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First Scientific Bird Atlas

- South Indian state of Kerala has launched its first Scientific Bird Atlas
- and with this it has also come that this bird atlas is Asia's largest bird atlas in terms of geographical extent which has 25,000 Checklist coverage.
- Kerala Bird Atlas is the first of its kind state level bird atlas in India under which solid baseline data has been prepared to know where different species of birds are found. In which areas their population is more or less?
- This atlas covers all the major bird habitats i.e. Bird Habitats. It has been designed as a citizen science driven exercise in which 1000 volunteers from the bird watching community participated.
- This bird atlas has been prepared by conducting two bird surveys every year in the wet and dry seasons from July to September and January to March respectively between 2015 and 2020.
- The Kerala Bird Atlas contains about three lakh records of 361 species. There are 94 very rare bird species, 103 rare species, 110 common species and 44 very common species and 10 abundant species.
- A provision of 4000 grids has been made under this atlas for estimation of birds. Research related to this has also found that the number of birds has been found in the dry season as compared to the wet season, while the species richness and species evenness are found in the northern and central districts of Kerala rather than the southern cities.
- The survey was conducted in all the 14 districts and it used technological tools like Locus free which is an Android GPS application and e-Bird platform to facilitate the survey and documentation in a seamless manner.

‘Transparency International’

- Recently, the Corruption Perception Index 2021 (CPI) was released by ‘Transparency International’.
- As a whole, this index shows that the control of corruption in 86 percent of countries has either been largely stable or poor over the past decade.

Transparency International



- ‘Transparency International’ is an international non-governmental organization, which was established in the year 1993 in Berlin (Germany).
- Its primary objective is to combat global corruption through civic measures and to take action to prevent criminal activities arising out of corruption.
- Its publications include the Global Corruption Barometer and the Corruption Perception Index.

Introduction:

- Under the index, a total of 180 countries are ranked according to the opinion given by experts and businessmen on the perceived level of corruption present in their public systems.
- It relies on 13 independent data sources and uses a level pattern from 0 to 100, where 0 represents the least corruption and 100 represents the most corrupt.
- More than two-thirds of countries (68%) have scores below 50 and the average global score remains stable at 43. Since 2012, 25 countries have significantly

improved their scores, but 23 countries have dropped significantly in the same period.

Top Performers:

- This year's top countries include Denmark, Finland and New Zealand, each with a score of 88. Norway (85), Singapore (85), Sweden (85), Switzerland (84), Netherlands (82), Luxembourg (81) and Germany (80) finished in the top 10.

Poor performer

- South Sudan (11), Syria (13) and Somalia (13) were at the bottom of the index.
- Countries facing armed conflict or authoritarianism such as Venezuela (14), Afghanistan (16), North Korea (16), Yemen (16), Equatorial Guinea (17), Libya (17) and Turkmenistan (19) etc. Got the lowest score.

India's performance:

- India ranks 85th out of 180 countries in the current index (86 in 2020 and 80 in 2019). Transparency International gave India a CPI score of 40.
- All neighboring countries of India have got lower ranking except Bhutan. Pakistan has dropped 16 places to 140th position in the index.
- India's score has remained largely stagnant over the past decade, while some mechanisms that can aid in corruption are weakening.
- However, the index expresses concern about the country's democratic status, as fundamental freedoms and institutional checks and balances seem to be eroding.
- Anyone who speaks out against the government is targeted through allegations of national security, defamation, treason, hate speech and contempt of court, and foreign funding regulations.

COMPETES Act, 2022

- The United States has unveiled the ambitious **America Creating Opportunities for Manufacturing, Pre-Eminence in Technology and Economic Strength (COMPETES) Act, 2022** that seeks to open new avenues for talented individuals around the world with a **new start-up visa**.
- It aims to strengthen supply chains and reinvigorate the country's economy in innovation to overtake China and the rest of the world in the coming decades.

Provision:

- US\$52 billion to encourage semiconductor production in the US and US\$45 billion for supply chain flexibility, grants and loans to improve manufacturing, among other programs.
- Financing to address social and economic inequality, climate change and immigration. For example, it waives the green card limit for STEM (science, technology, engineering, or math) PhDs and creates a new green card for entrepreneurs.
- A green card holder (permanent resident) is a person who has been granted the right to live and work in the United States on a permanent basis.
- This bill/bill releases US\$600 million annually to build manufacturing facilities to reduce the United States' reliance on solar components manufactured in Xinjiang, China.
- It creates a new category- 'W' of non-immigrants for entrepreneurs with an ownership interest in a start-up unit, essential employees of a start-up unit and their spouses and children.

Importance:

- This means that more opportunities will be available for Indian talent and skilled workers in America.
- Be aware that every year many Indians and Indian companies receive a substantial portion of H-1B 'work permits' issued in that year. With this new category Indian professionals are also likely to seize the opportunities that will be provided by the Act.

Work Visa:

- The IT revolution, the advent of the Internet and low-cost computers in developing countries like India, has led to the number of people willing to work at relatively low costs in the US, which is a great position for both employers and workers.
- The US administration issues a certain number of visas each year to fill vacancies for highly skilled low-cost workers in IT and other related fields.
- These visas allow companies outside the US to send employees to work at client sites.

Different types of Visa:

H1-B Visa:

- People seeking employment in the United States are required to obtain an H1-B visa. The H1-B visa is a visa granted to non-immigrant citizens seeking employment in the United States under sections 101(a) and 15(h) of the Immigration and Nationality Act.
- It allows US employers to temporarily employ foreign workers in specialty occupations.

H2-B Visa:

- The application form must be certified by the Labor Department to apply for such a visa. It is issued for temporary employment.

L-1 Visa:

- This is a non-immigrant visa under which companies can hire foreign workers in their subsidiaries or parent companies based in the US.

H-4 Visa:

- An H-4 visa is issued to dependent family members (spouse) of H1-B visa holders who wish to remain in the US during their stay with the H1-B visa holder. Under the H-4 visa, the main applicant is the holder of the H1-B visa.
- Family members such as spouses, children under the age of 21 qualify for H-4 visas and can apply at a US consulate in their home country.

J-1 Visa:

- This is for students on summer programs related to work-study.

Assam Vaibhav Award

- Recently, one of the country's most eminent industrialists, Mr. Ratan Tata, has been conferred its highest civilian honor 'Assam Baibhav Award' by the Government of Assam.
- It is the highest civilian award of the state of Assam.
- The award was officially announced by Chief Minister Himanta Biswa Sarma on the occasion of "Assam Day".
- Under this award, a cash prize of Rs 5 lakh is given. Apart from this, the awardee can get the benefit of medical treatment at government expense for the rest of his life.
- An image of Japi is carved on top of the award and the word "Assam Vaibhav" is inscribed in Assamese script on the leaf of the Holong tree.
- Ratan Tata is a well-known industrialist of the country and former chairman of Tata Sons. He has been awarded the Padma Vibhushan in the year 2008 and the Padma Bhushan in the year 2000.

Small satellite launch vehicle

- Recently the Chairman of 'Indian Space Research Organization' (ISRO) has mentioned the launch of 'SSLV-D1 Micro Sat' in April 2022.
- SSLV (Small Satellite Launch Vehicle) aims to launch small satellites into low earth orbit. In recent years, the 'Small Satellite Launch Vehicle' has become very important to meet the needs of developing countries, small satellites of universities and private corporations.

Small Satellite Launch Vehicle:

- These are relatively small vehicles, weighing only 110 tonnes. These take only 72 hours to integrate, whereas for a launch vehicle this period is around 70 days.
- It can carry satellites weighing 500 kg into low earth orbit, while the 'Polar Satellite Launch Vehicle' (PSLV) can launch satellites weighing 1000 kg.
- SSLV is a three-stage solid vehicle and has the capability to launch a 500 kg satellite into 'Low Earth Orbit' (LEO) and 'Sun Synchronous Orbit' (SSO).
- It is fully compatible to launch multiple microsattellites at a time and supports multiple types of 'orbital drop-off'.

- Key features of SSLV include low cost, low turn-around time, flexibility to accommodate multiple satellites, on-demand feasibility and minimal launch infrastructure.
- The government has approved a total of Rs 169 crore for the development project including development, qualification and flight demonstration of vehicle systems through three UDAN (SSLV-D1, SSLV-D2 and SSLV-D3).
- ISRO Chairman Dr. Somnath is credited with designing and developing the SSLV during his tenure as the Director of Vikram Sarabhai Space Center in Thiruvananthapuram from the year 2018.
- SSLV's first flight was scheduled to start in July 2019 but due to COVID-19 and other issues its flight is getting delayed.

Importance of SSLV:

- Development and manufacturing of SSLV is expected to create greater synergy between the space sector and private Indian industries, which is a major objective of the Ministry of Space.
- Indian industry has a consortium for production of PSLV and once tested they should come together to produce SSLV.
- One of the mandates of the newly-formed ISRO's commercial arm New Space India Limited (NSIL) is to mass-produce and manufacture SSLVs and more powerful PSLVs in partnership with the private sector in India through technology transfer.
- It aims to utilize the research and development work done by ISRO over the years for commercial purposes through Indian industry partners.
- Till now small satellites are launched along with larger satellites through 'Polar Satellite Launch Vehicle' (PSLV) which is ISRO's work-horse with more than 50 successful launches. Due to which the launch of small satellites depended on the launch of large satellites.

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