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## News Analysis (12 Sep, 2020)

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### Ranking of States on Support to Startup Ecosystems: DPIIT

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#### Why in News

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The Results of the 2<sup>nd</sup> edition of **Ranking of States on Support to Startup Ecosystems** were released by the **Department for Promotion of Industry and Internal Trade (Ministry of Commerce & Industry)**.

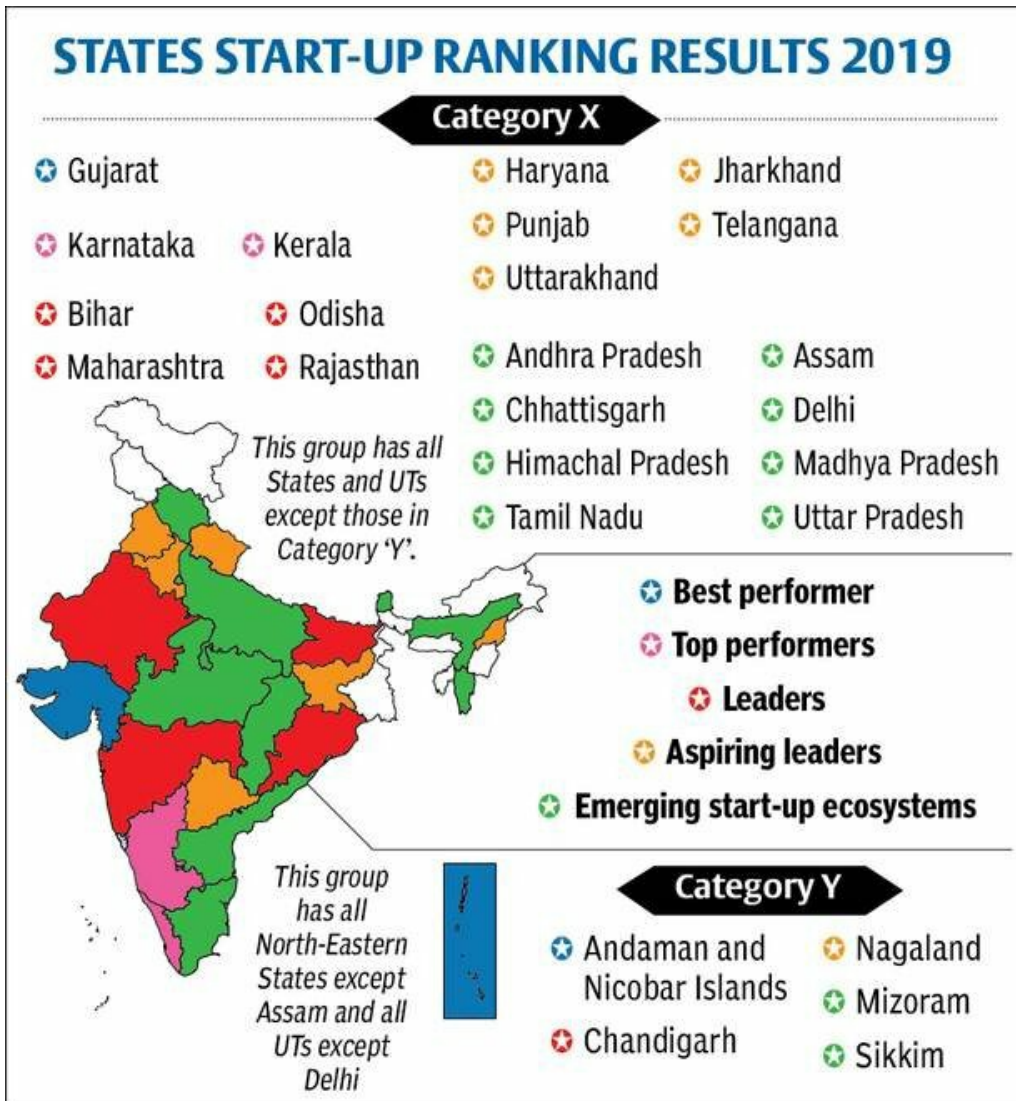
DPIIT has recently released the **Ease of Doing Business Rankings of the States-2019** based on the State Business Reform Action Plan.

#### Key Points

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- **Objectives:** The rankings were started with an objective of fostering **competitiveness, mutual learning** and propel States and Union Territories (UTs) to work proactively towards uplifting the startup ecosystem.
- **Framework:** The 2019 Ranking Framework has **seven broad reform areas consisting of 30 action points** ranging from institutional support, easing compliances, relaxation in public procurement norms, incubation support, seed funding support, venture funding support, and awareness and outreach.
- **Participation:** 22 States and 3 Union Territories.
- **2 Categories:** To establish uniformity and ensure standardization in the ranking process, States and UTs have been divided into two groups.
  - **Category Y: All UTs except Delhi and all States in North East India except Assam.**
  - **Category X: All other States and UT of Delhi.**

- **Results:** The States and UTs were classified as: Best Performers, Top Performers, Leaders, Aspiring Leaders and Emerging Startup Ecosystems.
  - **Gujarat** was the Best performer in **Category X** followed by Karnata and Kerala. Uttar Pradesh and Tamil Nadu occupied the lowest positions.
  - **Andaman and Nicobar Islands** was the Best performer in **Category Y**. Sikkim secured the bottom place.
  - Gujarat had secured the Best Performer position previous year as well.




## Startup Landscape in India

INDIA IS THE  
**3<sup>rd</sup> LARGEST**  
startup ecosystem  
in the world

 **28,000+**  
STARTUPS RECOGNISED  
by Department for Promotion of  
Internal Trade and Industry (DPIIT)

 INDIA IS  
HOME TO 32  
UNICORNS

(Startups with  
valuation \$1 Bn+) with  
a combined valuation  
of \$100+ Billion

 The current median age  
of founder entrepreneurs  
lies at only  
**31 YEARS**



**36 REGULATIONS**  
have been simplified for  
the startup ecosystem  
in India!

 **29 STATES AND UTs  
NOW HAVE A STATE  
STARTUP POLICY**  
*The federal as well as state  
governments are increasingly  
recognising startups as important  
engines for economic growth*



**ON AN AVERAGE 12  
JOBS CREATED PER  
STARTUP TOTALING  
UP TO 3,50,000+  
JOBS**

*The boom in women  
entrepreneurship is  
apparent in the growth  
story of women led  
startups -*

**MORE THAN  
43% OF THE  
TOTAL STARTUPS IN  
INDIA HAVE ONE OR MORE  
WOMEN DIRECTORS**

*The startup  
ecosystem, in driving  
India's growth story,  
tangibly adds to job  
creation in the nation*

 The entire startup  
ecosystem raised  
**\$50 BILLION  
FUNDING<sup>2</sup>**  
between 2014-2019

LEADING SECTORS THAT PERVADE THE INDIAN STARTUP LANDSCAPE ARE<sup>3</sup>

**\$5.7 BN**  
FINTECH

**\$3 BN**  
ENTERPRISES

**\$1.4 BN**  
HEALTH-TECH

**\$11.7 BN**  
E-COMMERCE

**\$1.2 BN**  
LOGISTICS

*(While sector diversity visibly  
permeates Indian led businesses)*

## Government Initiatives:

- **Start Up India Fund:** Under the Startup India program, the Government created the 'Fund of Funds for Startups (FFS) with a corpus of INR 10,000 crore.
- **Policy Reforms for Startups:** These include requirement of distributable profits for three years for a company to be eligible to issue shares with differential voting rights.
- **Start-up Cells:** The Cell will work towards redressal of grievances & tax-related issues of Startups with respect to the administration of the Income-tax Act, 1961.
- **National Startup Advisory Council:** To advise the Centre on measures needed to build a strong ecosystem for nurturing innovation and start-ups in the country.
- **Aatmanirbhar Bharat ARISE-Atal New India Challenge:** It is a national initiative to promote research & innovation and increase competitiveness of Indian startups and Micro, Small and Medium Enterprises (MSMEs).
- **AIM-iCREST:** It is an Incubator Capabilities Enhancement program launched by **NITI Aayog** for a Robust Ecosystem focused on creating high performing Startups.
- More than **1300 Startups** have been supported by **seed funding** from State Governments. In addition to seed funding, 10 States have created **Venture Funds** or a Fund of funds and 218 startups have been provided with venture funding support.
  - **Seed funding :** It is the initial capital used when starting a business.
  - **Venture Funds:** This generally comes after the seed funding round. It is a means of equity financing for rapidly-growing private companies for expansion or purchase of a company. It is provided by venture capitalists after carefully scrutinizing the projects.

## Way Forward

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- The initiative will help in **capacity-building of States** and building a robust Start-up ecosystem in the country for **nurturing innovation and providing opportunities to budding entrepreneurs**, as envisaged by the **Start-up India Initiative** launched in 2016. This is necessary for the country to realize the dream of becoming a 5 trillion dollar economy by 2024.
- There is a need to ease the access to funding to Start-ups, especially those from small cities and the need for simplification of regulations. The central and state governments would have to invest heavily in Research & Development and upcoming technologies, to build further on their competitive value addition to this exercise.

**Source: PIB**

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## Financing the Fiscal Deficit

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### Why in News

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India, being one the hardest hit major economy due to **Covid-19**, faces the challenge of managing its fiscal deficit.

**Borrowing more and monetizing the deficit** are the options being considered by the government and **Reserve Bank of India (RBI)** to finance the fiscal deficit.

### Key Points

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#### State of Indian Economy:

- As per the official data, the **Centre's fiscal deficit** for the first three months of fiscal 2020-21 (April-June) was Rs. 6.62 lakh crore, which is 83% of the budgeted target for the whole year.
  - As per the economists, the fiscal deficit may end up as high as 8% of the Gross Domestic Product (GDP), far exceeding the budget's goal of 3.5%.
- The **GDP contracted by 23.9% in the first** (April-June) quarter of 2020 compared to the same period (April-June) in 2019.
- The **manufacturing sector is also contracting**, as per the recent IHS Markit India Manufacturing **Purchasing Managers' Index (PMI)**.
- The **output of eight core industries** contracted for the **fourth consecutive month - shrinking by 15%** in June 2020.
- The **Financial Stability Report** from RBI also shows an increase in bad loans and Non-Performing Assets (NPA).

### Methods of Bridging the Fiscal Deficit

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- **Borrowing from the market:**

- The government has already raised its gross market borrowing target for the current financial year by **more than 50%**, owing to the pandemic.
- **Disadvantage:**
  - **High Debt:** An increased **borrowing** programme means that the public **debt** will go up.
  - **Higher Interest Rates:** Higher borrowing can **push up interest rates** because markets are nervous about the government's ability to repay.
  - **Increase in Taxes:** It may also necessitate an increase in taxes. This may burden the common people and also lead to less spending and saving by the public, leading to a stalled market.
  - **Crowding out:** When the government borrows from the private sector by selling bonds, the private sector is left with less money to spend and invest. Therefore, although government spending increases, private sector spending falls.

- **Monetisation of the Deficit:**

- Monetising deficit means RBI purchases government bonds in the primary market and **prints more money to finance the debt.**
- This is resorted to only when the government **cannot borrow from the market** (Banks and other Financial Institutions like LIC).
- The money printed by the RBI is called **high powered money or reserve money or monetary base.**
- RBI also conducts **indirect monetization of deficit** through **Open Market Operations (OMOs)**.
  - OMOs are market operations conducted by RBI by way of **sale/purchase of government securities to/from the market** with an objective to **adjust the rupee liquidity conditions** in the market on a durable basis.
  - Recently, RBI **decided to infuse Rs. 10,000 crore liquidity in the banking system** by buying government securities through OMOs.
  - Purchase of Government securities by the RBI helps in increasing the supply of the money in the market and with banks. It helps to stabilize the market economy and generates credibility in the investors.
  - It is different from monetization as it is controlled by RBI instead of the government as it is not as inflationary as deficit monetization.
- **Advantages:**

It has **helped in the economic development** of India as our domestic savings were less than 9% of GDP and the capacity to raise loans was also limited during the early 1950s, constraining the welfare activities of the government.
- **Disadvantages:**
  - Deficit financing is **inflationary** and is bad for the health of the central bank.
  - It may **push up interest rates** and thus make it even more difficult for the government to service the loan.
  - It also poses threat to the **financial stability** of the economy.

## **FRBM and Monetizing Deficits**

- Monetisation of deficit was in practice in India till 1997, whereby the central bank automatically monetised government deficit through the issuance of ad-hoc **treasury bills.**
- **Two agreements were signed between the government and RBI in 1994 and 1997** to completely phase out funding through ad-hoc treasury bills.
- With the enactment of **Fiscal Responsibility and Budget Management (FRBM) Act, 2003**, it was totally barred.

- However, the FRBM Act Amendment, 2018 contains an escape clause which permits monetisation of the deficit under special circumstances.
  - **Escape clause** generally refers to a contract provision that specifies the conditions under which a party can be freed from an obligation.
  - Escape clauses provide **flexibility to governments to overshoot fiscal deficit targets** in times of need, enabling them to respond to economic shocks.
  - The escape clause under the FRBM Act details a set of events in which the Central government can deviate from fiscal deficit targets. These include:
    - Overriding considerations of national security, acts of war, and calamities of national proportion and collapse of agriculture severely affecting farm output and incomes.
    - Far-reaching structural reforms in the economy with unanticipated fiscal implications.
    - A sharp decline in real output growth of at least 3% points below the average for the previous four quarters.

## Way Forward

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- Since the RBI has already taken up Open Market Operations and adopted a **monetary policy framework** to insert liquidity into the market, monetizing the deficit will only cost the government the credibility of the market and put inflationary pressure.
- Given the inflation-prone nature of Indian economy, monetization of deficit should only be considered as a last resort. Even if it is adopted, the primary challenge will be to communicate and ensure that this is a one-off pandemic-induced arrangement and not a recurrent financing line.

## Source: TH

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## Virtual Courts

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## Why in News

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Recently, the **Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice** has presented its report “**Functioning of the Virtual Courts/Courts Proceedings through Video Conferencing**”.

This is the **first report** to be presented **by any parliamentary panel** on the **impact of the pandemic**.

## Key Points

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- **Pre-Covid-19 period**, the **video-conference (VC)** set up was primarily used **for conducting remand matters to prevent movement of prisoners between courts and jails.**
  - Such VC facilities have been operationalised between 3,240 court complexes and corresponding 1,272 prisons.
  - In August 2019, the **High Court of Punjab and Haryana launched its first virtual court** at Faridabad to deal with traffic challan cases from across the state.
- The report suggests that a **full-fledged virtual court should be piloted** in the first instance and recommends the **continuation of virtual courts in a post-Covid-19 scenario.**
- It argued that **transfer of certain categories of cases**, like cases pertaining to traffic challans or other petty offences, from regular court establishments to virtual courts **will reduce the pendency of cases.**

Currently, there are 30 million pending cases.
- **Advantages:**
  - Virtual/digital justice is **cheaper and faster** besides **addressing locational and economic handicaps.**
  - Virtual courts are an improvement over traditional courts as they are **more citizen-friendly and offer greater access to justice.**
  - The **productivity of lawyers will increase substantially** as there will be no regular visits to courts and long waiting hours. If this practice is extended to other civil cases, **efficiency will double**, even treble, **in judicial functioning.**

- **Challenges:**

- Various stakeholders have noted that the **present infrastructure does not support virtual court proceedings.**
  - 3,477 courtrooms are supported with facilities for virtual proceedings while 14,443 are still to be provided with them.
- Almost 50% of **lawyers**, particularly in district courts, **do not have any laptop or computer facility** so their participation in the virtual courts will be either very less or not at all.
- **All judges are not able to undertake virtual hearings** due to lack of experience and also due to lack of sufficient infrastructure to enable all of them to undertake virtual hearings.
- Virtual court hearings, especially during peak hours when many people log into the video-conferencing system, are **subject to frequent crashes of the system** and one **glitch can spoil the entire proceeding.**
- There are concerns that virtual courts will **compromise the privacy of data as well as the confidentiality of discussions and court proceedings**, due to the usage of third-party software applications, which are **prone to hacking and manipulation.**

- **Suggestions:**

- **Infrastructure needs to be updated** with sufficient machinery and data connectivity to provide with the virtual proceeding.
- **Virtual proceedings can be extended permanently to various Appellate Tribunals** like **Telecom Disputes Settlement and Appellate Tribunal, National Company Law Appellate Tribunal**, etc. located across the country which do not require personal appearances of the parties/advocates.
- The Ministry of Law and Justice and Ministry of Electronics and Information Technology has been recommended to **address data privacy and data security concerns** while developing a new platform for India's judicial system.

## **e-Courts Project**

- It was conceptualized on the basis of the “**National Policy and Action Plan for Implementation of Information and Communication Technology (ICT) in the Indian Judiciary-2005**” submitted by **e-Committee, Supreme Court of India** with a vision to transform the Indian Judiciary by ICT enablement of Courts.
- The e-Courts Mission Mode Project, is a **pan-India Project**, monitored and funded by the **Department of Justice**, Ministry of Law and Justice, for the District Courts across the country.

## **Way Forward**

- While India grapples with a crisis on the health and economic front, there is a need to think out of the box and a change in mindset regarding the work-culture is needed.
  - It is time that the courtroom, which is often regarded as the last bastion of antiquated working practices, opens its doors to the latest technology.
  - If vested interests are kept aside and collective will to initiate what is for the common good takes precedence, a virtual judiciary can become a part of Indian judiciary.
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## Net Present Value of Forests

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### Why in News

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The Ministry of Mines has requested the Forest Advisory Committee (Ministry of Environment, Forest and Climate Change) to **exempt digging exploratory boreholes** from **Net Present Value (NPV)**.

In 2018, the Ministry of Coal, the Ministry of Mines and the Ministry of Petroleum and Natural Gas had sought to be exempted from forest clearances for exploratory boreholes.

### Key Points

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- **Exploratory Boreholes:** An exploratory borehole is drilled for the purpose of identifying the characteristics, location, quantity and quality of a resource (coal, metal or petroleum).  
It is a part of **prospecting a site** for future use for mining and extraction activities.

- **Net Present Value (NPV):** It is a mandatory one-time payment that a user has to make for diverting forestland for non-forest use, under the **Forest (Conservation) Act, 1980**.
  - **Calculation:** This is calculated on the basis of the services and ecological value of the forests.
    - It depends on the **location and nature of the forest and the type of industrial enterprise** that will replace a particular parcel of forest.
    - These payments go to the **Compensatory Afforestation Fund (CAF)** and are **used for afforestation and reforestation**.
    - The CAF is managed by the **Compensatory Afforestation Management and Planning Authority (CAMPA)**.
  - **Decided by:** The **Forest Advisory Committee** constituted by the Ministry of Environment, Forest and Climate Change (MoEF&CC) decides on whether forests can be diverted for projects and the NPV to be charged.
 

It is a **statutory body** constituted by the Forest (Conservation) Act 1980.
  - **Exemptions:** Some projects have been provided exemption from paying NPV like construction of **Schools, Hospitals, village tanks, laying down of optical fibre** etc. Projects like underground mining and wind energy plants have been given a 50% exemption from NPV.
  - **Background:** In the ***N. Godavarman Thirumulpad v. Union of India case, 2008***, the **Supreme Court mandated** the payment of NPV.
 

The **Kanchan Gupta Committee** developed the concept of NPV after this case.
- **Argument by Ministry of Mines:** All areas of exploration are not converted into mining. Only about 1% of cases are converted to mining.
 

Payment of NPV at a present rate of 2% or 5% NPV of the total forest area in the lease area is one of the major challenges which leads to **delay in the exploration/ prospecting activities**.
- **Response from the Forest Advisory Committee :** While it was not possible to do away with NPV, it recommended that the MoEF&CC may consider charging NPV on a per borehole basis instead of the present practice of charging 2 or 5%.

### **Forest Conservation Act, 1980**

- The Forest Conservation Act, 1980 stipulated that the central permission is necessary to practice sustainable agro-forestry in forest areas. Violation or lack of permit was treated as a **criminal offence**.
- It puts a restriction on the **use of forest-land for non-forest purposes**.
- It targeted to **limit deforestation, conserve biodiversity and save wildlife**.

**Source: TH**

# Climate Smart Cities Assessment Framework

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## Why in News

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The **Ministry of Housing and Urban Affairs** has launched the **Climate Smart Cities Assessment Framework (CSCAF) 2.0**, along with the ‘**Streets for People Challenge**’ under the **Smart Cities Mission**.

## Key Points

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- **CSCAF 2.0:**
  - **Objective:** To provide a clear **roadmap for cities** towards **combating Climate Change** while planning and implementing their actions, including investments.

CSCAF initiative intends to inculcate a **climate-sensitive approach** to urban planning and development in India.
  - **Framework:** It has **28 indicators across five categories** namely;
    - Energy and Green Buildings,
    - Urban Planning, Green Cover & Biodiversity,
    - Mobility and Air Quality,
    - Water Management and
    - Waste Management.
  - **Implementing Agency:** The Climate Centre for Cities under **National Institute of Urban Affairs (NIUA)** is supporting MoHUA in implementation of CSCAF.

- **Streets for People Challenge:**

- **Aim:** It aims to inspire cities to create **walking-friendly and vibrant streets**.
- **Eligibility:** All cities with a population of over 5 lakh, and capital cities, can apply.
- It includes:
  - Creating **pedestrian-friendly streets in high footfall areas**,
  - Re-imagining under-flyover spaces,
  - Re-vitalizing dead neighbourhood spaces, and
  - Creating walking links through parks and institutional areas.
- **Supporting Partners:**
  - **Fit India Mission**, under **Ministry of Youth Affairs and Sports**,
  - The **India program** of the Institute for Transport Development and Policy (ITDP).
    - ITDP works around the world to design and implement high quality transport systems and policy solutions that make cities more livable, equitable, and sustainable. It was set up in 1985 and is headquartered in New York, USA
    - **The India Program** works with cities to design and implement sustainable transport projects, and provide policy solutions to enhance social inclusion, reduce dependency on limited resources, improve road safety, and reduce carbon emissions.
- **Background:** Cities around the world, such as Bogota, Berlin, and Milan have responded by transforming streets for walking and cycling, to ensure safe mobility during Covid-19.

The Smart Cities Mission is also associated with **India 4 cycles challenge method**, that aims to inspire Indian cities to implement quick cycling-friendly interventions in the wake of Covid-19 with the support of their citizens and assistance from experts.

## **Smart Cities Mission**

- It is an innovative initiative under the Ministry of Housing and Urban Affairs, to drive **economic growth and improve the quality of life** of people by enabling local development and harnessing technology as a means to create smart outcomes for citizens.
- It was launched in the **year 2015** as a **Centrally Sponsored Scheme**.
- **Objective:** To promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of Smart Solutions.

- **Strategy:**
  - Pan-city initiative in which at least one Smart Solution is applied city-wide.
  - Develop areas step-by-step with the help of these three models:
    - Retrofitting.
    - Redevelopment.
    - Greenfield.

**Source: PIB**

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## **Contraction in July Factory Output: IIP**

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### **Why in News**

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Recently, the **National Statistical Office** (NSO) has released data, highlighting the **decline in the factory output** (also called **Industrial Production**) for the fifth consecutive month, with July 2020 posting a contraction of 10.4% compared to July 2019.

The data, however, **recorded a sequential improvement from 15.8% contraction seen in June**, reflecting some **resumption in industrial activity** with the **lifting of lockdown** restrictions.

### **Key Points**

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- Cumulatively, the **Index of Industrial Production** (IIP) contracted by 29.2% for April-July against a growth of 3.5% in the same period last year.
  - The IIP had grown by 4.9% in July 2019.
- **Reason:** The decline is **mainly due to degrowth** in manufacturing, mining, capital goods, and consumer durables output.
- **Contraction Data:** Barring consumer non-durables, all other sectors including manufacturing, mining, primary goods, capital goods contracted in July.
  - **Consumer Non-durables:** A proxy for the **Fast Moving Consumer Goods** (FMCG), it posted a positive growth of 6.7%.
  - **Manufacturing Sector:** Weight of 77.6% in IIP, contracted by 11.1% in July from a contraction of 16.0% in June.
  - **Electricity Output:** It contracted by 2.5% as against a double-digit contraction of 10.0% in June.
    - It recorded the best sequential improvement and may turn out to be the first sector, apart from consumer non-durables, to find its way in positive territory going ahead.

- **Similar Trends:** The decline in industrial growth **mirrors the trend in other high-frequency indicators** for July.

India's Manufacturing **Purchasing Managers' Index** (PMI) had stood at 46 in July compared with 47.2 in June. A print below 50 signifies a contraction.

- **Impact:** The negative IIP for July, which is the first month of the second quarter, will reflect in the expected contraction in the **Gross Domestic Product** (GDP) growth numbers for the July-September quarter.

India's **GDP growth contracted by 23.9%** in the April-June quarter, the worst among G20 countries.

## Index of Industrial Production

- It is an indicator that **measures the changes in the volume of production of industrial products** during a given period.
- It is **compiled and published monthly by the National Statistical Office** (NSO), Ministry of Statistics and Programme Implementation.

NSO is the **central statistical agency** of the government, set up by an **Act of the Parliament, Statistical Services Act (Chapter 386) 1980**.

- IIP is a **composite indicator** that measures the growth rate of industry groups classified under:

- **Broad sectors**, namely, Mining, Manufacturing, and Electricity.
- **Use-based sectors**, namely Basic Goods, Capital Goods, and Intermediate Goods.

- **Core Sector Industries** comprise **40.27%** of the weight of items included in IIP.

The **eight core Industries in decreasing order of their weightage:**

Refinery Products > Electricity > Steel > Coal > Crude Oil > Natural Gas > Cement > Fertilisers.

- **Base Year for IIP is 2011-2012.**

- **Significance of IIP:**

- It is used by government agencies including the Ministry of Finance, the **Reserve Bank of India**, etc. for policy-making purposes.
- IIP remains extremely relevant for the calculation of the quarterly and advance GDP estimates.

**Source: IE**

## Bradykinin Storm: Covid-19

### Why in News

A recent analysis of samples of patients with the **Covid-19** infection has shown a phenomenon called a '**bradykinin storm**'.



## Key Points

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- Doctors treating Covid-19 patients often **cannot identify the severity with which the SARS-CoV-2 virus seems to affect some people** and 'bradykinin storm' might explain the working of the virus in the body.
  - However, the **cytokine storm** is able to explain certain causes for the rapid deterioration in some patients with Covid-19.
- **The bradykinin hypothesis:**
  - SARS-CoV-2 uses a human enzyme called **ACE2** to enter into the cells of its host.
    - ACE2 lowers **blood pressure** in the human body and works against another enzyme known as ACE (which has the opposite effect).
  - The virus causes the levels of ACE to fall in the lungs, and consequently pushes up the levels of ACE2.
  - This happens as a chain reaction and increases the levels of the **molecule bradykinin** in the cells, causing a **bradykinin storm**.
    - **Bradykinin** is a compound that is **related to pain sensation and lowering blood pressure** in the human body.
    - Bradykinin storm causes the blood vessels to expand and become leaky, leading to swelling of the surrounding tissue.
  - **Increase in hyaluronic acid:** The levels of a substance called hyaluronic acid also increases.
    - Hyaluronic acid is a sugar molecule that occurs naturally in the skin, and it helps to bind water to collagen (a protein). It can absorb more than 1,000 times its own weight in water to form a hydrogel.
  - **Impact:** The bradykinin storm-induced **leakage of fluid into the lungs combined with the excess hyaluronic acid** would likely result in a **Jello-like substance** that prevents oxygen uptake and carbon dioxide in the lungs of severely affected Covid-19 patients.
    - This rapid accumulation of fluid in the lungs of patients sometimes makes even the most sophisticated intensive care, including ventilators, futile.
- **Significance:** Knowing the mechanism, doctors can target the bradykinin pathway to evolve more **therapeutic interventions** to offset the severe effects of Covid-19.

## Cytokine Storm Syndrome

- **Cytokine Storm Syndrome** is characterised by the overproduction of immune cells and the cytokines themselves because of a dysregulation in the process.
  - Cytokines** are a large group of proteins that are secreted by specific cells of the immune system.

- **Reasons:** A cytokine storm can occur due to an infection, auto-immune condition (when the body's immune system attacks healthy cells as in case of coeliac disease- an immune disorder that primarily affects the small intestine), or other diseases.
- **Signs and symptoms** include high fever, inflammation (redness and swelling), severe fatigue, and nausea.
- In the case of any flu infection, a cytokine storm is associated with a surge of activated immune cells into the lungs, which, instead of fighting off the antigen, leads to lung inflammation and fluid build-up, and respiratory distress.

**Source TH**

**Five Point Plan to De-escalate LAC Stand-off**

**Why in News**

Recently, India and China have agreed on a **five points plan to disengage troops and reduce tensions** along the **Line of Actual Control (LAC)**, where **Indian and Chinese troops have been engaged in a four and a half month long stand-off.**

The move came after the **talks between India’s External Affairs Minister and his Chinese counterpart**, on the margins of a **Shanghai Cooperation Organisation (SCO)** meeting in Russia.

**WHY LAC OFTEN FLARES UP** 23 “disputed and sensitive” areas along the unresolved 3,488-km-long LAC witness aggressive patrolling & face-offs between troops from the two sides

**FLASHPOINTS INCLUDE:**

**Himachal:** Kaurik, Shipki La

**Ladakh:** Demchok, Trig Heights, Dumchele, Pangong Tso, Chumar & Spanggur Gap

**Arunachal:** Namkha Chu, Sumdorong Chu, Asaphila, Longju, Dichu, Yangtse, Fish Tail-1 & 2 in Dibang Valley

**Uttarakhand:** Barahoti & Pulan Sunda

**Key Points**

- **Five Point Plan:**

- Both sides should **take guidance** from **Wuhan and Mahabalipuram summits** on developing India-China relations, that includes **not allowing differences to become disputes**.
- **Border troops** should continue their **dialogue**, quickly **disengage**, maintain proper distance and ease tensions.
- The two sides shall **abide by all the existing agreements and protocols on China-India boundary affairs** and avoid any action that could escalate matters.
- Continuing communications through the **Special Representatives mechanism**, and meetings of the **Working Mechanism for Consultation and Coordination on border affairs**.
  - The **Special Representatives (SRs)** on the **Boundary Question** was established in 2003. It provided important guidance for ensuring peace and tranquility in border areas in a challenging situation.
  - WMCC was established in 2012.
- **Working to conclude new confidence-building measures.**

- **Reasons for Talk:**

- Initially, China appeared to have convinced itself that India had no option but to accept its new claims at LAC.

This confidence was reflected in China's refusal to pull back its forces from LAC and its dismissive diplomatic tone.
- India's repeated demand for restoration of the status quo ante on the frontier was **not heeded**, until the **Indian army ramped up its mobilisation** and boldly seized some high ground to challenge Chinese military positions.

These moves on the frontier also came along with a **series of economic measures against China**, such as **banning 100s of Chinese applications** and **specifying country of origin on imports**.
- **India's demonstration of the political resolve to escalate the conflict** and the military capability to back it may have probably convinced China that it needs to rethink its approach to the current crisis.

- **Issues Involved:**

- The joint statement of India and China tries to **reduce the tension at LAC**, however the **separate explanatory comments from both the countries reveal the challenges ahead**.
  - India insists that the **objective of the talks is to “restore” the status quo ante**, however there is **no explicit Chinese commitment** to that goal.
  - China wants to **separate the border conflict from the rest of the relationship**, however India says the **two are inextricably interlinked**.
- These **deep differences** continue to complicate the path towards comprehensive military disengagement and de-escalation.

## Way Forward

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The five point plan between both the countries is a welcome step, however India must not blindly trust China amidst the surprise aggression during April-May by the People's Liberation Army. This is not the first time in the last few months that China has promised to stand down. However, it raised the expectations only to dash them quickly.

**Source: TH**

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## Number of Giant Radio Galaxies

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### Why in News

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**Indian Researchers** working on **giant radio galaxies (GRG)** at Inter-University Centre for Astronomy and Astrophysics (IUCAA) Pune, India and Leiden University, Netherlands, have found nearly 400 new GRGs.

GRGs are **large single structures** in the universe.

### Key Points

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- **Radio Galaxies:** The universe has **billions of galaxies** and **almost all have supermassive black holes** at the centre.
  - Some of these **black holes are active** and **produce jets** travelling almost at the speed of light.

**A black hole** is a place in space where gravity pulls so much that even light can not get out. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.
  - These jets are **visible in radio light or at radio wavelengths** of the electromagnetic spectrum.
  - Such galaxies, which have active black holes shooting high-speed jets, are called **radio galaxies**.
  - A radio galaxy is a strong source of **electromagnetic radiation or radio waves**.
  - They are **extremely weak in radio luminosity** making it difficult for even a sensitive radio telescope to detect them.
- **Giant Radio Galaxies:** When some of these radio galaxies grow to enormous sizes, bigger than 33 lakh light years across, they are called giant radio galaxies (GRGs).
  - GRGs were discovered in **1974** and until 2016, only about 300 GRGs were known. The latest findings indicate that they are over 800.
  - It is not clearly understood how some objects grow to such large scales and what is the fuel of their respective black holes.
  - The **length of jets** indicates how powerful and active a black hole is as well as about the environment density of black holes.
- **Significance:** The study of GRGs gives important clues to unveiling how these massive black holes accrete mass and the efficiency with which they produce the magnificent jets.

**Source: IE**

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## **Limits on Multi-Cap Fund Investments**

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### **Why in News**

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Recently, the **Securities and Exchange Board of India (SEBI)** has **imposed some limits** on multi-cap funds.

### **Multi-Cap Fund**

- Multi-cap funds are those that **diversify their investments** into all three categories (small, medium, and large-cap).

- These funds invest by **market capitalization of shares**.
  - **Market capitalization** is the aggregate valuation of the company based on its current share price and the total number of outstanding stocks.
  - It is calculated by multiplying the current market price of the company's share with the total outstanding shares of the company.
- **Large cap stocks:** Stocks of top 100 listed companies in terms of full market capitalisation.
- **Mid-cap stocks:** Stocks of top 101 to 250 companies in terms of full market capitalisation.
- **Small-cap stocks:** Stocks of companies above 251 in terms of full market capitalisation.

## Key Points

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- **Changes Made:**
  - A multi cap fund will be required to **invest a minimum of 75%** of its total assets in equities and equity-related instruments.

At present, the rule is to invest a minimum of 65% in equities.
  - Minimum investment of **75% has to be allocated in between** large cap companies, mid cap companies and small cap companies, with a **minimum share of 25% in each**. The rest 25% can be invested as per the investor's choice.

Till now, fund managers of multi cap mutual funds were investing across market capitalisation as per their choice.
- **Reason:**
  - The changes have been done **to diversify the underlying investments** of multi-cap funds across the large-cap, mid-cap and small-cap companies and be true to the label.
  - Currently, the portfolio of most multi cap funds is **biased towards large caps** with 65% to 90% of their portfolio in large cap stocks.
- **Impact:**
  - Fund houses will have to cut their exposure to big cap stocks and invest in mid- and small-cap stocks.
  - This will result in up to Rs. 40,000 crore moving from largecap to broader market (mid-cap and small-cap fund).

**Source: IE**

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## Sonamura-Daudkandi Inland Waterway Route

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### Why in News

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Recently, **Sonamura-Daudkandi** inland waterway route between India and Bangladesh was operationalised.

Daudkandi is in Bangladesh, while Sonamura is in Tripura, India.

## Key Points

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- **Sonamura-Daudkandi Route:** The inland waterway route **over river Gumati** was included in the list of **Indo-Bangla Protocol (IBP) routes** in May 2020. It connects **Tripura with the National Waterways of India** through Bangladesh.
- **Benefit of the Route:**
  - It will improve the connectivity of Tripura and the adjoining States with Indian and Bangladesh's economic centers and will help the hinterland of both the countries.
  - It will open up new avenues for economic development in both the countries.
- **Protocol on Transit and Trade:** Bangladesh and India have a long standing and time-tested Protocol on Transit and Trade through **inland waterways**.
  - It provides inland waterways connectivity between the two countries, particularly with the North Eastern Region of India and also enhances bilateral trade.
  - This Protocol was first signed in 1972.
  - It was last renewed in for five years with a provision for its automatic renewal for a further period of five years.

## Indo-Bangladesh Protocol Routes

- As per the **IBP on Inland Water Transit & Trade**, inland vessels of one country can transit through the specified routes of the other country.
- The existing protocol routes are:
  - Kolkata-Pandu-Kolkata
  - Kolkata-Karimganj - Kolkata
  - Rajshahi-Dhulian-Rajshahi
  - Pandu-Karimganj-Pandu
  - Sonamura-Daudkandi
- Under the Protocol, **50:50 cargo sharing** by Indian and Bangladeshi vessels is permitted both for transit and inter country trade.
- **Inland Waterways Authority of India (IWAI)** is the Competent Authority on Indian side.

## River Gumati

- It is the **largest and longest river of Tripura** with a cumulative length of 180 km.

- **Dumbur dam** is built over the river.
- The river meets with river **Meghna** in Bangladesh.

**Source: IE**

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