

August - 15

TNPSC BITS

- ❖ The National Commission for Women (NCW) has inaugurated the Digital Shakti Center in New Delhi to address the rising cybercrimes against women.
- ❖ Bharat Heavy Electricals Limited (BHEL) has received the first ever order for the demonstration of methanol firing in a Gas Turbine at the 350 MW Kayamkulam Combined Cycle Power Plant (CCPP) in Kerala.
- ❖ The West Bengal government and UNICEF have teamed up to encourage fathers to play an active role in promoting breastfeeding among new mothers.
- ❖ The Odisha government has introduced India's first round-the-clock grain ATM, also known as the 'rice ATM,' to revolutionise the Public Distribution System (PDS) for ration cardholders.

TAMIL NADU

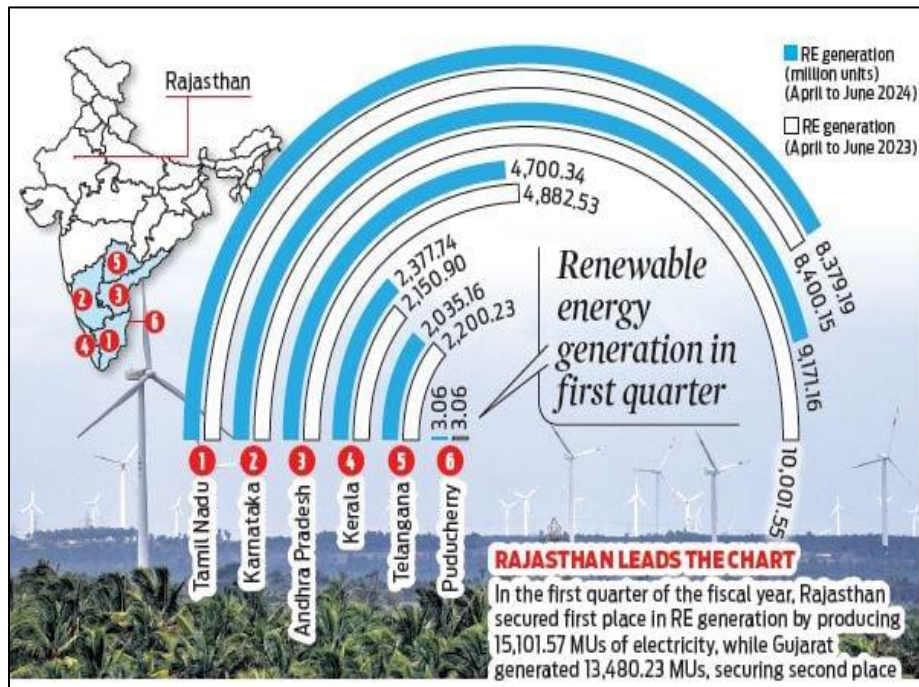
Public EV charging stations - 2023



- ❖ Public electric vehicle charging stations in Tamil Nadu consumed 1.727 million units (MU) of electricity in the first two months of financial year 2024-25.

- ❖ The overall electricity consumption by public charging stations across India was 113.58 MU in the first two months of FY2024-25.
- ❖ In Tamil Nadu, 163 public charging stations consumed 1.032MU of electricity in April 2024, while 154 consumed 0.695 MU in May 2024.
- ❖ The major regions in Tamil Nadu with public charging stations included Coimbatore, Villupuram, Tirunelveli, Chennai North and Vellore.
- ❖ In 2023-24, the public charging stations in Tamil Nadu consumed 13.383 MU of electricity.
- ❖ In April 2023 and May 2023, the consumption was 1.438 MU and 1.422 MU respectively.
- ❖ Around 40% of the EV four-wheelers and close to 70% of the EV two-wheelers sold in the country are made in Tamil Nadu.
- ❖ Delhi (54.43 MU), Maharashtra (28.64 MU), Gujarat (8.78MU) were the top states in terms of electricity consumption by public charging stations.

Renewable energy generation in Tamilnadu 2024



- ❖ Tamil Nadu has continued to rank second in renewable energy generation among southern states during the first quarter of the current financial year for the second year in a row.
- ❖ The state produced 8,379.19 million Units (MUs) of renewable energy.
- ❖ This is bit less than 8,400.15 MUs it generated during the same period last year.

- ❖ Karnataka took the top spot by generating 9,171.16 MUs despite recording a marginal dip from 10,001.55 MUs it generated last year.
- ❖ Tamil Nadu led in wind energy generation, producing 4,114.02 MUs, while Karnataka generated 3,095.93 MUs.

NATIONAL

Kasturi Cotton Bharat program



- ❖ This Ministry of Textiles' programme is a pioneering effort in the traceability, certification and branding of Indian cotton.
- ❖ It is operational at the national level and its promotion is being made at national and international platform.
- ❖ India is contributing to 25% of global production.

NIPCCD's Executive Council

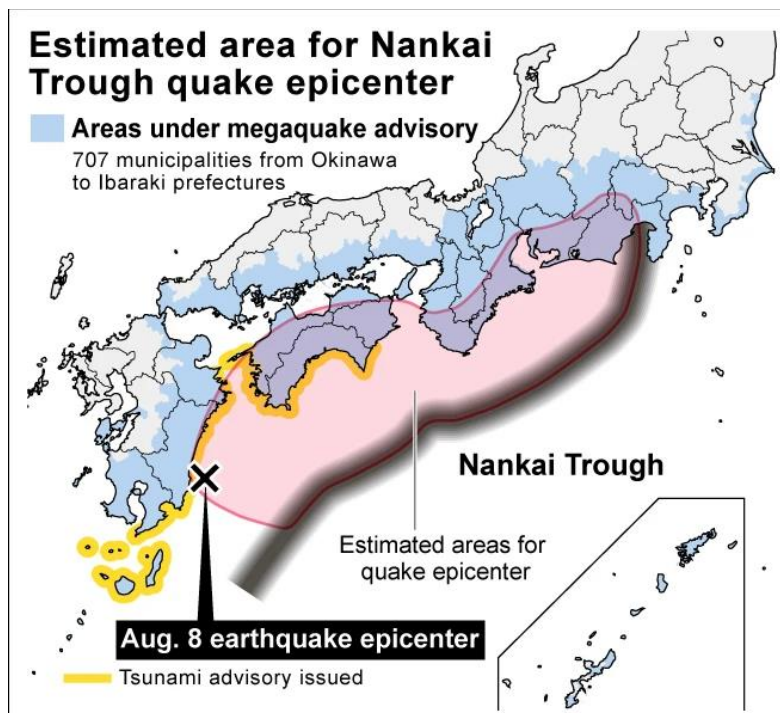
- ❖ The centre has reconstituted the Executive Council and General Body of the National Institute of Public Cooperation and Child Development (NIPCCD) after more than five decades.
- ❖ NIPCCD, an autonomous organization under the Ministry of Women and Child Development.
- ❖ It was initially established in 1966 under the Societies Registration Act XXI of 1860.

- ❖ The reconstitution reduces the size of the General Body from 94 to 22 members and the Executive Council from 21 to 13 members.
- ❖ The General Body is responsible for formulating the overall policies, while the Executive Council manages the administrative affairs of the institute.



INTERNATIONAL

Megaquake advisory



- ❖ After a 7.1-magnitude earthquake shook the southern Japan, the country's meteorological agency issued its first-ever "megaquake advisory".

- ❖ The warning said the likelihood of strong shaking and large tsunamis is higher than normal on the Nankai Trough.
- ❖ Nankai Trough is a 900 km long subduction zone along Japan's southwest Pacific coast.
- ❖ The trough has produced large earthquakes roughly every 100 to 150 years.
- ❖ These tremors usually come in pairs, with the second often rupturing in the subsequent two years.
- ❖ The most recent "twin" earthquakes took place in 1944 and 1946.
- ❖ This advisory by the Japan's meteorological agency was just a warning not a prediction.

SCIENCE AND TECHNOLOGY

Candida Auris

<p>WHY IT'S SUCH A BIG WORRY...</p> <p>What is Candida auris</p> <ul style="list-style-type: none">➤ A type of fungus that can cause serious illness in hospitalised patients; infections can be difficult to treat➤ First identified in 2009 in a patient in Japan. In recent years, it has emerged around the world. The US has reported over 600 such cases	<p>Mortality rate in patients suffering from the infection was as high as 33%</p> <ul style="list-style-type: none">➤ Another study published in Intensive Care Medicine in 2014 was conducted at 27 Indian ICUs; 6.5% of admitted patients suffered from fungal infection
<p>WHY IT'S SO DANGEROUS</p>	
<ul style="list-style-type: none">➤ Candida auris is resistant to most anti-fungal medications➤ Affects immune-compromised patients and causes high mortality➤ Found in patient's environment and hands of healthcare workers, which indicates it's hospital-acquired➤ The fungus forms non-dispersible cell	<p>aggregates and persists for longer time in environment, in addition to its thermos-tolerant and salt-tolerant properties</p> <ul style="list-style-type: none">➤ Mortality rate in patients infected by Candida auris can range from 33% to 72%➤ The fungus is sensitive mostly to echinocandins, a new class of antifungal drug, which is very expensive

- ❖ Candida auris, a formidable yeast infection, has been escalating its presence across the United States.
- ❖ This emerging fungus was first identified in 2009 and first detected in the US in 2016.

- ❖ It poses a significant global health threat due to its severe impact on hospitalized patients and its resistance to multiple antifungal treatments.

ENVIRONMENT

Unprecedented Glacier Retreat

- ❖ Recent glacier retreat across the Andes is unprecedented in the history of human civilization.
- ❖ Scientists carbon-dated bedrock that had been recently exposed by the retreated glaciers by measuring beryllium-10 and carbon-14 nuclide levels and found that concentrations were nearly zero.
- ❖ These glaciers are smaller than they've been since the last interglacial period, which ended about 115,000 years ago.
- ❖ The rock hadn't been exposed during the Holocene Era, which dates back 11,700 years.



New Peacock sanctuaries 2024

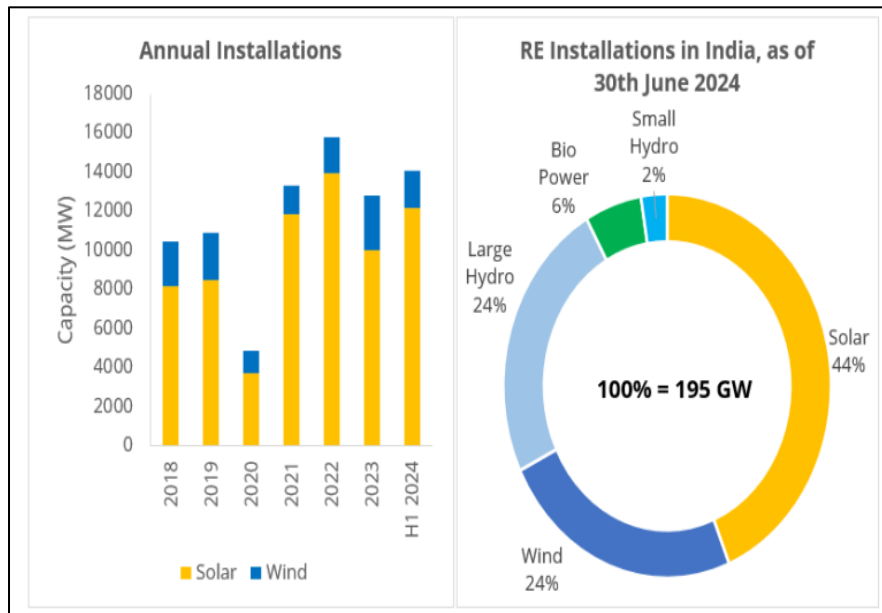
- ❖ The Central Government has declared Adichunchanagiri in Karnataka and Choolannuar in Kerala as Peacock Sanctuary.
- ❖ The Sanctuaries offer a safe space where these birds can live and thrive without human disturbance.

- ❖ Peacock conservation involves protecting both the Indian blue peacock and the green peafowl.
- ❖ As per IUCN red list, the green peafowl classified as Near Threatened.



STATES

Wind energy generation capacity 2023-24



- ❖ Gujarat topped in the all-India wind energy generation capacity commissioned for the year 2023 -24.
- ❖ Karnataka secured second place and Tamil Nadu ranked third.

- ❖ Gujarat's wind power generation for financial year 2023- 24 is 1743.8MW.
- ❖ Karnataka's commissioned capacity is 724.66MW and Tamil Nadu's capacity is 586.37MW.

PERSONALITIES, AWARDS, AND EVENTS

Rekha Sharma - NCW

- ❖ National Commission for Women chief Rekha Sharma has stepped down from her role.
- ❖ Sharma has had a contentious tenure as the NCW chief for two terms and spent 9 years in total.
- ❖ She has been involved with NCW since 2015, taking on roles as a member and temporarily as chairperson before becoming chief.



Gandhian Shobhana Ranade

- ❖ Renowned social worker Shobhana Ranade, who met Gandhi when she was 18, passed away recently.
- ❖ She had dedicated her life to uplifting the underprivileged, especially women and children.
- ❖ She was awarded with the Padma Bhushan in 2011.

- ❖ She played a role in setting up the Gandhi National Memorial Society (GNMS) and a National Institute for Training Women at the Aga Khan Palace in Pune in 1979.



MISCELLANEOUS

Indian Siris tree



- ❖ The century-old Indian Siris tree in East Godavari district, Andhra Pradesh, recently collapsed during the Godavari floods.

- ❖ By early 2024, the lone tree was dubbed as the most photographed tree on the banks of river Godavari in Andhra Pradesh.
- ❖ Indian Siris, also known as Albizia lebbeck, is a tropical tree native to India and Southeast Asia.
- ❖ It belongs to the Fabaceae family and is a deciduous tree.

Machine learning framework - 'LEAP'

- ❖ Researchers at the Indian Institute of Technology, Guwahati (IIT-G) have developed an innovative machine learning framework named 'LEAP'.
- ❖ It marks a significant advancement in the field of Electronic Design Automation (EDA) used in the semiconductor industry.
- ❖ It is a critical component in the \$600 billion semiconductor industry

