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Weekly current affairs Series

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Abhimanu's IAS Study Group
Chandigarh

Current *Affairs*

NATIONAL ECONOMIC AFFAIRS

Foreign exchange reserves surge to new lifetime high of $409.4 billion

- Foreign exchange reserves of India has surged by a $4.444 billion to touch a new life- time high of $409.366 billion in the last week of December.
- In the previous week, foreign exchange reserves had spurted by $3.53 billion to reach $404.921 billion.
- This surge was due to a massive spike in foreign currency assets, which is a key component of the reserves.
- The reserves had crossed the $400-billion mark for the first time in the week to September 8 last year but has since been fluctuating.
- The total foreign currency assets rose by $4.423 billion to $385.103 billion. Expressed in the US dollar terms, the foreign currency assets include the effect of appreciation or depreciation of the non-US currencies such as the euro, the pound and the yen held in the reserves.
- Gold reserves remained unchanged at $20.716 billion.
- The special drawing rights with the International Monetary Fund (IMF) rose by $8.9 million to $1.511 billion.
- The country's reserve position with the IMF also increased by $12.1 million to $2.035 billion, the central bank said.

About Foreign Exchange reserve:
- Foreign exchange reserves are the foreign currencies held by a country's central bank and its member banks. They are also referred to as foreign currency reserves or foreign reserves.
- The country's exporters deposit foreign currencies into their local banks who then transfer them to the central bank. Exporters are paid by their trading partners in U.S. dollars, euros, or other currencies.
- The exporters exchange them for the local currency they can use to pay their workers and local suppliers.
- The banks prefer to use the cash to purchase sovereign debt because it pays a small interest rate. The most popular are Treasury bills since most foreign trade is done in dollars thanks to its status as the world's global currency.
- Banks are increasing their holdings of euro-denominated assets, such as high-quality corporate bonds. That has continued despite the eurozone crisis. In addition, they'll hold gold, special drawing rights (SDR), and any reserve balances they've deposited with the International Monetary Fund (IMF).

80 lakh subscribers' base under Atal Pension Yojana

- Subscribers' base under the Atal Pension Yojana (APY) has reached more than 80 Lakhs and growing at a good pace.
- At present 233 Banks and Department of Post are involved with the implementation of the scheme.
- Besides the branches of the banks and CBS enabled offices of India Post, quite a few banks are sourcing subscribers through their internet banking portals in a paperless environment.
- Now APY can also be opened through a complete digital channel through eNPS platform.
- Currently 15 Banks are offering registration services through eNPS channel including State Bank of India(SBI).

- The highest contributing State is Uttar Pradesh with 11.41 APY account followed by Bihar & Tamil Nadu.8.87 lakh & 6.60lLakh subscribers respectively.

About Atal Pension Yojana:
- Atal Pension Yojana (APY), a pension scheme for unorganised sector workers such as personal maids, drivers, gardeners etc, was launched in June 2015 by the government.
- This social security scheme was introduced as a replacement to previous government's Swavalamban Yojana NPS Lite, which wasn't well accepted by people.
- APY aims to help these workers save money for their old age while they are working and guarantees returns post retirement.
- The scheme also promises a co-contribution by Central Government of 50% of the total prescribed contribution by a worker, up to Rs. 1000 per annum, but only to those who joined APY before 31.12.2015. Further, this co-contribution would be made only for 5 years, from FY 2015-16 to 2019-20 in the eligible cases subject to conditions mentioned below.

What is the monthly contribution and mode of payment?
- APY is a periodic contribution based pension plan and promises a fixed pension of Rs 1000/ Rs 2000/ Rs 3000/ Rs 4000 or Rs 5000.

Benefits under APY
- It provides guaranteed pension of Rs 1,000 to Rs 5,000 to the subscribers. The scheme also allows a subscriber to decrease or increase pension amount during the course of accumulation phase, once an year.
- In case of death of subscriber, the spouse of the subscriber shall be entitled for the same amount of pension till his or her death. And after the demise of both spouse and subscriber, the nominee will be entitled to receive the pension money that the subscriber had accumulated till 60 years of age.
- However if the subscriber dies before 60 years, the spouse will have the choice to either exit the scheme and claim the accumulated amount or continue maintaining the account under the subscriber's name for the remaining vested years. The spouse of the subscriber shall be entitled to receive the same pension amount as the subscriber until death of the spouse in the latter case.

Electoral Bonds

- The scheme, announced during the 2017 Budget, aims to bring to book the donations made to all major political parties.

About Electoral bond:
- An electoral bond is designed to be a bearer instrument like a Promissory Note — in effect, it will be similar to a bank note that is payable to the bearer on demand and free of interest. It can be purchased by any citizen of India or a body incorporated in India.
- The bonds will be issued in multiples of ₹1,000, ₹10,000, ₹1 lakh, ₹10 lakh and ₹1 crore and will be available at specified branches of the State Bank of India. They can be bought by the donor with a KYC-compliant account. Donors can donate the bonds to their party of choice which can then be cashed in via the party's verified account within 15 days.
- Every party that is registered under section 29A of the Representation of the Peoples Act, 1951 (43 of 1951) and has secured at least one per cent of the votes polled in the most recent Lok Sabha or State election will be allotted a verified account by the Election Commission of India. Electoral bond transactions can be made only via this account.
- The bonds will be available for purchase for a period of 10 days each in the beginning of every quarter, i.e. in January, April, July and October as specified by the Central Government. An additional period of 30 days shall be specified by the Central Government in the year of Lok Sabha elections.
- Electoral bonds will not bear the name of the donor. The donor and the party details will be available with the bank, but the political party might not be aware of who the donor is. The intention is to ensure that all the donations made to a party will be accounted for in the balance sheets without exposing the donor details to the public.

- A donor will get a deduction and the recipient, or the political party, will get tax exemption, provided returns are filed by the political party.

NATIONAL POLITY

TRAI issues interconnect rules

- The Telecom Regulatory Authority of India (Trai) has issued the Telecommunication Interconnection Regulations, 2018, that are effective from February 1.

Important Highlights of the rules:

- Now, it requires that the telecom operators have to sign an interconnection agreement on a non-discriminatory basis within 30 days of receipt of a network connectivity request from a rival service provider.
- A penalty of a maximum of Rs1 lakh a day per circle for operators that violate these rules. There are 22 telecom circles in the country and most top operators are now present in all of them.
- These regulations assume significance since there were no clear guidelines on the time frame for entering into such network connectivity pacts.
- In addition, the previous interconnect agreement rules did not provide for any penalties on defaulting operators.
- Interconnection means the commercial and technical arrangements under which service providers connect their equipment, network and services for the benefit of customers across their networks.
- Point of interconnect (PoI) is a mutually agreed point of demarcation where the exchange of traffic between the two operators takes place.

Background:

- In September 2016, Reliance Jio Infocomm Ltd complained to the regulator that a majority of calls on its network were failing as rival operators were not providing sufficient PoIs.
- The other operators had then said the free voice calls offered by Reliance Jio had led to a "tsunami" of traffic on their networks.
- In past, Trai had defended its earlier stand to recommend to the department of telecommunications the imposition of a cumulative fine of Rs3,050 crore on Bharti Airtel Ltd, Idea Cellular Ltd and Vodafone India Ltd for allegedly denying PoIs to Reliance Jio.
- Trai had recommended this penalty as it believed that the three operators had violated the licence agreement which mandates that the licensee will be responsible for maintaining the quality of service and any violation is liable to be treated as breach of terms and conditions of the licence.
- Trai does not have penal powers and can only recommend penalties for violation of regulations.

About TRAI:

- The Telecom Regulatory Authority of India (TRAI) was, thus, established with effect from 20th February 1997 by an Act of Parliament, called the Telecom Regulatory Authority of India Act, 1997, to regulate telecom services, including fixation/revision of tariffs for telecom services which were earlier vested in the Central Government.
- TRAI's mission is to create and nurture conditions for growth of telecommunications in the country in a manner and at a pace which will enable India to play a leading role in emerging global information society.

- One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition.
- In pursuance of above objective TRAI has issued from time to time a large number of regulations, orders and directives to deal with issues coming before it and provided the required direction to the evolution of Indian telecom market from a Government owned monopoly to a multi operator multi service open competitive market.
- The directions, orders and regulations issued cover a wide range of subjects including tariff, interconnection and quality of service as well as governance of the Authority.
- The TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI. TDSAT was set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI.

National Knowledge Network (NKN)

- India has started the process of appointing a telecom company that will connect and extend its state-of-the art National Knowledge Network (NKN) to research and education networks in six South Asian Association of Regional Cooperation member states — Afghanistan, Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka. Pakistan is the only Saarc nation that has been left out of this initiative.

About National Knowledge Network:

- National Knowledge Network (NKN) project is aimed at establishing a strong and robust Indian network which will can provide secure and reliable connectivity.
- Globally, frontier research and innovation are shifting towards multidisciplinary and collaborative paradigm and require substantial communication and computational power.
- In India, NKN with its multi-gigabit capability aims to connect all universities, research institutions, libraries, laboratories, healthcare and agricultural institutions across the country to address such paradigm shift.
- The leading mission oriented agencies in the fields of nuclear, space and defence research are also part of NKN.
- By facilitating the flow of information and knowledge, the network addresses the critical issue of access and creates a new paradigm of collaboration to enrich the research efforts in the country.
- The network design is based on a proactive approach that considers the future requirements and new possibilities that this infrastructure may unfold, both in terms of usage and perceived benefits. This will bring about a knowledge revolution that will be instrumental in transforming society and promoting inclusive growth.

Role of NKN:

- Establishing a high-speed backbone connectivity which will enable knowledge and information sharing amongst NKN connected institutes.
- Enabling collaborative research, development and innovation amongst NKN connected institutes.
- Facilitating advanced distance education in specialized fields like engineering, science, medicine etc.
- Facilitating an ultra-high speed e-governance backbone.
- Facilitating connection between different sectoral networks in the field of research

Nagaland declared as 'disturbed area' for 6 more months

- The entire Nagaland has been declared as "disturbed area" for six more months, till June- end, under the controversial AFSPA. The decision to continue the declaration of Nagaland as "disturbed area" has been taken as killings, loot and extortion have been going in various parts of the state which necessitated the action for the convenience of the security forces operating there.

- The AFSPA has been in force in Nagaland for several decades. It has not been withdrawn even after a framework agreement was signed in August 2015 between the Naga insurgent group NSCN-IM and the government. The framework agreement came after over 80 rounds of negotiations spanning 18 years with the first breakthrough in 1997 when the ceasefire agreement was sealed after decades of insurgency in Nagaland.

About AFSPA

- AFSPA, enacted in 1958, gives powers to the army and state and central police forces to shoot to kill, search houses and destroy any property that is "likely" to be used by insurgents in areas declared as "disturbed" by the home ministry. Security forces can "arrest without warrant" a person, who has committed or even "about to commit a cognizable offence" even on "reasonable suspicion". It also protects them from legal processes for actions taken under the act.

States are under AFSPA

- It is in force in Assam, Jammu and Kashmir, Nagaland, Manipur (except the Imphal municipal area). In Arunachal Pradesh, only the Tirap, Changlang and Longding districts plus a 20-km belt bordering Assam come under its purview. And in Meghalaya AFSPA is confined to a 20-km area bordering Assam.

'Disturbed' areas

- The state or central government considers those areas as 'disturbed' "by reason of differences or disputes between members of different religious, racial, language or regional groups or castes or communities."

- Section (3) of the AFSPA empowers the governor of the state or Union territory to issue an official notification in The Gazette of India, following which the Centre has the authority to send in armed forces for civilian aid. Once declared 'disturbed', the region has to maintain status quo for a minimum of three months, according to The Disturbed Areas (Special Courts) Act, 1976.

- The state governments can suggest whether the act is required to be enforced or not. But under Section (3) of the act, their opinion can be overruled by the governor.

All India Higher Education Survey (AIHES)

- According to All India Higher Education Survey (AIHES) launched by Union Human Resource Development (HRD) Minister, the country's Gross Enrolment Ratio or GER in higher education has registered an increase from 24.5% in 2015-16 to 25.2% in 2016-17.

Important highlights of the survey:

- GER is a statistical measure for determining the number of students enrolled in undergraduate, postgraduate and research level studies within the country and is expressed as a percentage of the population.

- Although India aims to attain a GER of 30% by 2020, it's still much behind countries like China, which, currently, boasts an enrolment ratio of 43.39%. USA's GER is 85.8% and Pakistan's is 9.93%.

- Tamil Nadu has the highest GER in the country at 46.9%, which is higher than the national average. Bihar's poor show continues with just 14.9% of its eligible population (in the age group of 18 to 23 years) pursuing higher education.

- States in south India have higher college density, which is defined as the number of colleges per lakh eligible population. Puducherry has, on average, 549 students enrolled in each college. This is followed by Telangana with 483 students in each college and Karnataka with 381. The college density in the top three states is 49 in Puducherry, 59 in Telangana and 53 in Karnataka.

- Bihar, Jharkhand and West Bengal, on the other hand, are at the bottom of the pile with seven, eight and 11 colleges, respectively for every one lakh students in the state.

- At a time when Indian Institutions are competing to figure in world rankings, there hasn't been much improvement in the internationalisation of Indian education. There is a marginal improvement in the number of foreign students —from 45,424 in 2015-16 to 47,575 in 2016-17 — studying in the country. Of the total foreign students, 31,779 are men and 15,796 are women.

Central Government Initiatives to improve GER
- The Central Government has launched various initiatives to improve the quality of education in institutes of higher education.
- The HRD ministry launched National Institute Ranking Framework (NIRF) in 2015. NIRF released its first ranking list in 2016 and is set to release the ranking list for 2017 in April this year.
- In the Twelfth Five Year Plan a new scheme called Rashtriya Uchchatar Shiksha Abhiyan (RUSA) was launched.
- RUSA seeks to promote equity, access, and excellence in state higher education system. This scheme supports upgrading autonomous colleges to universities, clustering colleges to form a university, setting up of new professional colleges in unserved and underserved areas and providing grant to colleges and universities to help them improve their infrastructure.

Kamala Mills fire tragedy

- The Kamala Mills fire tragedy in Mumbai, which claimed the lives of 14 people last week, has spurred the civic administration into action, leading to inspections and demolitions.
- However, the fire safety situation is alarming across India as cities are expanding and new retail hubs are coming up.

Analysis:
- A ministry of home affairs-sponsored study found that of the minimum 8,559 fire stations needed in the country, only 2,087 are in place, a shortage of 65%. Urban areas alone require an additional 4,200 fire stations just to meet the minimum standard for response time.
- There is a close correlation between urbanization, with its associated density and deaths due to fire-related accidents, according to National Crime Records Bureau figures.
- As many as 17,700 Indians died—48 people every day—due to fire accidents in 2015, of which 10,925 (62%) were women. Most of them were in the highly urbanized states of Maharashtra and Gujarat.
- Cities are growing so rapidly without any basic infrastructure like fire stations and almost every accident has the same set of gross violations.
- As cities grow more vertical, fighting a fire from outside is quite a task, given the traffic conditions in most Indian cities. Buildings need in-built fire-fighting equipment like sprinklers and alarms that work. But there is hardly any attention.
- Regular inspections are supposed to ensure the presence of basic fire-fighting equipment as well as compliance with building norms. But there are enough loopholes, such as norms not applying for establishments with a seating capacity of less than 50 people.
- While the great fire of Chicago in 1871 or Baltimore in 1904 might have led to the creation of a stringent fire safety regime, India shouldn't wait for a tragedy to get basic urban planning right.
- There are LIDAR-based (Light Detection and Ranging) technologies that can be used to aerially keep a track of setbacks and presence of fire exists. We should adopt digital technologies to enforce regulations. Manual inspections are no longer necessary.

Tidal Energy

- According to a study conducted by the Indian Institute of Technology, Chennai, along with credit rating firm Crisil Ltd, country is having an estimated tidal energy potential of around 8000 megawatt (MW).
- While the Gulf of Kambhat and Gulf of Kutch near Gujarat have an estimated potential of 7000 MW and 1200 MW, respectively, even the Gangetic delta in Sunderbans in West Bengal has a potential of 100 MW.

Analysis:

- Commercial projects are still some time away, given the high costs involved, cost of harnessing tidal energy ranges from Rs30 crore to Rs60 crore per MW.
- Some believe that India's large consumer base and economies of scale will help bring down the cost, as was witnessed in the case of solar and wind power tariffs. India has registered record low wind and solar power tariffs of Rs2.43 per kilowatt-hour (kWh) and Rs2.44 per unit, respectively.
- The interest in tidal energy comes in the backdrop of India's growing energy demand. This demand is expected to further increase with the government's focus on improving energy access through schemes such as Pradhan Mantri Sahaj Bijli Har Ghar Yojana, or Saubhagya launched to provide electricity connections to over 40 million families in rural and urban areas.
- According to the government's policy think-tank Niti Aayog, the country's energy demand is likely to go up by 2.7-3.2 times between 2012 and 2040 and hence the need to scale new frontiers.
- India has an opportunity to incorporate emerging technologies in the new infrastructure, to be able to exploit these technologies as they mature and costs fall.
- With India's per capita energy demand expected to reach 1055-1184 kilogram of oil equivalent (kgoe) in 2040 from 503 kgoe in 2012, perhaps the Arabian sea holds some of the answers for the nation's energy quest.

Brahmaputra Board

- The 9th meeting of High Powered Review Board of Brahmaputra Board was recently held at Borgos, Kaziranga in Assam.
- High Powered Review Board (HPRB) approved restructuring of Brahmaputra Board and advised that funds should be largely spent for works and limited funds should be spent for establishment costs including salary and wages.
- HPRB also ratified the project for protection of Majuli Island from flood and erosion for an amount of Rs. 237 crore.
- A Mathematical Model Study prepared by IIT, Guwahati called Brahma-ID was also launched on this occasion. This project has been sponsored by Brahmaputra Board for an amount of Rs. 3.00 crore.

About the Brahmaputra Board:
- The Brahmaputra Board is an autonomous statutory body which is responsible for preparation and implementation of plans related to flood management, erosion control, drainage management and water resource development in the Brahmaputra valley.
- The board was set up under the Ministry of Irrigation (later renamed as Ministry of Water Resources) as per the Brahmaputra Board Act 1980. The Board started functioning from January 11, 1982 and it's headquarters are located at Guwahati, Assam.
- The jurisdiction of the Board includes both the Brahmaputra and Barak Valley and covers all the States of the North Eastern Region, Sikkim and part of West Bengal falling under Brahmaputra river basin. For it's works and establishments, Brahmaputra Board is provided fund through grant-in-aid by the Central Government. A Review Board oversee the work of the Brahmaputra Board.
- The Board consists of 21 Members (4 full time Members and 17 part time Members), representing seven states of the North Eastern Region, North Eastern Council, concerned Ministries and Departments of the Government of India.
- Since creation of Ministry of Development of North Eastern Region (DoNER) and inclusion of Sikkim and part of West Bengal within the jurisdiction of Board, some other representatives of various concerned departments or bodies are also invited as Special Invitees in the meetings of the Brahmaputra Board.

H-1B visa

- The US government is considering a proposal that could potentially lead to large-scale deportation of foreigners on H-1B visas for high-speciality workers waiting for their Green Card — mostly Indians — and drastically alter the way high-tech companies operate in the United States.
- The proposal intends to end the provision of granting extensions to H-1B visa holders whose applications for permanent residency (Green Card) had been accepted. The administration also plans to redefine high-speciality professionals for the purpose of H-1B visas.
- The United States grants 85,000 non-immigrant H-1B visa every year — 65,000 to foreigners hired abroad and 20,000 to foreigners enrolled in advanced degree courses in US schools and colleges. An estimated 70% of these visas go to Indians — hired mostly by American companies such as Facebook, Microsoft and Google and some by American arms of Indian tech giants Infosys, Wipro and TCS.

What is H1-B?

- H1-B is a non-immigrant visa in the United States under the Immigration and Nationality Act. It allows US employers to temporarily employ foreign workers in speciality occupations. If a foreign worker in H1-B status quits or is dismissed from the sponsoring employer, the worker must either apply for and be granted a change of status to another non-immigrant status, find another employer, or leave the US.

Analysis:

- Indians account for 60 per cent of H1-B visas issued by the US Government, mostly in the IT sector. The $143-billion Indian IT industry derives about $65 billion of total export revenues from US market alone.
- While it will be a big loss for individuals, it could be a huge gain for the country. Just when India's new-age enterprise is taking off as innovative start-ups mushroom in all big cities and the government is keen to make doing business easier, the return of such a large number of Indian tech workers can give a big push to Indian business.
- t's true that it is easier for bright Indians to make a mark in the U.S. given the right ecosystem and an overall helpful atmosphere. The startup sector has just taken off and the government has shown commitment to reforms, as reflected in India's jump of 30 spots in World Bank's Ease of Doing Business rankings.
- Of America's 87 unicorns— as startups valued at more than $1 billion are called—were founded or co-founded by Indian entrepreneurs, the highest among 44 by all immigrants. 26% of all startups in the US have been founded by Indians.
- For long, India has lost it's best talent to the West in what has come to be called brain drain. Trump's decision can trigger a reverse brain drain. This could be an unintended benefit of an otherwise disruptive move.
- In the long term, the move can also help Indian information technology (IT) industry evolve beyond its labour-arbitrage model. From being called "body shoppers", Indian IT firms can turn into true innovators, something they can't do without in times when emerging technology is already roiling their business prospects.

SCIENCE AND TECHNOLOGY

GI recognition: Famed Nilambur teak

- Nilambur teak aka Malabar teak has found its place in the Geographical Indications (GI) Registry.

- The golden-brown teak is known for its log dimensions, desired wood figure and wide reputation in the world of trade.

About Nilambur Teak:

- Nilambur teak is famous for its larger size, superior colour and durability.
- Its durability is attributed to the synergistic effect of total extensive components and the resistance to fungal decay to naphthoquinone and derivatives it contains.
- The hydrophobicity, anti-oxidant properties and oily nature are due to a caoutchouc compound.
- The superiority of teak from this area used for shipbuilding and structural purposes have earned reputation world over and it is believed the Nilambur-Shornur railway line itself was laid by the Britishers to transport teak logs.

About Geographical indicators:

- GI(Geographical Indications) are signs used on goods that have a specific geographical origin and possess qualities or a reputation that are due to that place of origin.
- Agricultural products typically have qualities that derive from their place of production and are influenced by specific local factors, such as climate and soil. They may also highlight specific qualities of a product, which are due to human factors that can be found in the place of origin of the products, such as specific manufacturing skills and traditions.
- A geographical indication points to a specific place or region of production that determines the characteristic qualities of the product that originates therein. It is important that the product derives its qualities and reputation from that place.
- Place of origin may be a village or town, a region or a country. It is an exclusive right given to a particular community hence the benefits of its registration are shared by the all members of the community.
- Keeping in view the large diversity of traditional products spread all over the country, the registration under GI will be very important in future growth of the tribes / communities / skilled artisans associated in developing such products.

Species we lost in 2017

- According to the updated IUCN (International Union for Conservation of Nature) red list, here are the species that were marked as "Extinct", Critically endangered and Vulnerable.

Extinct:

- Christmas Island Pipistrelle: This small bat found exclusively on Christmas Island, Australia was listed as critically endangered last year. Predation, loss of habitat, and diseases were pointed out as causes for its extinction.
- Christmas Island Whiptail-skink : Another species endemic to Christmas Island, this lizard went extinct this year. Non-native predators and insecticide poisoning drove it over the edge.
- Christmas Island chained gekho : The species is listed as extinct in the wild, which means it is now found only in a captive breeding programme.
- Gunthers Dwarf Burrowing skink : Though no record of the skink has been made for more than 125 years, this native of South Africa was officially confirmed to be extinct only this year.

Critically endangered:

- Western Ringtail Possum: The number for this species has declined by almost 80 per cent in the past 10 years. Australia's increasingly dry and hot climate has led to its dramatic decline.
- Yellow-breasted Bunting: Loss of roosting site and use of pesticides are major causes of their its decline.
- Plains Wanderer : Exposure to pesticides, habitat loss, predation by foxes have all affected the survival of this small quail-like bird
- Green Poison Frog, Perret's Toad, and Rose's Mountain Toad are also listed as critically endangered.

Vulnerable

- Snow Leopard: Setting up of protected areas, anti-poaching measures, vaccination have helped save the mountain species of Asia.
- North Brown Kiwi & Okarito Kiwi: Conservation efforts by the Australian Government and captive breeding has aided the change in their status.
- Aberdare cisticola : Their status of this Kenyan warbler bird was changed after re-assessment in its habitat
- Ouvea Parakeet: Native to Ouvea Island of France, conservation efforts by local population has helped increase its population.
- A Happy Tortoise Story: The C. duncanensis which was termed 'extinct in the wild' last year has recovered fully-thanks to conservationists. A native to the Pinzon Island in Equador, it faced constant trouble from non-native rats who feed on its eggs. In order to save these endemic species of the island, conservationists started captive breeding programme and a rat eradication programme which proved a huge success and now the tortoise is down listed as vulnerable.

Retrotransposons

- Scientists have identified a gene that improves the heat tolerance of the algae that live symbiotically with coral species, and could potentially help the corals adapt to some warming.
- Symbiodinium is a unicellular algae that provides its coral host with photosynthetic products in return for nutrients and shelter.
- However, high sea temperatures can cause the breakdown of this symbiotic relationship and lead to the widespread expulsion of Symbiodinium from host tissues, an event known as coral beaching. If bleached corals do not recover, they starve to death, leaving only their white, calcium-carbonate exoskeleton.
- Now, researchers have identified special genes, called retrotransposons, which could help the algae adapt more rapidly to heat stress.
- During their study, most genes commonly associated with heat stress were turned off, while a small number of retrotransposons were turned on.
- The activation and replication of Symbiodinium's retrotransposons in response to heat stress could lead to a faster evolutionary response, "since producing more mutations increases the chance of generating a beneficial one that allows the symbionts to cope better with this specific stress.

What is Coral Bleaching?
- Coral and algae depend on each other to survive. Corals have symbiotic relationship with microscopic algae called zooxanthellae that live in their tissues. These algae are coral's primary source of food and give them their colour.
- When temperatures in the ocean become too warm due to temperature, nutrients, and light, it causes the corals to get stressed. When this happens, the algae leaves the coral's tissue.
- When the algae leaves the coral's tissue, it causes the coral in the ocean to turn completely white by expelling symbiotic algae that lives inside them. This happens when the temperature is at approximately 104 degrees.
- When conditions change, the corals become stressed which causes them to turn white, leaving them extremely vulnerable. Without the algae the coral loses its major source of food, turns white and is more susceptible to disease.
- Coral reef bleaching is the whitening of the invertebrate taxa which causes it to change it pigment which can cause issues for other coral and other underwater creatures in the ocean.
- When coral bleaching happens, this does not mean that they are dead. Corals can survive a bleaching event but they are under more stress than ever before.

NARI portal

- In a path breaking initiative to empower women ministry of Women & Child Development has developed an online portal NARI.
- This portal will provide women citizens with easy access to information on government schemes and initiatives for women.
- For the first time ever since Independence, women of the country will be able to access information about benefits being provided to them by the Government.
- The portal contains information about schemes being run by both Central as well as the States Governments.
- The WCD Minister also gave an overview of the agenda of the WCD Ministry in the current year 2018.

Analysis:

- The Government – both Central and State – has implemented a number of schemes & legislations for women to provide them equal rights, economic opportunities, social support, legal aid, housing etc.
- However, there is often a lack of awareness of these provisions and difficulties in accessing their benefits. For example, many are unaware that One Stop Centres are available in 168 districts for women in difficult circumstances, PM Awas Yojana gives priority to registraton of homes in the name of women and many State Governments offer financial support for the education of girl children. However, information related to women centric schemes/legislations are all scattered on different websites/portals.
- In order to make this information more easily accessible in one place, the NARI portal summarizes over 350 government schemes and other important information for the benefit of women, with more being added everyday. It provides links to the Ministries, Departments and autonomous bodies offering these schemes as well as easy access to online applications and grievance redressal.
- NARI will provide information to women on issues affecting their lives. There are tips on good nutrition, suggestions for health check ups, information on major diseases, tips for job search and interview, investment and savings advice, information on crimes and against women and reporting procedures, contacts of legal aid cells, simplified adoption procedures and much more. It will endow women with the power of information to build their life skills and facilitates them in taking full advantage of the services provided by the Government for them.

Ozone layer hole

- For the first time, Scientists have observed less ozone depletion because of declining level of ozone destroying chlorine.
- The findings showed that an international ban on chlorine-containing manmade chemicals called chlorofluorocarbons(CFCs) has resulted in about 20 per cent less ozone depletion during the Antarctic winter from 2005 to 2016.

About Ozone layer:

- Ozone layer is a deep layer in earth's atmosphere that contain ozone which is a naturally occurring molecule containing three oxygen atoms.
- These ozone molecules form a gaseous layer in the Earth's upper atmosphere called stratosphere. This lower region of stratosphere containing relatively higher concentration of ozone is called Ozonosphere. The Ozonosphere is found 15-35 km (9 to 22 miles) above the surface of the earth.
- The concentration of ozone in the ozone layer is usually under 10 parts per million while the average concentration of ozone in the atmosphere is about 0.3 parts per million. The thickness of the ozone layer differs as per season and geography. The highest concentrations of ozone occur at altitudes from 26 to 28 km (16 to 17 miles) in the tropics and from 12 to 20 km (7 to 12 miles) towards the poles.

- The ozone layer protects life on earth from strong ultraviolet radiation that comes from the sun. Ultraviolet rays are harmful rays that can drive up the risk of deadly disorders like skin cancer, cataracts and damage the immune system. Ultraviolet rays are also capable of destroying single cell organism, terrestrial plant life, and aquatic ecosystems.
- The ozone layer was discovered in 1913 by the French physicists Charles Fabry and Henri Buisson. The ozone layer has the capability to absorb almost 97-99% of the harmful ultraviolet radiations that sun emit and which can produce long term devastating effects on humans beings as well as plants and animals.

    Substances that cause the depletion of the ozone layer are called Ozone Depleting Substances (ODS). The different ODS are

- CFCs as we've already discussed
- Halons – Used in fire extinguishers
- Methyl Chloroform
- Carbon Tetrachloride
- Hydrofluorocarbons (HCFCs)

Integrated Disease Surveillance Programme (IDSP)

- Recent data put out by the Union Health Ministry's Integrated Disease Surveillance Programme (IDSP) has indicated that food poisoning is one of the commonest outbreaks reported in 2017. This is apart from acute diarrhoeal disease (ADD).
- The IDSP has interpreted that the incidence of ADD and food poisoning is high in places where food is cooked in bulk, such as canteens, hostels and wedding venues.
- Food poisoning, also called food-borne illness, is caused by eating contaminated food. Infectious organisms including bacteria, viruses and parasites or their toxins are the most common causes.

About IDSP:

- The Government of India has initiated a decentralized, state based Integrated Disease Surveillance Project (IDSP) in the country in response to a long felt need expressed by various expert committees. The project is to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. It also provides essential data to monitor progress of on going disease control programs and help allocate health resources more optimally.
- The project development objective is to improve the information available to the government health services and private health care providers on a set of high-priority diseases and risk factors, with a view to improving the on-the-ground responses to such diseases and risk factors.

Specifically, the projects aims:

- To establish a decentralized state based system of surveillance for communicable and non-communicable diseases, so that timely and effective public health actions can be initiated in response to health challenges in the country at the state and national level.
- To improve the efficiency of the existing surveillance activities of disease control programs and facilitate sharing of relevant information with the health administration, community and other stakeholders so as to detect disease trends over time and evaluate control strategies.

The project is assisting the Government of India and the states and territories to:

- Survey a limited number of health conditions and risk factors
- Strengthen data quality, analysis and links to action
- Improve laboratory support
- Train stakeholders in disease surveillance and action
- Coordinate and decentralize surveillance activities
- Integrated disease surveillance at the state and district levels, and involve communities and other stakeholders, particularly the private sector.

QUICK FACTS

- In positive peace index 2017, Rank of India is: **90th**
- World Braille Day is observed on: **4 January**
- First Country to Enforce Equal Pay Laws**: Iceland**
- 3rd meeting of the Council for Trade Development and Promotion was held in: **New Delhi**
- 18th All India Whips Conference was started in **: Udaipur**
- New Foreign secretary of India**: Vijay Keshav Gokhale**
- New CEO and MD of Infosys**: Salil Parekh**