World Gold Council is the market development organisation for the gold industry. It works across all parts of the industry, from gold mining to investment, and their aim is to stimulate and sustain demand for gold.

- The World Gold Council is an association whose members comprise the world's leading gold mining companies. It helps to support its members to mine in a responsible way and developed the Conflict Free Gold Standard.

- Headquartered in the UK, they have offices in India, China, Singapore, Japan and the United States.

NamamiGangeProgramme

Context: National Mission for Clean Ganga has brought on board Survey of India to facilitate the Ganga rejuvenation task by using Geographic Information System (GIS) technology. Through the project, NMCG aims to strengthen planning and implementation at national/state/local levels.

DEM technology:

The project includes use of Digital Elevation Model (DEM) technology which ensures accurate data collection, an important aspect for river basin management planning. DEM technology enables identification of entire topography

of an area making it easy for policy makers to analyse the available data thereby supporting the decision-making process. Critical hotspots are also easily identified through this technology.

About NamamiGangeProgramme:

- NamamiGangeprogramme was launched as a mission to achieve the target of cleaning river Ganga in an effective manner with the unceasing involvement of all stakeholders, especially five major Ganga basin States – Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal.

- The programme envisages: River Surface Cleaning, Sewerage Treatment Infrastructure, River Front Development, Bio-Diversity, Afforestation and Public Awareness.

Implementation:

- The program would be implemented by the National Mission for Clean Ganga (NMCG), and its state counterpart organizations i.e., State Program Management Groups (SPMGs).

- In order to improve implementation, a three-tier mechanism has been proposed for project monitoring comprising of a) High level task force chaired by Cabinet Secretary assisted by NMCG at national level, b) State level committee chaired by Chief Secretary assisted by SPMG at state level and c) District level committee chaired by the District Magistrate.

- The program emphasizes on improved coordination mechanisms between various Ministries/Agencies of Central and State governments.

About Survey of India:

- It is the oldest scientific department in the country set up in 1767. It works under the administrative control of Department of Science & Technology.

- Functions: As the nation's Principal Mapping Agency, Survey of India bears a special responsibility to ensure that the country's domain is explored and mapped suitably, provide base maps for expeditious and integrated development and ensure that all resources contribute with their full measure to the progress, prosperity and security of our country now and for generations to come.

First organised census for Indus dolphins

Context: For the conservation of Indus dolphins – one of the world's rarest mammals – the Punjab government along with WWF-India are conducting the first organised census on their population.

About Indus Dolphins:

- A blind species that communicates through echo like bats do, Indus dolphins are one of the seven freshwater dolphins found across the world.

- They are found only in India and Pakistan. In Punjab, they are confined to only a 185 km stretch between Talwara and Harike Barrage in India's Beas river in Punjab.

- The most flourishing population of the Indus dolphin, platanistagangetica minor, is found across Pakistan where their numbers are estimated to be around 1,800 over a stretch of 1,500 km of the Indus river.

It is listed by the IUCN as endangered on its red list of threatened species. IUCN suspects the population size of the Indus river dolphins has reduced by more than 50% since 1944.

Mars InSight probe

Context: NASA has launched Interior Exploration using Seismic Investigations, Geodesy and Heat Transport (InSight), the first-ever mission to study the heart of Mars. It was launched on board Atlas 5 rocket.

About InSight Mission:

- InSight is part of NASA's Discovery Program, managed by the agency's Marshall Space Flight Center in Huntsville, Alabama.

- It will be the first mission to peer deep beneath the Martian surface, studying the planet's interior by measuring its heat output and listening for marsquakes, which are seismic events similar to earthquakes on Earth.

- It will use the seismic waves generated by marsquakes to develop a map of the planet's deep interior.

Significance of the mission:

- The findings of Mars' formation will help better understand how other rocky planets, including Earth, were and are created. But InSight is more than a Mars mission – it is a terrestrial planet explorer that would address one of the most fundamental issues of planetary and solar system science – understanding the processes that shaped the rocky planets of the inner solar system (including Earth) more than four billion years ago.

- By using sophisticated geophysical instruments, InSight would delve deep beneath the surface of Mars, detecting the fingerprints of the processes of terrestrial planet formation, as well as measuring the planet's "vital signs": Its "pulse" (seismology), "temperature" (heat flow probe), and "reflexes" (precision tracking).

- InSight seeks to answer one of science's most fundamental questions: How did the terrestrial planets form?

Why Mars?

Previous missions to Mars have investigated the surface history of the Red Planet by examining features like canyons, volcanoes, rocks and soil. However, signatures of the planet's formation can only be found by sensing and studying its "vital signs" far below the surface.

In comparison to the other terrestrial planets, Mars is neither too big nor too small. This means that it preserves the record of its formation and can give us insight into how the terrestrial planets formed. It is the perfect laboratory from which to study the formation and evolution of rocky planets. Scientists know that Mars has low levels of geological activity. But a lander like InSight can also reveal just how active Mars really is.

GravityRAT

What is it? It is a malware allegedly designed by Pakistani hackers. The RAT was first detected by Indian Computer Emergency Response Team, CERT-In, on various computers in 2017. It is designed to infliltrate computers and steal the data of users, and relay the stolen data to Command and Control centres in other countries. The 'RAT' in its name stands for Remote Access Trojan, which is a program capable of being controlled remotely and thus difficult to trace.

Why in news? It has recently been updated further and equipped with anti-malware evasion capabilities. The latest update to the program by its developers is part of GravityRAT's function as an Advanced Persistent Threat (APT), which, once it infiltrates a system, silently evolves and does long-term damage.

Bangabandhu Satellite-1

Context: The Bangabandhu Satellite-1 mission will be the first to utilize Falcon 9 Block 5, the final substantial upgrade to SpaceX's Falcon 9 launch vehicle. Falcon 9 Block 5 is designed to be capable of 10 or more flights with very limited refurbishment as SpaceX continues to strive for rapid reusability and extremely high reliability.

About Bangabandhu Satellite-1:

What is it? Bangabandhu is Bangladesh's first communications satellite. Built by Thales Alenia Space, a Franco-Italian aerospace manufacturer, it is designed to provide a wide range of broadcast and communication services throughout the country for the next 15 years. It is named after Bangladesh's "Father of the Nation"- Bangabandhu Sheikh MujiburRahman.

Applications: Once operational, citizens of Bangladesh will gain access to the Internet, phone services, radio, backhaul, direct-to-home TV, and other related services.

Significance of the satellite:

The satellite could open up a lot of opportunities for the country in terms of revenue generation. So far, a majority of Bangladesh's communications was based on rented transponders from neighbouring countries and this satellite will make the country autonomous, in terms of telecommunications and broadcasting services.

Pacific Islands Forum

Context: The Pacific Islands Forum has been granted approval to establish a Permanent Observer Office at the United Nations Office at Geneva (UNOG).

The Permanent Observer status would entrench the presence of the Blue Pacific region in, and strengthen its links to the United Nations organisations, including its specialised agencies, programmes, fund initiatives and joint programs.

About Pacific Islands Forum:

- Pacific Islands Forum, formerly (1971–2000) South Pacific Forum, organization established in 1971 to provide a setting for heads of government to discuss common issues and problems facing the independent and self-governing states of the South Pacific.

- It comprises 18 members: Australia, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Kiribati, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu.

- In 2000 Forum leaders adopted **the Biketawa Declaration**, which was a response to regional political instability and which put forward a set of principles and actions for members to take to promote open, democratic, and clean government, as well as equal rights for citizens regardless of gender, race, colour, creed, or political belief.

<u>Lassa fever</u>

Context: Nigeria has announced that it is free from Lassa fever outbreak. The announcement follows the epidemiological review by the Nigeria Centre for Disease Control (NCDC) and the World Health Organisation (WHO).

Lassa fever- key facts:

- Lassa fever is an acute viral haemorrhagic illness of 2-21 days duration that occurs in West Africa.

- The Lassa virus is transmitted to humans via contact with food or household items contaminated with rodent urine or faeces.

- Person-to-person infections and laboratory transmission can also occur, particularly in hospitals lacking adequate infection prevention and control measures.

- Lassa fever is known to be endemic in Benin, Ghana, Guinea, Liberia, Mali, Sierra Leone, and Nigeria, but probably exists in other West African countries as well.

- The overall case-fatality rate is 1%. Observed case-fatality rate among patients hospitalized with severe cases of Lassa fever is 15%.

- Early supportive care with rehydration and symptomatic treatment improves survival.