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MINISTRY OF
SCIENCE AND
TECHNOLOGY



MK Yadav Sir

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Combined Index of Eight Core Industries increases by 8.0% (provisional) in July 2023 as compared to the Index of July 2022

Context: The **combined Index of Eight Core Industries (ICI)** increased by 8.0% (provisional) in July 2023 as compared to the Index of July 2022. The **production of Coal, Steel, Natural Gas, Cement, Electricity, Refinery Products, Fertilizers and Crude Oil** increased in July 2023 over the corresponding month of last year.

Combined Index of Eight Core Industries

- The ICI evaluates both collective and individual performance within the production of eight essential industries.
- **Core Industries:** Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement, and Electricity.
- These **Eight Core Industries constitute 40.27%** of the overall weight in the Index of Industrial Production (IIP).
- **Released By:** The Office of Economic Adviser (OEA) under the Department for Promotion of Industry and Internal Trade (DPIIT), part of the Ministry of Commerce and Industry.
- **Base Year:** 2011 -012
- These indices offer advanced insights into the production performance of industries classified as '**core**' prior to the IIP assessment.

Focus on digital capability upgrade, FM Sitharaman tells rural banks

Context: Union Finance Minister recently emphasised **regional rural banks (RRBs)** to **upgrade** their digital capability and increase penetration under **Pradhan Mantri Mudra Yojana**.

Regional Rural Banks

- **About:** RRBs, are **government-owned scheduled commercial banks** in India, functioning at the regional level across different states.
- These banks cater to rural areas, offering essential banking and financial services to the rural population.
- **Origin:** The **Narasimham Committee** on Rural Credit (1975) recommended establishing RRBs, which was realized through the RRB Act 1976 and an ordinance on September 26, 1975.
- The first RRB, Prathama Grameen Bank, was founded on October 2, 1975.
- **Functions of RRBs:** Providing **basic banking services in rural and semi-urban areas**, facilities such as **locker services, internet and mobile banking, debit and credit cards**, extend **credit to rural individuals like small farmers, artisans, and entrepreneurs**, while also accepting deposits.
- **Regulation:** RBI, and NABARD supervises RRBs.
- **Ownership:** Government of India (50%), Sponsor Bank (35%), and relevant State Government (15%).
- **Management:** Board of Directors with a Chairman, Directors nominated by the Central and State Governments, and those nominated by the sponsor bank.

Pradhan Mantri Mudra Yojana: A flagship scheme of the Government of India to extend affordable credit to micro and small enterprises. Mudra schemes are designed to bring enterprises into the formal financial system, or to “fund the unfunded”. MUDRA **does not lend** directly to micro-entrepreneurs/individuals. It has created three products i.e. '**Shishu**', '**Kishore**' and '**Tarun**'.

Q1 growth at 7.8% as Indian economy braves headwinds

Roshan Kishore and
Rajeev Jayaswal

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NEW DELHI: Strong domestic demand driven by government capex and a continuing recovery in contact intensive services helped the Indian economy build on its growth momentum despite external headwinds in the first quarter of the current fiscal year.

India's GDP growth in the quarter ending June was 7.8%, the National Statistical Office (NSO) said in a release on August 31. The latest numbers are exactly in line with a projection by Bloomberg poll of economists and 1.7 percentage points more than the 6.1% number in the previous quarter. To be sure, the latest growth numbers are marginally below the 8% projection by the Monetary Policy Committee (MPC) of the RBI.

Indian economy's "growth prospects appear bright" despite downward risks from external factors such as "firming of prices of crude oil" and "prolonged geopolitical uncertainty", chief economic adviser (CEA) V Anantha Nageswaran said while commenting on the GDP numbers. Analysts concurred with CEA's assessment, identifying a service sector driven boost to domestic economy activity as an effective antidote to the headwinds from external markets.

To be sure, almost all projections, including RBI's, expect

In line with projections

The latest GDP growth numbers are exactly in line with a projection by Bloomberg poll of economists

QUARTERLY GDP GROWTH (YoY change, in %)



the annual growth number for 2023-24 to be lower than the June quarter numbers. This is more a reflection of the fact that the June quarter numbers enjoy a favourable base effect. RBI's MPC resolution released in August projected a growth rate of 6.5% for 2023-24 with quarterly growth numbers being 8%, 6.5%, 6% and 5.7% in the quarters ending June 2023, September 2023, December 2023 and March 2024 respectively.

An expenditure-side analysis of the GDP numbers shows that private consumption and investment (as captured by

Gross Fixed Capital Formation) numbers have played an important role in driving the growth momentum. While Private Final Consumption Expenditure increased by 6% on an annual basis, investment spending increased by 8%. This provided a crucial buffer to the headline GDP number despite a three-fold decline in net exports of goods and services driven by a fall in exports and rise in imports.

A look at the sector-wise Gross Value Added (GVA) numbers shows that services played

continued on → 13

Context: Strong domestic demand driven by government capex and a continuing recovery in contact intensive services helped the Indian economy build on its growth momentum despite external headwinds in the first quarter of the current fiscal year.

Key Points

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- The latest numbers are exactly in line with a projection by Bloomberg poll of economists and 1.7 percentage points more than the 6.1% number in the previous quarter.
- Indian economy's "growth prospects appear bright" despite downward risks from external factors such as "firming of prices of crude oil" and "prolonged geopolitical uncertainty"
- An expenditure-side analysis of the GDP numbers shows that private consumption and investment (as captured by Gross Fixed Capital Formation) numbers have played an important role in driving the growth momentum.
- A look at the sector-wise Gross Value Added (GVA) numbers shows that services played an important role in building the growth momentum during this period.
- This is likely to give a further boost to inflation for key food items such as cereals which are already at uncomfortable levels.

Mutinous soldiers in Gabon say they have ousted president whose family has ruled for 55 years



Context: Mutinous soldiers in **Gabon** say they have ousted the president whose family has ruled for 55 years.

- In his **first public appearance since the coup attempt**, President **Ali Bongo Ondimba** called on people to 'make noise' to support him.

Key Points

- Gabon experiences a recent attempted coup, joining a series of coup attempts in Africa.
- This potential coup marks the eighth instance in **West and Central Africa since 2020**.
- Notable recent coups have occurred in **Niger, Mali, Guinea, Burkina Faso, and Chad**, the most recent being in July.
- The prevalence of coups **jeopardizes** the progress of **democratization** achieved by the continent over the last twenty years.
- **Behind the Issues:** Corruption, mismanagement, and poverty.

Gabon

- **Location:** The Republic of Gabon is positioned at the **Equator in West-Central Africa**, adjacent to the Atlantic Ocean.
- **Borders:** It shares borders with **Equatorial Guinea and Cameroon** to the north, and the **Republic of the Congo** to the east and south.
- **Colonial Legacy:** Previously a **French colony**, Gabon maintains strong connections to France, the French language, and culture.
- **Independence:** On August 17, 1960, Gabon **gained independence from France**.
- **International Affiliations:** Gabon holds memberships in **the United Nations**, the **African Union**, and the **Organization of Petroleum Exporting Countries (OPEC)**.

Fiscal Deficit in First 4 Months Widens to 34% of FY24 Target

Gap hits ₹6.06 L cr in Apr-Jul as revenue spending doubles in July & govt keeps capex pace

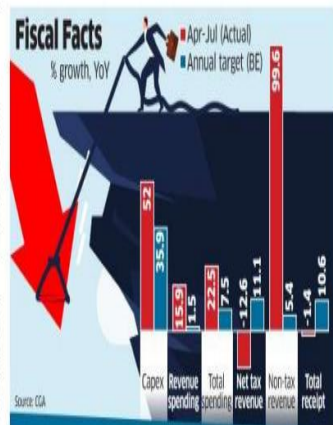
Our Bureau

New Delhi: The Centre's fiscal deficit in the first four months of this financial year stood at 33.9% of the annual target, sharply higher than 20.5% a year before, as revenue spending doubled in July on top of a sustained hike in capital expenditure, showed official data released on Thursday.

The fiscal deficit, in absolute terms, hit ₹6.06 lakh crore between April and July against ₹3.41 lakh crore a year earlier, as the government appeared to have frontloaded not just capital but also revenue expenditure. The front-loading of tax devolution to states, too, played its part in pushing up the Centre's deficit so far.

Capital spending jumped nearly 50% during the April-July period from a year earlier to ₹3.17 lakh crore, higher than the budgeted annual increase of about 36%, as the government kept pushing such productive expenditure to spur economic growth.

Revenue expenditure increased 15.9% year-on-year until July in this fiscal to ₹10.64 lakh crore, way above the targeted annual increase



However, the frontloading of devolution will also mean the government will have to release ₹7.1 lakh crore to states in the next eight months, 3% lower than the amount devolved a year earlier, according

GOVT SPENDING UP

Capex jumped 52% in April-July from a year earlier to ₹3.17 lakh cr, higher than budgeted annual increase of 36%

of 1.5%. Overall expenditure increased 22.5% to ₹13.81 lakh crore, higher than the annual budgeted increase of 7.5%.

Senior finance ministry officials have already asserted that the fiscal deficit target of 5.9% of gross domestic product (or ₹17.87 lakh crore) for 2023-24 will be strictly adhered to, although spending under a few schemes could vary from the budgetary outlays.

Meanwhile, the Centre's net tax revenue fell 12.6% until July this fiscal to ₹5.83 lakh crore. However, a

doubling of the non-tax revenue to ₹1.79 lakh crore - driven by handsome dividends by the Reserve Bank of India - softened the blow of the tax shortfall.

Total receipts between April and July fell to ₹7.75 lakh crore, down 1.4% from a year before and compared with the targeted annual increase of 10.6%.

The central tax devolution jumped to ₹3.1 lakh crore until July in this fiscal from ₹2 lakh crore a year before, dragging down the net tax revenue.

to ICRA estimates. This would contain the incremental fiscal deficit in some of the ensuing months, especially August, ICRA said.

In July alone, the Centre's capital expenditure surged almost 15% to ₹38,589 crore, while overall spending swelled 84.6% to ₹3.30 lakh crore. Capital spending, which had crossed the crucial ₹1 lakh crore mark in June, dropped sharply sequentially in July. Revenue expenditure, however, doubled to ₹2.91 lakh crore in July, pushing up the overall spending.

Context: India's fiscal deficit for the first four months of this fiscal year through July stood at 6.06 lakh crore rupees, or 33.9% of annual estimates, government data showed.

- While the fiscal impact after the Indian government this week **slashed LPG cylinder prices by Rs 200 per unit** is seen to be limited as the move for now seems to only trim oil refiners' **profit margins**, the rising clamor for the need to **cut petrol and diesel prices** may have an impact on budget gap.

Fiscal Deficit

- About:** It is the gap **between the government's overall income** (including taxes and non-debt capital receipts) and its total expenditure excluding any borrowed funds.
- Causes of fiscal deficit arise:** When **government spending surpasses** its income.
 - It represents the extent to which the government has spent more than its earnings, usually presented as a **percentage of the GDP**.
- The **Fiscal Responsibility and Budget Management (FRBM) Act** was established in 2003, aiming to establish targets for reducing fiscal deficits.
- Reduced fiscal deficit target:** In Union Budget 2023-24, the fiscal deficit to GDP is pegged at **5.9% in FY24**. This ratio has declined from **6.4% in 2022-23** (revised estimate) and 6.7% in 2021-22 (actual).

Assam-based oncologist Ravi Kannan wins 2023 Ramon Magsaysay award

The Hindu Bureau
CHENNAI

Surgical oncologist R. Ravi Kannan, Director of the Cachar Cancer Hospital and Research Centre (CCHRC) in Assam, is one of the Ramon Magsaysay award winners for 2023.

He is credited with revolutionising cancer treatment in Assam through people-centric and pro-poor healthcare.

Dr. Kannan hails from Chennai, where he earlier worked at the Cancer Institute, Adyar, before moving to Silchar in 2007. He became the Director of the CCHRC that year.

The citation on the website of the Ramon Magsaysay Award Foundation says that under Dr. Kannan's leadership, the CCHRC became a full-fledged comprehensive cancer hospital and research centre. From having limited facilities, the hospital now has 28 departments covering oncology, pathology, radiology, microbiology, epidemiology, tumour registry, and



R. Ravi Kannan

palliative care.

The hospital introduced pro-poor initiatives such as free treatment, food and lodging, *ad hoc* employment for caregivers, and a home-care programme as patients could not continue their treatment due to difficulty in travelling long distances, and cost, with the underlying reason being poverty.

Hospital team members travelled long distances to train family members in pain management and palliative care, and provided free medicines.

The patient compliance rate in treatment rose from 28% to 70%.

The CCHRC now pro-

vides free or subsidised cancer care treatment to an average 5,000 new patients annually, catering to approximately 20,000 poor patients for treatments and follow-ups, the citation read.

Dr. Kannan said the award belongs to all who had joined hands to make the lives of those suffering from cancer better.

He said they were now focusing on "decentralising cancer care by setting up smaller hospitals in different parts of the State and also in Tripura so that people do not have to travel far to reach a hospital for treatment".

"We have to go near people and focus on prevention, treatment, and cancer care. We need a lot of support for infrastructure and equipment, which are one-time investments, but what we need most is human resources, which is a recurring requirement," Dr. Kannan, who is also a recipient of the Padma Shri award, said.

(With inputs from PTI)

Context: Oncologist **R. Ravi Kannan** of the Cachar Cancer Hospital and Research Centre wins the 2023 Ramon Magsaysay award.

R. Ravi Kannan: He is credited with revolutionising cancer treatment in Assam through people-centric and pro-poor healthcare. **According to the citation** on the website of the Ramon Magsaysay Award Foundation, under Dr. Kannan's leadership, the **CCHRC became a full-fledged comprehensive cancer hospital and research centre.**

Ramon Magsaysay Award

- **About:** The award is given to **individuals and organisations in Asia** for selfless service to society in various fields.
- **Launched:** In 1958, the Ramon Magsaysay Award is widely considered to be **Asia's equivalent to the Nobel Prize.**
- **Award was set up by:** Trustees of the Rockefeller Brothers Fund and the Philippine government to carry forward Magsaysay's legacy of service to the people, good governance, and pragmatic idealism.
- **The award is given out every year on August 31**, on Magsaysay's birth anniversary.
- The awardees are **presented with a certificate and a medal** with an image of Ramon Magsaysay.
- **Indian winners on the list:** Vinoba Bhave in 1958, Mother Teresa in 1962, Kamaladevi Chattopadhyay in 1966, Satyajit Ray in 1967, Mahasweta Devi in 1997.
 - In recent years, Arvind Kejriwal (2006), Anshu Gupta of Goonj (2015), human rights activist Bezwada Wilson (2016), and journalist Ravish Kumar (2019) have won the award.

Not just driest, this August also hottest ever in India: IMD

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New Delhi: August was not just the driest since 1901, but was also the hottest ever recorded in India, said the India Meteorological Department (IMD) on Thursday.

It further shared that four out of five hottest August mean temperatures were recorded in the last seven years, an indication of growing extreme weather events due to climate change.

A bit of relief is, however, expected in September as the monsoon rainfall activity in the month is going to be 'normal' in the country as a whole. But the overall seasonal (June-September) rainfall in

DEFICIT IS 10%

► Apart from being the driest with 36% rain shortfall, this August broke the record for India's hottest ever, set in 2016

► Sept rainfall likely to be in normal range (-9% to 9% of LPA), says IMD. Overall, monsoon may be 'below normal'

► Countrywide monsoon deficit has risen to 10%

► Water scarcity in Sangli's Jat tehsil & Satara, P 15

IMD's records show that the country recorded the highest ever mean temperature in August (since 1901 when re-

Context: August was **not just the driest since 1901 (in a century)**, but was also the **hottest** ever recorded in India, said the **India Meteorological Department (IMD)**.

Key Points

- **August recorded high temperatures** (maximum and mean) primarily due to subdued monsoon activity over a significant portion of the country.
- **Reduced rainfall led to decreased cloud cover**, allowing temperatures to rise.
- This phenomenon is indicative of climate change, as several recent months have set temperature records.
- The **Intergovernmental Panel on Climate Change (IPCC)** highlighted the trend of expecting record temperatures in the future in its Physical Science Basis report.
- **Central India**, especially, was hit hard.
- **Negative Indian Ocean Dipole** over the tropical Indian Ocean, a **phenomenon where the western Indian ocean becomes colder than the eastern one**, and which is unfavourable for monsoon prevailed throughout August, contributing to deficient rainfall.
- **There were also fewer typhoons in the West Pacific** and so there was an absence of westward movement of their remnants into Bay of Bengal. This led to fewer **low-pressure systems forming over Bay of Bengal**.

Re-advertisement for '01' temporary post of Scientist 'C' under INSPIRE program in DST on deputation (ISTC) basis

Scheme Component	Target Group	Target Group	Age	Target Number	Aim
INSPIRE Internship	Top 1% students in Class X Boards	16-17 years		50,000	To expose students to joys of creative science during 5-day camps through lectures by experts, innovative experiments etc.
Scholarship For Higher Education (SHE)	Top 1% students in Class XII Boards + top 10000 performers in IIT-JEE + other national exams	17-22 years		12,000	To encourage meritorious students to study B.Sc. & M.Sc. (basic and natural sciences) by providing scholarship (Rs. 60,000/- p.a.) and mentorship grant (Rs. 20,000/- p.a.)
INSPIRE Fellowship	INSPIRE-SHE Scholars with 70% marks in M.Sc. + M.Sc. Toppers with min 70% marks	22-27 years		1000	To encourage students to pursue Ph.D. in areas of S&T, Medicine, Agriculture, Pharmacy and Veterinary Sciences
INSPIRE Faculty Fellowship	Ph.D.	27-32 years		100	To encourage young researchers to continue research in areas of S&T, Medicine, Agriculture, Pharmacy and Veterinary Sciences.

Context: Re-advertisement for 01 temporary post of Scientist C under INSPIRE program in DST on deputation basis.

INSPIRE Scheme

- Innovation in Science Pursuit for Inspired Research (**INSPIRE**)" is an **innovative programme** sponsored and managed by the **Department of Science & Technology for attraction of talent to Science.**
- **Goal:** Attract **Young Talent to opt research as a career.** A striking feature of INSPIRE Scheme is that it does not conduct any competitive exam(s) for identification of talent at any level.
 - It relies on the efficacy of the existing educational structure for identification of talent.
- **Scope:** Covers the entire meritorious **youth who is interested to study science right from school to college and university level** and choose scientific research as a career. It carries out enabling activities of human capacity building including scholarships and fellowships, research exposure training of human resources.
- **INSPIRE attracts and nurtures young bright students** to study basic and natural sciences at the college and university level and to pursue research **careers in both basic and applied science areas including engineering, medicine, agriculture and veterinary sciences.**

LAUNCH OF 'DSC A 20 (YARD 325)' FIRST SHIP OF 05 x DIVING SUPPORT CRAFT (DSC) PROJECT 31 AUG 23 AT M/S TITAGARH RAIL SYSTEMS (TRSL), KOLKATA

Context: Launch of 'DSC A 20 (yard 325)' first ship of 05 x diving support craft (DSC) project being built by M/s Titagarh Rail Systems Ltd (TRSL), Kolkata was held recently.

Key Points

- These **ships are designed to undertake operational/ training** diving operations in harbours and coastal waters.
- **They are 30 m long catamaran hull ships**, with a displacement of approx. 300 tons. All five (05) DSC are anticipated to be delivered to the Indian Navy in FY 2024-25.
- DSC are being equipped with advanced diving equipment and tools to carry out diving operations.
- The ships are designed and constructed within the guidelines of Naval Rules and Regulations of the Indian Register of Shipping (IRS), following indigenous approaches.
- The ships will be **commissioned in the Indian Navy** to provide diving assistance for ships inside and close to harbour, for underwater repairs, maintenance and salvage.
- The ships predominantly utilize main and auxiliary equipment from local manufacturers, aligning with the **Make in India and Make for the World initiatives**.
- **Supported by:** Government of India (GoI) and the Ministry of Defence (MoD).

WHO: More investments needed in Africa to control, eliminate neglected tropical diseases

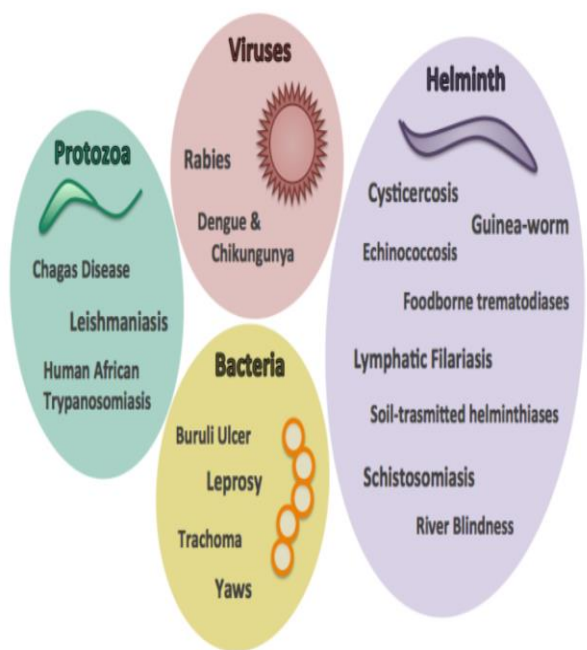
Around 400 million people in the region are still affected; 99 million in 26 countries at risk of not receiving treatment

Context: The **World Health Organization (WHO)** has called for increased investments in Africa to control and **eliminate neglected tropical diseases**.

Key Points

- The diseases are **recognised as a public health problem** for poor populations living in tropical environments and difficult-to-access areas **especially in low-income and developing countries**. These diseases often receive inadequate attention and resources compared to other more well-known and prevalent diseases, hence **the term "neglected."**
 - Examples:** African trypanosomiasis, **also known as sleeping sickness**; **lymphatic filariasis**, also known as elephantiasis; onchocerciasis or river blindness; schistosomiasis or **bilharzia** and chronic ulcers and other **skin infections**.
- A **global roadmap by WHO released in 2021** seeks to reduce by 90% the number of people requiring treatment for these diseases through 2030. It also aims to reduce associated disability by 75 per cent.
- The **African Regional Framework endorsed the roadmap** for the control, eradication and elimination of tropical and vector borne diseases.
- Guinea worm-free status** has been granted to 42 African countries and trachoma has been deemed to be no longer be a public health issue in six African nations. Last year, **Togo became the first African country** to eliminate four neglected tropical diseases.
- India:** India has the world's largest absolute burden of at least 10 major NTDs, including hookworm, dengue, lymphatic filariasis, leprosy, visceral leishmaniasis or kala-azar and rabies.

Neglected Tropical Diseases



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