

November

5

CRUX 10

10 News. 10 Sources. One Place



MK Yadav Sir



The Indian **EXPRESS** live **mint** पॉप

DownToEarth
FORTNIGHTLY ON POLITICS OF DEVELOPMENT,
ENVIRONMENT AND HEALTH

**Science
Reporter**



विज्ञान एवं
प्रौद्योगिकी मंत्रालय
MINISTRY OF
SCIENCE AND
TECHNOLOGY

Table of Contents

- 1 Krishna Pilgrimage Circuit
- 2 NSFDC
- 3 Employees' Provident Funds Scheme
- 4 Lavender Cultivation
- 5 Eat Right India Movement
- 6 IIPDF Scheme
- 7 National Anti-Doping Agency
- 8 UDISE+ 2021-22
- 9 Lycopene
- 10 Drought Monitoring System

Mathura-Vrindavan aims to become a carbon neutral tourist destination by 2041

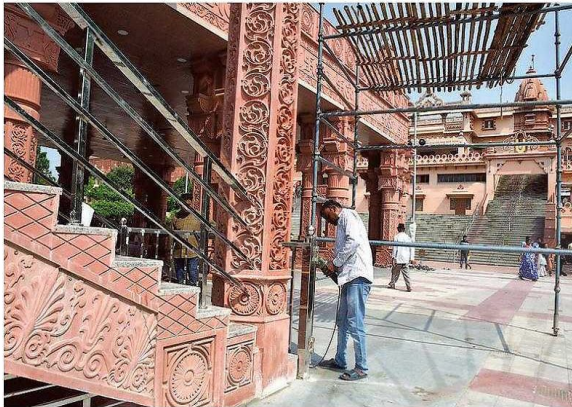
Sreeparna Chakrabarty
NEW DELHI

Mathura-Vrindavan, one of India's largest pilgrimage centres, aims to become a "net zero carbon emission" tourist destination by 2041, Uttar Pradesh government officials have told *The Hindu*.

This means that tourist vehicles will be banned from the entire Braj region, which includes famous pilgrim centres such as Vrindavan and Krishna Janmabhoomi. Instead, only electric vehicles used as public transport will be allowed into the area.

All 252 waterbodies and 24 forests in the area will also be revived, officials privy to the U.P. government's draft redevelopment plan said.

According to the plan, the Braj region's annual pilgrim-tourist footfall is ex-



Green plans: Work under way at a visitors' shelter near the Krishna Janmabhoomi Temple at Mathura in Uttar Pradesh. R. V. MOORTHY

pected to multiply from the current level of 2.3 crore to six crore by 2041.

"Keeping this in mind, there is a need for eco-friendly development of the area which while aiding the local economy does not have an adverse effect on the environment," said a top official of the Braj Teerth Vikas Parishad, the

nodal agency for implementing the plan.

While the draft master plan was submitted in March, the strategy document will be submitted this month after which it will be released for public consultation.

CONTINUED ON
» PAGE 8

KRISHNA PILGRIMAGE CIRCUIT (Syllabus: GS Paper 1 - Art & Culture)

Context: Mathura-Vrindavan, one of India's largest pilgrimage centres, aims to become a "net zero carbon emission" tourist destination by 2041.

Krishna pilgrimage circuit

- **About:** Krishna Circuit is among 15 thematic circuits identified for development under the **Swadesh Darshan scheme** of Ministry of Tourism.
- **Identified destinations under Krishna Circuit:**
 - **Gujarat:** Dwarka.
 - **Rajasthan:** Nathdwara, Jaipur & Sikar.
 - **Haryana:** Kurukshetra.
 - **Uttar Pradesh:** Mathura, Vrindavan, Gokul, Barsana, Nandgaon & Govardhan.
 - **Odisha:** Puri.

Swadesh Darshan Scheme

- **About:** Launched in 2014 -15 for **integrated development of theme based tourist circuits** in the country.
- **Funding:** Central Sector Scheme, **100% funded by the Union government** and implemented by the Central Government machinery.
 - The projects under the schemes are sanctioned **subject to availability of funds**, submission of suitable Detailed Project Reports, adherence to scheme guidelines and utilization of funds released earlier.
- **Nodal Ministry:** The Ministry of Tourism provides Central Financial Assistance (CFA) to State Governments/Union Territory Administrations for infrastructure development of circuits.
- **Identification:** The **State Governments/Union Territories identifies** the projects and submit the same to the Ministry regularly for consideration.
- **15 thematic circuits have been identified:** Buddhist Circuit, Coastal Circuit, Desert Circuit, Eco Circuit, Heritage Circuit, Himalayan Circuit, Krishna Circuit, North East Circuit, Ramayana Circuit, Rural Circuit, Spiritual Circuit, Sufi Circuit, Tirthankar Circuit, Tribal Circuit, Wildlife Circuit.

Mustard covers 72% of normal sowing area, wheat spikes

SANJEEB MUKHERJEE
New Delhi, 4 November

Sowing wheat and mustard — the two main rabi crops — picked up pace during the week ended November 4. While mustard-sowing covered almost 72 per cent of the normal area, the same for wheat rose almost 436 per cent as compared to last year.

Mustard is usually sown in 6.4 million hectares, and sowing in almost 4.6 million hectares is complete till Friday.

Traders said in the next 10-15 days, bulk of the sowing for mustard should be complete, which is a good sign and should ensure a big harvest, if the weather remains favourable in the next few months.

In case of wheat, early sowing trends indicate that there could be a rise in acreage due to shift of farmers from other competing crops such as gram and ancillary pulses towards wheat in Rajasthan, Madhya Pradesh and even Gujarat.

Some reports said a big swing towards wheat might also happen this year as farmers do not want to repeat the mistakes of last year when a sudden surge in temperature in the fog end of the harvest season brought down per-hectare yields.

Overall, till November 4, all rabi crops have been sown in around 9.74 million hectares, which is almost 17 per cent more than the area covered during the same period last year.

Meanwhile, the India Meteorological Department (IMD) in its November forecast said intense winter might elude North India as maximum temperatures will remain above normal.



RABI SOWING TRACKER

As on Nov 4 (in million hectares)



Note: Total might not match as all crops haven't been included
Source: Ministry of Agriculture

As far as moisture levels are concerned, the Met department said post-monsoon rains across the country are expected to be about 23 per cent more than normal in November with bulk of showers concentrated in southern parts of the country that gets Northeastern monsoon.

The national average rainfall across India in November is about 29.7 millimetres. The rains should further aid planting of rabi crop, where the soil moisture levels are already good due to almost

47 per cent more than normal rains in October across India.

Wheat prices are trading around ₹2,700 per quintal in the open market in Delhi and its adjoining areas, which till a few months back was being quoted about ₹2,400 per quintal.

The current market price is much more than even the revised MSP for the next season — to start in April 2023 — that has been fixed at ₹2,125 per quintal, amongst the highest in recent years.

Context The Centre is contemplating increasing authorised share capital of the National Scheduled Castes Finance and Development Corporation (NSFDC) by Rs 1,000 crore to Rs 2,500 Crore.

National Scheduled Castes Finance and Development Corporation (NSFDC)

- **About:** set up in 1989 as a non profit company with the name National Scheduled Castes and Scheduled Tribes Finance and Development Corporation (NSCSTFDC) established under **Ministry of Social Justice and Empowerment**.
- **Objective:** to **finance, facilitate and mobilize funds** for the economic empowerment of persons belonging to the Scheduled Castes families living below double the Poverty Line.
- **Incorporation:** as a **fully owned Government of India Company** under Section 8 of the Companies Act, 2013 (Previously Section 25 of the Companies Act, 1956).
- **Functions:** NSFDC **finances income generation schemes** for the target group through the State Channelizing Agencies (SCAs) nominated by respective State/UT Governments.
- **Eligibility Criteria:** The **beneficiary should be from the Scheduled Caste Community**.
 - Annual family income of the beneficiary(ies) should not exceed Double the Poverty Line (DPL) income limit (presently Rs. 81,000/- p.a. for rural areas and Rs.1,03,000/- p.a. for urban areas).
- **Different loan schemes of NSFDC:**
 - Mahila Samriddhi Yojana
 - Mahila Kisan Yojana
 - Shilpi Samriddhi Yojana
 - Laghu Vyavasaya Yojana
 - Nari Arthik Sashaktikaran Yojana
 - Educational Loan Scheme
 - Green Business Scheme
 - Mahila Adhikarita Yojna
 - Stand-Up India
 - Udyam Nidhi Yojana
 - Vocational Education And Training Loan Scheme
 - Aajeevika Micro-Finance Yojana
 - Swachhta Udyami Yojana

Amended EPS is upheld, SC opens window to opt for higher annuity

Members can get to contribute 8.33% of actual salaries towards pension

ANANTHAKRISHNAN G &
AANCHAL MAGAZINE
NEW DELHI, NOVEMBER 4

IN A significant ruling, the Supreme Court Friday upheld the Employees' Pension (Amendment) Scheme, 2014, but also read down certain provisions concerning the current subscribers to the scheme.

A three-judge bench of Chief Justice of India UU Lalit and Justices Aniruddha Bose and Sudhanshu Dhulia said the amendments to the scheme shall apply to employees of exempted establishments as they do for the employees of regular establishments. There are about 1,300 companies in the list of the EPFO's (Employees' Provident Fund Organisation) exempted establishments.

In a nutshell, Friday's

EXPLAINED
E Choice of higher pension

TRADE UNIONS were resisting the government argument that workers at all levels should have more liquidity. The SC, through its ruling, has let the workers decide whether they should opt for higher provident fund or choose higher pension payouts.

Supreme Court ruling gives EPFO members, who have availed of the EPS, another opportunity over the next four months to opt and contribute up to 8.33 per cent of their actual salaries — as

CONTINUED ON PAGE 4

Context: IN a significant ruling, the Supreme Court upheld the Employees' Pension (Amendment) Scheme, 2014.

Employees' Provident Funds (EPF) scheme

- **Origin:** Launched in **1995** as a social security scheme.
- **About:** A mandatory savings scheme under the **Employees' Provident Funds and Miscellaneous Provisions Act, 1952**.
- **Nodal Department:** managed under the aegis of **Employees' Provident Fund Organisation (EPFO)**.
- **Coverage:** It covers every establishment in which **20 or more persons are employed** (and certain other establishments which may be notified by the Central Government even if they employ less than 20 persons each).
- **Key features:**
 - Both employer and employee contribute **12% of employee's monthly salary** to the EPF scheme.
 - Monthly salary includes basic wages and dearness allowance.
 - **Mandatory for employees** who draw a basic wage of Rs. **15,000 per month**.
 - 8.33 % is diverted towards the EPS from the employer's share of 12 %.
 - **Central government contributes 1.16%** of employees' monthly salary.
- **Determination of interest rates:** The **Central Board of Trustee**, which is a key decision making body for EPFO, takes a call on the interest rates that have to be provided on the provident fund deposits, every year.
 - In 2021, the interest rates on deposits were set at 8.5% and the rates for the current financial year will depend on the income projections for the year.
- **Amendment in 2014:** The EPFO amended the act to **increase the contribution to 8.33%** of a maximum of Rs. 15,000 per month.
 - In case of those who avail the benefit of pension on full salary, their pensionable salary would be calculated as the average of the last five years' monthly salary, and **not of the last one year of average salary, as per earlier norms**.

A Purple Patch at the Pinnacle

Growing wild in Ladakh, lavender now also exudes the aroma of prosperity for Kashmir's cultivators



A Golden Oriole rests on lavender flowers during a hot day in Kashmir

Silk Stalkings



Reshmi Dasgupta

Many years ago, an Italo-German Aussie chef—a career in cooking was probably pre-destined given his diverse genes!—who had fallen in love with India told me about his foraging trip to Ladakh. This was long before foraging became fashionable thanks to celebrity Scandinavian gastronomes, so the idea of a chef of a five-star hotel (upscale restaurants were yet to become a thing in India) rooting around for ingredients was pleasantly outlandish.

"You'll never guess what I found," chortled Bill, a smile lighting up his plump bearded face. "Lavender! Imagine that, wild lavender!!" At that time, Ladakh had just about come into the radar of foodies, thanks to the discovery of the properties of seabuckthorn berries, also growing wild in India's high, rocky northern extremity, and the Defence Research and Development Organisation (DRDO) had begun marketing "Leh Berry juice".

Amazingly, Leh Berry juice is still available—at least online although it's no longer seen on most supermarket shelves—and there are plenty of companies selling seabuckthorn extract capsules for its Vitamin C and antioxidant properties. But lavender is another matter altogether, and despite many years passing since Bill's 'discovery', it has not become a familiar desi ingredient, though it remains a favourite fragrance for soaps and room fresheners.

India is changing, of course, and becoming even more closely aligned with international trends. So, it is not surprising that both celebrity chefs and foraging in the wild are far more common these days than when Bill went on his Bharat Darshan. And now some chefs—youthful and Indian rather than an enthusiastic middle-aged Aussie—have also come across wild Ladakhi lavender in recent years and been blown away by its infinite possibilities.

Earlier this year, when my sister-in-law went to Ladakh on holiday I told her to look out for wild lavender. And sure enough, she saw pur-

plish bracts by the roadside and asked the driver to stop as she wanted to take some for herself—and me. The bemused driver did not think those colourful "weeds" were of the slightest interest to anyone, especially tourists. As if in corroboration, no other cars and bikes stopped to look at the lavender shrubs!

Then this week, a friend who sources and markets organic (and often exotic) products sent me a mailer on a tranche of lavender that had just arrived. I immediately thought of Bill and eagerly asked if he had sourced it from Ladakh. He hadn't actually; this lavender was from a specific village in Doda, he told me and added that villagers had switched from maize to cultivating lavender as part of the Centre's evocatively named 'Aroma Mission'.

Intrigued, I found out that since 2016 under the Aroma Mission, lavender is increasingly grown in Kashmir. In phase II, damask rose, clary sage, artemisia, wild marigold, dragonhead etc.—in high demand worldwide by perfumers and pharma companies—will also be introduced there. As many of the

region's famed native herbs and flowers are already prized for their medicinal and aromatic value this expansion will obviously be complementary.

This mini agricultural revolution is reminiscent of a similar successful project that India had undertaken in Afghanistan: persuading more and more cultivators there to shift from poppies to saffron, the aromatic 'stigma' that fetches more money by weight than contraband opium. From one tonne in 2001, Afghanistan grew 20 tonnes in 2020. No doubt that Kashmir's lavender farmers will find a more lucrative market for it than for corn.

Interest in wild lavender is understandable but commercially exploiting it is a bad idea, especially as the indigenous flora there is already threatened by over-harvesting. Cultivating lavender seems an ideal solution and the purple vistas this offers could even be a new tourism magnet! Incidentally, Bill was also excited by fresh (not dried) Kashmiri mores and fresh cheese made of Ladakh's famous yak milk; maybe those will become the next 'new' trend...

LAVENDER CULTIVATION (Syllabus: GS Paper 3 - Agriculture)

Context: Interest in wild lavender is understandable but commercially exploiting it is a bad idea, especially as the indigenous flora there is already threatened by over-harvesting.

Lavender

- **About:** a genus of 47 known species of flowering plants in the mint family, Lamiaceae.
- **Distribution:** It is **native to the Old World** and is found in Cape Verde and the Canary Islands, and from Europe across to northern and eastern Africa, the Mediterranean, southwest Asia to India.
- **Usage:** used over centuries in **traditional medicine and cosmetics**.
- **Cultivation in India:** Lavender cultivation is practiced in almost all the 20 districts of **Jammu & Kashmir**.
- **Part of Purple Revolution:** Recently, 'Lavender Cultivation' under **Aroma Mission** has been started in Ramban district (Jammu Kashmir) as a **part of Purple Revolution**.

Purple or Lavender Revolution

- **About:** launched in 2016 through the Council of Scientific & Industrial Research (CSIR) Aroma Mission.
- **Nodal Ministry:** Union **Ministry of Science & Technology**.
- **Key features:** First-time farmers were given free lavender saplings.
 - Those who had cultivated lavender before were charged Rs. 5-6 per sapling.
- **Main Products:**
 - **Lavender oil:** sells for at least Rs. 10,000 per litre.
 - **Lavender water:** used to make incense sticks.
 - **Hydrosol (formed after distillation from the flowers):** used to make soaps and room fresheners.

Aroma Mission

- **About:** launched in 2016 to boost the cultivation of plants like lavender, Aloe Vera, Mehndi, Menthol, Mint which have aromatic medicinal properties through new technology developed by the Council of Scientific & Industrial Research (CSIR).
- **Nodal ministry:** Ministry of science & technology
- **Nodal Agencies:** CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow.
- **Phase-I(2016):** CSIR helped cultivation on 6000 hectares of land and covered 46 Aspirational districts across the country.
- **Phase-2(2021):** to engage over 45,000 skilled human resources and will benefit more than 75,000 farming families across the country.

CEC justifies plan to amend MCC over poll promises

Bharti.Jain@timesgroup.com

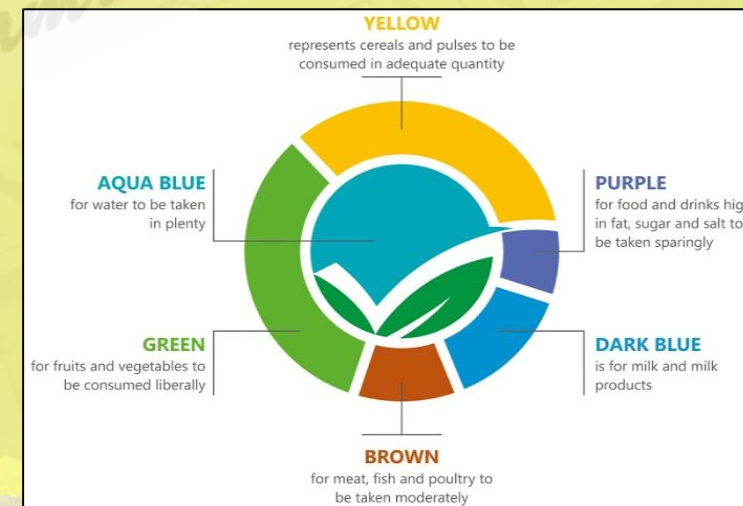
New Delhi: Even as only two political parties — BJP and SAD — backed EC's proposal to amend the model code of conduct (MCC) that requires all parties to disclose financial viability of their poll promises in a standardised format, chief election commissioner Rajiv Kumar on Thursday again justified the initiative, saying its sole purpose was to empower voters in assessing the promises and making an informed choice.

Pointing to a large number of democracies across the world facing serious macro-economic constraints and crises on account of populism, Kumar said the EC's basic principle behind mooted a standardised format for disclosures by political parties on source of funding of their promises was to balance the democratic right of the parties to make poll promises with their responsibility to offer the voter transparency on economic aspect of those promises.

Context: Twenty-three schools in Delhi were given the "Eat Right School" tag by Food Safety and Standards Authority of India.

Eat Right India Movement

- **About:** an initiative of the **Government of India and the Food Safety and Standards Authority of India (FSSAI)** to transform the country's food system in order to ensure safe, healthy and sustainable food for all Indians.
- **Tagline:** 'Sahi Bhojan. Behtar Jeevan'
- **Three broad pillars:** 'Eat Healthy', 'Eat Safe' and 'Eat Sustainably'.
- **Aim:**
 - Eat Right India's vision for 2050 is about creating a culture of safe, healthy and sustainable food for all
 - Making Indian food **Trans fat free** by 2022
 - It aims to **cut down salt/sugar and oil consumption by 30%** in three years
- **Eat Right India logo:** It represents a healthy 'Indian thali' (plate). The **6 colours** signify the **six tastes as per Ayurveda** that is necessary for energetic effects on the mind and body as **suggested in Charak Samhita:**
 - **Yellow:** pulses and cereals
 - **Green:** fruits and vegetables
 - **Brown:** poultry, fish and meat
 - **Blue:** milk and milk products
 - **Purple:** food and drinks high in fat or sugar



Scheme for Financial Support for Project Development Expenses of PPP Projects – 'IIPDF Scheme' (India Infrastructure Project Development Fund Scheme) Notified on 03.11.2022

Context: The Department of Economic Affairs (DEA), Ministry of Finance, Government of India, notified Scheme for **Financial Support for Project Development Expenses of Public-Private Partnerships (PPPs)** Projects – India Infrastructure Project Development Fund Scheme (IIPDF Scheme).

India Infrastructure Project Development Fund Scheme

- **About:** As a **Central Sector Scheme**, it will aid development of quality PPP projects.
- **Objective:** It will provide necessary **funding support to the project** sponsoring authorities, both in the Central and State Governments, for creating a shelf of bankable viable PPP projects.
- **Funding:** Same as **Viability Gap Funding (VGF) Scheme**.
 - Infrastructure projects undertaken through PPP mode that are economically justified but commercially un-viable are supported.

Viability Gap Funding (VGF) Scheme

- **Origin:** Introduced in 2006 with a view to support infrastructure projects undertaken through PPP mode.
 - Viability Gap Funding (VGF) means **a grant one-time or deferred**, provided to support infrastructure projects that are economically justified but fall short of financial viability.
- **Nodal Ministry:** Department of Economic Affairs, **Ministry of Finance**.
- **Key Features:** Up to 40% of the Total Project Cost (TPC) is provided by the Government of India (GoI) and the sponsoring authority in the form of capital grant at the stage of project construction (20%+20%).

NADA India issues notices to athletes for not filing their whereabouts in stipulated time

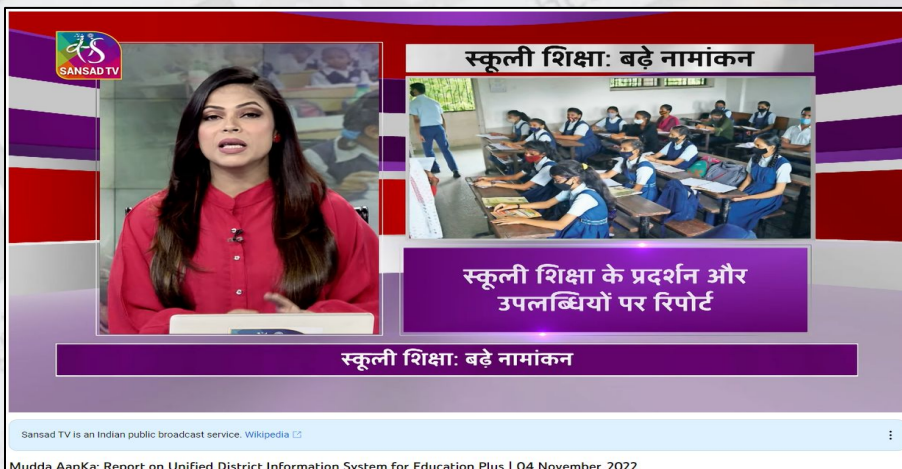
Context: National Anti-Doping Agency (NADA) India issued notices to athletes for not filing their whereabouts in stipulated time.

More In News

- As per NADA Anti Doping Rules - Article 5.5, some athletes, who are part of a Registered Testing Pool (RTP), are required to provide **mandatory whereabouts information** in the online portal/App.
- This information is **used to locate athletes** for effective out of competition doping control.
- Any combination of three Whereabouts Failures (filing failures and/or missed tests) within an 12-month period constitute an Anti-Doping Rule Violation under NADA Anti Doping Rules - Article 2.4, which may leads to imposition of **sanction upto 4 years**.

National Anti-Doping Agency (NADA)

- **Origin:** set up as a **registered society under the Societies Registration Act of 1860** in 2005 with a mandate for Dope free sports in India.
- **Statutory body:** The **National Anti-Doping Bill, 2021**, recently passed in the parliament, provides for constituting this National Anti-Doping Agency as a statutory body.
- **Objectives:** to implement anti-doping rules as per WADA (World Anti-Doping Agency) code, regulate dope control programme, to promote education and research and creating awareness about doping and its ill effects.
- **Functions:**
 - Planning, coordinating, implementing, monitoring and advocating improvements in **Doping Control**.
 - **Cooperating with other relevant national organisations**, agencies and other Anti-Doping Organisations etc.



About UDISE+

- **About:** A system of online data collection from the schools.
- **Origin:** Unified District Information System for Education (UDISE) was initiated in 2012-13.
 - It is one of the largest Management Information Systems on School Education.
- **Developed by:** Department of School Education & Literacy (Ministry of Education) in the year 2018-19.
- **Mandate:** To collect online data from the schools to overcome the issues related to the erstwhile practice of manual data filling in paper format.
- **Data:** UDISE+ collects information on parameters ranging from school, Infrastructure, teachers, enrolments, examination results etc.
- **UDISE+ 2021-22:** Additional data on important indicators viz., digital library, peer learning, hard spot identification, number of books available in school library, etc have been collected for the first time to align with the NEP 2020 initiatives.

Context: Ministry of Education released a detailed report on Unified District Information System for Education Plus (UDISE+) 2021-22 on school education of India.

Key findings of UDISE+ 2021-22

- **Enrollment:** In 2021-22, the total number of students enrolled in school education from primary to higher secondary stood at 25.57 crores as compared to 25.38 crore enrolment in 2020-21 registering an increase of 19.36 lakh enrolments.
 - **Uttar Pradesh has witnessed the highest enrollment of students** in government schools and recruitment of teachers.
- **A decline in Schools:** For the first time since the pandemic, there was a **decline in the number of schools** due to closures as well as a lack of teachers.
- **Computer and Internet Facilities:** Computer facilities were available in 44.75% of schools, while Internet access was available only in 33.9% of schools.
 - Their **availability has improved** as compared to pre-Covid when only 38.5% of schools had computers and 22.3% had Internet facilities.
- **Gross Enrollment Ratio(GER):** It **compares the enrollment in a specific level of education** to the population of the corresponding age group.
 - GER for the primary section has improved from 101.3% in 2018-2019 to 104.8% in 2021-2022.
 - For secondary classes, it has risen to 79.6% in 2021-22, from 76.9% in 2018-19 and for higher secondary level, it has increased from 50.14% to 57.6%.
- **Gender Parity Index(GPI):** GPI of GER which indicates the representation of girls in school with respect to their population in the corresponding age group was also found to be **favourable to girls with a GPI value of 1**.

SCIENCE & TECHNOLOGY

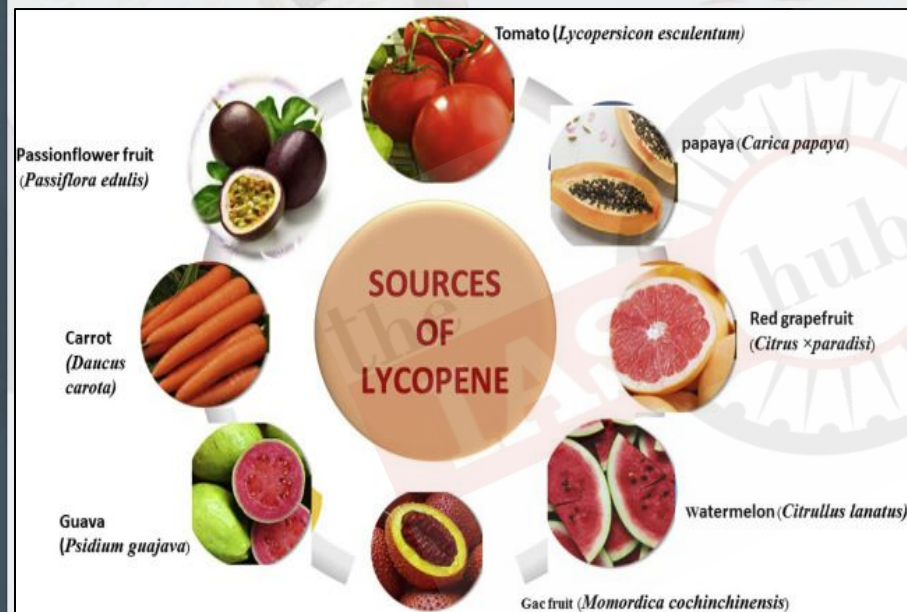
Researchers develop reusable, paper-based lycopene sensors

Lycopene-rich foods may reduce cancer risks



NEXT NEWS >

By India Science Wire
Published: Friday 04 November 2022



Context: A team of researchers has developed a nano-biosensor for detecting 'lycopene', a phytochemical with high commercial value.

Key points

- **Newly developed transparent strip:** This transparent Upconversion Nanoparticles (UCNP) strip has been found to be **sensitive to lycopene with a detection limit as low as 10 nM**.
 - A commercial sensor is used for determining the percentage. The process is expensive and time-consuming.
 - The reusable, paper-based strip may **help make the lycopene detection** process easy, cheap, and less time-consuming.
- **Upconversion:** It is a process where light can be emitted with photon energies higher than the light generating the excitation.
- **Significance:** It **offer minimal scattering** with maximum sensitivity despite not using any metal quenchers, in comparison to previous paper strips.

Lycopene

- **About:** a bright **red carotenoid hydrocarbon** found in tomatoes and other red fruits and vegetables, such as red carrots, watermelons, grapefruits, and papayas.
 - **Exceptions:** not present in strawberries or cherries.
- **Limitations:** Although lycopene is chemically a carotene, it has **no vitamin A activity**.
- **Structure and physical properties:** Tetraterpene and **insoluble in water**.
- **Biosynthesis:** It is synthesised by plants and microorganisms.
 - It cannot be synthesised by the human body and can only be obtained via diet.
- **Antioxidant:** helps **prevent cancer and heart diseases**.
 - Several epidemiologic studies have suggested a strong association between a high intake of lycopene-rich foods and a reduced risk of several cancers, notably prostate cancer.

SOUTH ASIA DROUGHT MONITORING SYSTEM

(Syllabus: GS Paper 1 - Geography)

New drought monitoring tool gives hope of better preparation, mitigation at farmer level

State-level workshops will be conducted to help users interpret data from the system



NEXT NEWS >

By Shagun

Published: Friday 04 November 2022



International Water Management Institute

- **About:** A non-profit international water management research organisation under the CGIAR with its headquarters in Colombo, Sri Lanka, and offices across Africa and Asia.
 - CGIAR (Consultative Group for International Agricultural Research) is a global partnership that unites international organizations engaged in research about food security.
- **Achievements:** In 2012, IWMI was awarded the prestigious Stockholm Water Prize Laureate by Stockholm International Water Institute for its pioneering research, which has helped to improve agricultural water management, enhance food security, protect environmental health and alleviate poverty in developing countries

Context: A new satellite-based drought-monitoring tool, South Asia Drought Monitoring System (SADMS), will be able to indicate the presence of drought and its level of severity, providing authorities the maximum possible lead time to put mitigation strategies into place in India and across South Asia.

South Asia Drought Monitoring System (SADMS)

- **Developed by:** In India, the South Asia Drought Monitoring System (SADMS) was developed by the International Water Management Institute (IWMI) and the Indian Council of Agricultural Research (ICAR).
- **Globally tested:** It has been tested in India, Pakistan, Bangladesh, Sri Lanka, Nepal, Maldives, Afghanistan and Bhutan.
- **Key features:** The system will not just monitor the drought conditions but also incorporate this information of real-time weather updates and open-access satellite data, and provide extension workers as well as agriculture and water resources authorities with all the information needed to forecast, monitor and manage drought on a weekly basis.
- **Functioning in India:** From 2017, ICAR used SADMS to implement real-time contingency measures.
 - It helped farmers in three districts of Andhra Pradesh and Maharashtra to obtain drought-tolerant seeds, develop supplementary irrigation and apply potassium nitrate (which helps seedlings cope better with dry conditions).
 - The platform is already in operation in Hyderabad in the state of Telangana. They use the system to know when to initiate their strategy for mitigating drought.

THANK YOU!



t.me/theiashub



[/mkyadav](https://www.youtube.com/channel/UCmkyadav)



www.theiashub.com/daily-quiz



9560082909