

ECONOMY**Increase in Direct Tax Collections**

India's direct tax collections in the first two and a half months (April - June) of 2021-22 stand at nearly Rs. 1.86 lakh crore, which is double the collections over the same period of last year that was affected by the national lockdown. The collections last year over the same period were Rs. 92,762 crore.

Key Points**Surge in Direct Tax Collections:**

- It includes Corporation Tax collections of Rs. 74,356 crore and Personal Income Tax inflows, which include the Security Transaction Tax of Rs. 1.11 lakh crore.
- The jump in the direct tax collections reflects healthy exports and a continuation of various industrial and construction activities.
- It is expected that GDP (Gross Domestic Product) will record a double-digit expansion in Quarter 1 of 2021-22.

Direct Tax:

1. A direct tax is a tax that a person or organization pays directly to the entity that imposed it.
2. An individual taxpayer, for example, pays direct taxes to the government for various purposes, including income tax, real property tax, personal property tax, or taxes on assets.

Corporation Tax:

1. Corporation tax is a direct tax imposed on the net income or profit that enterprises make from their businesses.
2. Companies, both public and privately registered in India under the Companies Act 1956, are liable to pay corporation tax.
3. This tax is levied at a specific rate according to the provisions of the Income Tax Act, 1961.
4. In September 2019, India slashed corporate tax rates to 22% from 30% for existing companies and to 15% from 25% for new manufacturing companies. Including a surcharge and cess, the effective tax rate for existing companies now stands at 25.17%, down from 35%.

Security Transaction Tax (STT):

1. It is a direct tax charged on purchase and sale of securities that are listed on the recognized stock exchanges in India.
2. Both purchaser and seller need to pay 0.1% of share value as STT.

Advance Tax Collections:

- Advance tax is paid by those who have tax liability of Rs. 10,000 or more in a financial year. It is paid by both salaried and businesses, thus including collections from corporate tax and personal income tax.
- Advance tax is paid as and when the money is earned in four instalments rather than at the end of the fiscal year.
- It is considered an indication of economic sentiment.
- The first instalment or 15% of the annual tax is to be paid by 15th June, the second by 15th September (30%), the third by 15th December (30%), and the rest by 15th March.

Dividend Distribution Tax (DDT):

- Dividend refers to the distribution of profits to shareholders of a company.
- Thus, the dividend distribution tax is a type of tax that is payable on the dividends offered to its shareholders by the corporation.
- In the Union Budget for 2020-2021 the DDT was withdrawn from the tax paid by the dividend payer. Instead, from April 2021 on, dividends would be taxed in the hands of the recipients, i.e. shareholders of the distributing company. The proposed rate is 10% for dividends paid to shareholders resident in India and 20% if paid to foreign investors.

TDS/TCS:

- Tax Deduction at Source: A person (deductor) who is liable to make payment of specified nature to any other person (deductee) shall deduct tax at source and remit the same into the account of the Central Government.
- Tax Collection at Source: It is an additional amount collected as tax by a seller of specified goods from the buyer at the time of sale over and above the sale amount and is remitted to the government account.

Government Initiatives to Improve Direct Taxes:

- For Personal Income Tax - The Finance Act, 2020 has provided an option to individuals and co-operatives for paying income-tax at concessional rates if they do not avail specified exemption and incentive.
- Vivad se Vishwas: Under Vivad se Vishwas, declarations for settling pending tax disputes are currently being filed. This will benefit the Government by generating timely revenue and also to the taxpayers by bringing down mounting litigation costs.
- Expansion of scope of TDS/TCS- For widening the tax base, several new transactions were brought into the ambit of Tax Deduction at Source (TDS) and Tax Collection at Source (TCS). These transactions include huge cash withdrawal, foreign remittance, purchase of luxury cars, e-commerce participants, sale of goods, acquisition of immovable property, etc.
- 'Transparent Taxation - Honoring The Honest' platform: It is aimed at bringing transparency in income tax systems and empowering taxpayers.

2. Drone Survey Mandatory for All National Highways Projects

The National Highways Authority of India (NHAI) has made use of drones mandatory for video recording of the national highway projects during different stages of development, construction, operation and maintenance. These videos will be saved on NHAI's portal "Data Lake" to assess the progress made on the projects.

Key Points**Significance:**

- It will enhance transparency, uniformity and leverage the latest technology.
- NHAI officials can use the videos during the physical inspection of the projects to check the discrepancies and rectifications made on the earlier observations.
- Since these videos will be permanently stored on the 'Data Lake', they can also be used as evidence during the dispute resolution process before Arbitral Tribunals and Courts.
- Also the mandatory deployment of Network Survey Vehicle (NSV) to carry out road condition surveys on the National Highways will enhance the overall quality of the highways. NSV uses the latest survey techniques such as high-resolution digital camera for 360 degree imagery, Laser Road Profilometer and other latest technology for measurement of distress in road surface.

NHAI's Portal "Data Lake":

- NHAI has gone 'Fully Digital' with the launch of cloud based and Artificial Intelligence powered Big Data Analytics platform – Data Lake and Project Management Software.
- All project documentation, contractual decisions and approvals are now done through the portal only.
- Data Lake software forecasts the delays, likely disputes and gives advance alerts.

Significance:

1. The Data Lake will bring revolutionary changes to NHAI with benefits like No delays, Quick decision making, No question of missing records, Work from anywhere/anytime.
2. It will enhance transparency, as all officers and stakeholders connected with the project can see what is going on a real time basis.
3. It will also help in carrying out audits by the senior officers and other external agencies.

National Highways Authority of India (NHAI):

- NHAI was set up under NHAI Act, 1988.
- It has been entrusted with the National Highways Development Project (NHDP), along with other minor projects for development, maintenance and management. NHDP is a project to upgrade, rehabilitate and widen major highways in India to a higher standard. The project was started in 1998.
- NHAI maintains the National Highways network to global standards and in a cost effective manner, thus promoting economic well being and quality of life of the people.

BIODIVERSITY & ENVIRONMENT**Great Barrier Reef**

Recently, the UNESCO World Heritage Committee has recommended that the Australia's Great Barrier Reef should be added to a list of "in danger" World Heritage Sites. Placement on the "in-danger list" is not considered a sanction.

Key Points

Reason behind this Move:

- It was recommended to add to the list because of the impact of climate change.
 - Despite Reef 2050, the coral reef ecosystem has suffered three major bleaching events since 2015 due to severe marine heatwaves.
1. The Reef 2050 Long-Term Sustainability Plan is the Australian and Queensland Government's overarching framework for protecting and managing the Great Barrier Reef by 2050.
 2. When corals face stress by changes in conditions such as temperature, light, or nutrients, they expel the symbiotic algae zooxanthellae living in their tissues, causing them to turn completely white. This phenomenon is called coral bleaching.
 3. Marine heatwave is an event of anomalous warm sea surface temperatures (SST) from several days to years.

Repercussions:

1. It prompted environmental groups to take aim at the Australian government's reluctance to take stronger climate action.
2. Australia, which is one of the world's largest carbon emitters per capita, has remained reluctant to commit to stronger climate action and has cited jobs as a major reason to back the country's fossil fuel industries. It has not updated its climate goals since 2015.

About Great Barrier Reef:

- It is the world's most extensive and spectacular coral reef ecosystem composed of over 2,900 individual reefs and 900 islands.
 - The reef is located in the Coral Sea (North-East Coast), off the coast of Queensland, Australia.
 - It can be seen from outer space and is the world's biggest single structure made by living organisms.
 - This reef structure is composed of and built by billions of tiny organisms, known as coral polyps.
1. They are made up of genetically identical organisms called polyps, which are tiny, soft-bodied organisms. At their base is a hard, protective limestone skeleton called a calicle, which forms the structure of coral reefs.
 2. These polyps have microscopic algae called zooxanthellae living within their tissues. The corals and algae have a mutualistic (symbiotic) relationship.
- It was selected as a World Heritage Site in 1981.

Initiatives to Protect Corals:

- A number of global initiatives are being taken to address the issues, like:
1. International Coral Reef Initiative
 2. Global Coral Reef Monitoring Network (GCRMN)
 3. Global Coral Reef Alliance (GCRA)
 4. The Global Coral Reef R&D Accelerator Platform
- Similarly, the Ministry of Environment and Forests and Climate Change (MoEF&CC), India has included the studies on coral reefs under the Coastal Zone Studies (CZS).
1. In India, the Zoological Survey of India (ZSI), with help from Gujarat's forest department, is attempting a process to restore coral reefs using "biorock" or mineral accretion technology.
 2. National Coastal Mission Programme, to protect and sustain coral reefs in the country.

Coral Reef

- **Largest Coral Reef Area:**
1. Indonesia has the largest coral reef area in the world.
 2. India, Maldives, Sri Lanka and Chagos have the maximum coral reefs in South Asia.
 3. The Great Barrier Reef of the Queensland coast of Australia is the largest aggregation of coral reefs.
- **Coral Reef Areas in India:** India has four coral reef areas: Gulf of Mannar, Andaman and Nicobar Islands, Lakshadweep islands and the Gulf of Kutch.
 - **Benefits:**
1. Protect humanity from natural calamities.
 2. Provide revenue and employment through tourism and recreation.
 3. Provide habitats for fishes, starfish and sea anemones.
- **Use:**
1. They are used in jewellery.

2. Coral blocks are used for buildings and road construction.
3. The lime supplied by corals is used in cement industries.
- **Threats:**
 1. Due to anthropogenic activities such as coastal development, destructive fishing methods and pollution from domestic and industrial sewage.
 2. Due to increased sedimentation, over-exploitation and recurring cyclones.
 3. Coral diseases such as black band and white band due to infectious microorganisms introduced by the human population that live on the coastal regions.
- **Role of Mangroves:** Mangrove forests play a crucial role in helping the coral reef system by acting as filters and providing protection from cyclones, storms and tsunamis.

SCIENCE & TECHNOLOGY

New Doppler Radars in Maharashtra: IMD

Recently, the India Meteorological Department (IMD) announced that it will install seven new doppler radars in Maharashtra, including Mumbai in 2021. In January 2021, the Union Minister for Earth Sciences commissioned two of the ten indigenously built X-Band Doppler Weather Radars (DWR) to closely monitor the weather changes over the Himalayas.

India Meteorological Department

- It is an agency of the Ministry of Earth Sciences, established in 1875.
- It is the principal agency responsible for meteorological observations, weather forecasting and seismology.

Key Points

About:

- Doppler radars of varying frequencies — S-band, C-band and X-band — are commonly used by the IMD to detect and track the movement of weather systems, cloud bands and gauge rainfall over its coverage area of about 500 km.
- Four X-band and one C-band radar will be deployed over Mumbai. In addition, Ratnagiri will get a new C-band and Vengurla will get an X-band radar, each of which will operate for multiple purposes.

Existing Radars:

- **East Coast:** Kolkata, Paradip, Gopalpur, Visakhapatnam, Machilipatanam, Sriharikota, Karaikal and Chennai.
- **West Coast:** Thiruvananthapuram, Kochi, Goa and Mumbai.
- **Other Radars:** Srinagar, Patiala, Kufri, Delhi, Mukteshwar, Jaipur, Bhuj, Lucknow, Patna, Mohanbar, Agartala, Sohra, Bhopal, Hyderabad and Nagpur.

Significance:

- They will guide meteorologists, particularly in times of extreme weather events like cyclones and associated heavy rainfall.
- As the radar observations will be updated every 10 minutes, forecasters will be able to follow the development of weather systems as well as their varying intensities, and accordingly predict weather events and their impact.

Radars

Radar (Radio Detection and Ranging): It is a device which uses electromagnetic waves in the microwaves region to detect location (range & direction), altitude, intensity and movement of moving and non-moving objects.

Doppler Radar:

- It is a specialized radar that uses the Doppler effect to produce velocity data about objects at a distance. Doppler effect: When the source and the signal are in relative motion to each other there is a change in the frequency observed by the observer. If they are moving closer, frequency increases and vice versa.
- It does this by bouncing a microwave signal off a desired target and analyzing how the object's motion has altered the frequency of the returned signal.
- This variation gives direct and highly accurate measurements of the radial component of a target's velocity relative to the radar.

Doppler Weather Radar (DWR):

- Based on Doppler principle the radar is designed to improve precision in long-range weather forecasting and surveillance using a parabolic dish antenna and a foam sandwich spherical radome.

- DWR has the equipment to measure rainfall intensity, wind shear and velocity and locate a storm centre and the direction of a tornado or gust front.

Types Of Doppler Radars :

Doppler radar can be divided into several different categories according to the wavelength which are L,S,C,X,K.

- **X-band radar:**

1. It operates on a wavelength of 2.5-4 cm and a frequency of 8-12 GHz. Because of the smaller wavelength, the X band radar is more sensitive and can detect smaller particles.
2. It is used to detect thunderstorms and lightning.

- **C-band radars:**

1. It operates on a wavelength of 4-8 cm and a frequency of 4-8 GHz. Because of the wavelength and frequency, the dish size does not need to be very large.
2. The signal is more easily attenuated, so this type of radar is best used for short range weather observation. It guides at the time of cyclone tracking.

- **S band radars:**

1. It operates on a wavelength of 8-15 cm and a frequency of 2-4 GHz. Because of the wavelength and frequency, S band radars are not easily attenuated.
2. This makes them useful for near and far range weather observation.

2. Antibodies against Nipah Virus in Bats

A recent survey has found the presence of antibodies against the Nipah virus (NiV) in some bat species from a cave in Mahabaleshwar, a popular hill station in Maharashtra. The survey was conducted by the Indian Council of Medical Research (ICMR) - National Institute of Virology (NIV).

Key Points**About the Survey:**

- The NIV team looked at Rousettus leschenaultii and Pipistrellus pipistrellus bats that are common in India. Pteropus medius bats, which are large fruit-eating bats, are the reservoir for NiV in India as both NiV RNA and antibodies were detected in the samples of these bats collected during previous NiV outbreaks.
- A bat's immune system is especially adept at withstanding viral infection because of its ability to limit excessive inflammation — which uniquely allows viruses to thrive without proving deadly to the mammal.

Nipah virus (NiV):**About:**

- It is a zoonotic virus (it is transmitted from animals to humans).
- The organism which causes Nipah Virus encephalitis is an RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and is closely related to Hendra virus. Hendra virus (HeV) infection is a rare emerging zoonosis that causes severe and often fatal disease in both infected horses and humans.
- It first broke out in Malaysia and Singapore in 1998 and 1999.
- It first appeared in domestic pigs and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.

Transmission:

- The disease spreads through fruit bats or 'flying foxes,' of the genus Pteropus, who are natural reservoir hosts of the Nipah and Hendra viruses.
- The virus is present in bat urine and potentially, bat faeces, saliva, and birthing fluids.

Symptoms: The human infection presents as an encephalitic syndrome marked by fever, headache, drowsiness, disorientation, mental confusion, coma, and potentially death.

Prevention: Currently, there are no vaccines for both humans and animals. Intensive supportive care is given to humans infected by Nipah virus.

IMPORTANT FACTS FOR PRELIM**Krivak Stealth Frigates**

Recently, the Vice-Chief of the Naval Staff has inaugurated the construction of the second frigate of the Krivak or Talwar class. The construction of the first ship was laid in January, 2021. It would be delivered in 2026 and the second ship after six months.

Key Points**About:**

- The Krivak class stealth ships are being built with technology transfer from Russia by Goa Shipyard Ltd. (GSL) under 'Make in India'. Engines for the ships are supplied by Ukraine.
- 1. In October 2016, India and Russia signed an Inter-Governmental Agreement (IGA) for four Krivak or Talwar stealth frigates.
- 2. The first two frigates will be built in Yantar Shipyard, in Kaliningrad, Russia. The following two will be built in GSL.
- The new Krivak frigates will have the same engines and armament configuration as Yantar's last three frigates - INS Teg, Tarkash and Trikan. These will be armed with BrahMos anti-ship and land attack missiles.

Use: They are primarily used to accomplish a wide variety of naval missions such as finding and eliminating enemy submarines and large surface ships.

Existing Frigates: The navy already operates six Krivak III frigates. The first three joined the fleet between June 2003 and April 2004, followed by another three between April 2012 and June 2013. With the current contract, the navy will operate 10 Krivak frigates.

India-Russia Defence Relation

About:

- Defence cooperation is an important pillar of the India-Russia strategic partnership.
- The two Defence Ministers meet annually, alternately in Russia and India, to discuss and review the status of ongoing projects and other issues of military technical cooperation.
- As India has been spreading its supplier base with Israel, US and France, Russia still remains a major supplier.
- The two sides are successfully moving towards the implementation of an AK-203 rifle contract and 200 Ka-226T utility helicopter supplies.
- According to a paper published by Stimson Center, 86% of the equipment, weapons and platforms currently in military service in India are of Russian origin.

Joint Exercises: Exercise INDRA, is a joint, tri services exercise between India and Russia.

Russia's Military Equipment Deployed by India:

- **Navy:** The Navy's only active aircraft carrier INS Vikramaditya is from Russia. A nuclear attack submarine Chakra II is also in service.
- **Army:** Army's T-90 and T-72 main battle tanks. S-400 Triumf missile system.
- **Air Force:** IAF's Su30 MKI fighter.

DAILY ANSWER WRITING PRACTICE

Qns. Explaining the significance of digital lending, discuss the measures to be taken to make digital lending more responsible in India. (250 Words)

Ans:

Introduction

- Digital Lending consists of lending through web platforms or mobile apps, by taking advantage of technology for authentication and credit assessment.
- India's digital lending market has seen a significant rise over the years. The digital lending value increased from USD 33 billion in FY15 to USD 150 billion in FY20 and is expected to hit the USD 350-billion mark by FY23.
- Banks have launched their own independent digital lending platforms to tap in the digital lending market by leveraging existing capabilities in traditional lending.

Body

Significance of Digital Lending

- **Financial Inclusion:** It helps in meeting the huge unmet credit need, particularly in the microenterprise and low-income consumer segment in India.
- **Reduce Borrowing from informal channels:** It helps in reducing informal borrowings as it simplifies the process of borrowing. Indians continue to borrow from family and friends, and moneylenders, sometimes at unreasonably high interest rates, primarily because these loans are more flexible and convenient.
- **Time Saving:** It decreases time spent on working loan applications in-branch. Digital lending platforms have also been known to cut overhead costs by 30-50%.

Issues with Digital Lending Platforms

- Growing number of unauthorised digital lending platforms and mobile applications as:

- They charge excessive rates of interest and additional hidden charges.
- They adopt unacceptable and high-handed recovery methods.
- They misuse agreements to access data on mobile phones of borrowers.
- Steps Taken by RBI
- Non-Banking Financial Companies (NBFCs) and banks need to state the names of online platforms they are working with.
- RBI has also mandated that digital lending platforms which are used on behalf of Banks and NBFCs should disclose the name of the Bank(s) or NBFC(s) upfront to the customers.
- The central bank had also asked lending apps to issue a sanction letter to the borrower on the letter head of the bank/ NBFC concerned before the execution of the loan agreement.
- Legitimate public lending activities can be undertaken by banks, NBFCs registered with the RBI and other entities who are regulated by state governments under statutory provisions.
- Government of India has taken many initiatives such as Unified Payments Interface, Jan dhan yojana, Aadhaar enabled Payment System, etc. to promote digital environment in the country especially after demonetization.

Measures needed to make digital lenders more responsible

- India is on the verge of a digital lending revolution and making sure that this lending is done responsibly can ensure the fruits of this revolution are realized.
- As several players have access to sensitive consumer data, there must be clear guidelines around, for example, the type of data that can be held, the length of time data can be held for, and restrictions on the use of data.
- Digital lenders should proactively develop and commit to a code of conduct that outlines the principles of integrity, transparency and consumer protection, with clear standards of disclosure and grievance redressal.
- An agency can be created that tracks all digital loans and consumer/lender credit history.
- Apart from establishing technological safeguards, educating and training customers to spread awareness about digital lending is also important.

DAILY QUIZ

Q1. Consider the following statements regarding Avian influenza or Bird flu.

1. It is a highly contagious viral disease caused by Influenza Type A viruses.
2. Avian influenza does not affect the egg production in poultry birds.
3. Bird flu can be spread through their droppings while flying.

Which of the above statements is/are correct?

- a. 1 only
- b. 2 and 3 only
- c. 1 and 3 only**
- d. 1, 2 and 3

Q2. Under the RTE Act, 2009, the National Commission for Protection of Child Rights (NCPCR) can:

1. inquire into complaints about violation of the law.
2. summon an individual and demand evidence.
3. seek a magisterial enquiry.
4. file a writ petition in the High Court or Supreme Court.
5. recommend interim relief to those affected.

Select the correct answer using the code below:

- a. 1, 2 and 3 only
- b. 1, 2, 3 and 4 only
- c. 2 and 5 only
- d. 1, 2, 3, 4 and 5**

Q3. Consider the following statements about “17+1” initiative:

1. It is a China-led format founded in 2012 in Budapest.
2. It aims to expand cooperation between Beijing and the Central and Southeastern Asia member countries.

Which of the given above statements is/are correct?

- a. 1 only**
- b. 2 only

- c. Both 1 and 2
- d. Neither 1 nor 2

Q4. Consider the following statements:

As per the National Security Act, the grounds for preventive detention of a person include:

1. acting in any manner prejudicial to the defence of India.
2. strong criticism against government policies and personalities.
3. depictions of an unresponsive or insensitive regime.

Which of the statements given above is/are correct?

- a. 1 and 3 only
- b. 1 only**
- c. 2 and 3 only
- d. 1, 2 and 3

Q5. With reference to “Retrofit of Air-conditioning to improve Indoor Air Quality for Safety and Efficiency” (RAISE) initiative, consider the following statements:

1. It is a joint initiative of Bureau of Energy Efficiency (BEE) and the U.S. Agency for International Development’s (USAID) MAITREE Program.
2. It aims to focus on improving indoor air quality (IAQ), thermal comfort, and energy efficiency (EE) in workspaces across the nation.

Which of the given above statements is/are correct?

- a. 1 only
- b. 2 only**
- c. Both 1 and 2
- d. Neither 1 nor 2



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