

FVF RYDAY CURRENT AFFAIRS - September

TAMIL NADU

- Union minister of road transport and highways Nitin Gadkari – unveiled a new drone capable of carrying vital organs within Chennai through video conference on September 3.



- ✓ Tamil Nadu health minister Ma Subramanian was present at the function in which the drone, co-developed by MGM Health Care, was unveiled.
- ✓ The drone is designed to fly 15km-20km at a height of 300 feet
- ✓ The operation of the battery-run drone with an organ box is awaiting permission from various agencies including the Directorate General of Civil Aviation and the city police.
- ✓ The aim of launching the drone is to get organs from one place to another within the Chennai city without much human intervention and disturbing traffic
- ✓ In the next phase, the hospital would fly the drone to neighbouring districts and states

- **Ministers Geetha Jeevan, Anitha Radhakrishnan and Thangam Thennarasu - flagged off NIOT's maritime research vessel 'Sagar Tara' from Tuticorin port.**
- ✓ The research vessel will undertake a reconnaissance mission to trace the ancient port city of Korkai in the Tuticorin sea
- ✓ The mission has been launched by the state archaeology department in coordination with National Institute of Ocean Technology (NIOT) and Indian Maritime University
- ✓ Korkai was the port city of early Pandyas situated on the banks of the Thamirabarani near Bay of Bengal.

EXPLORE MORE

EARLY PORT CITY

➤ Korkai was capital of early Pandyas. **Capital moved to Madurai by King Nedunchezhiyan I who ruled around 270 BCE**

➤ Korkai finds mention in Periplus of Erythrian Sea. **Western classical writers Pliny the Elder, Strabo and Ptolemy talk about pearl fishery there**

➤ Early Pandyas exported pearls, spices, ivory and shells



and imported horses, gold, wine and glass

➤ **Carbon dating of the evidences found in archaeological site Adichanallur, 13 kms away from present day Korkai, put it at 750 BC**

➤ Present day Korkai is situated 8 km away from coast. **The ancient port city lost its sheen when Thamirabarani changed course**



- ✓ Trade with Ganges Valley as well as ancient Roman civilizations flourished in the port city.
- ✓ The maritime guide book written in the first century AD "Periplus of the Erythrean Sea" mentions Korkai along with other port towns of Tamil Nadu.
- ✓ Equipped with multibeam echo sound, sub-bottom profiler and side-scan sonars, Sagar Tara will study the ocean floor.

SEARCH FOR KORKAI

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SAGAR TARA

➤ NIOT research & survey vessel was built in 2018

➤ About 43m in length, 2.5m draught, it can accommodate 8 scientists and 12 crew

➤ Has dedicated wet lab & dry lab with latest scientific equipment

➤ Her drop keel arrangement helps in mounting SONARS without dry docking and it is

TO EXPLORE MORE:

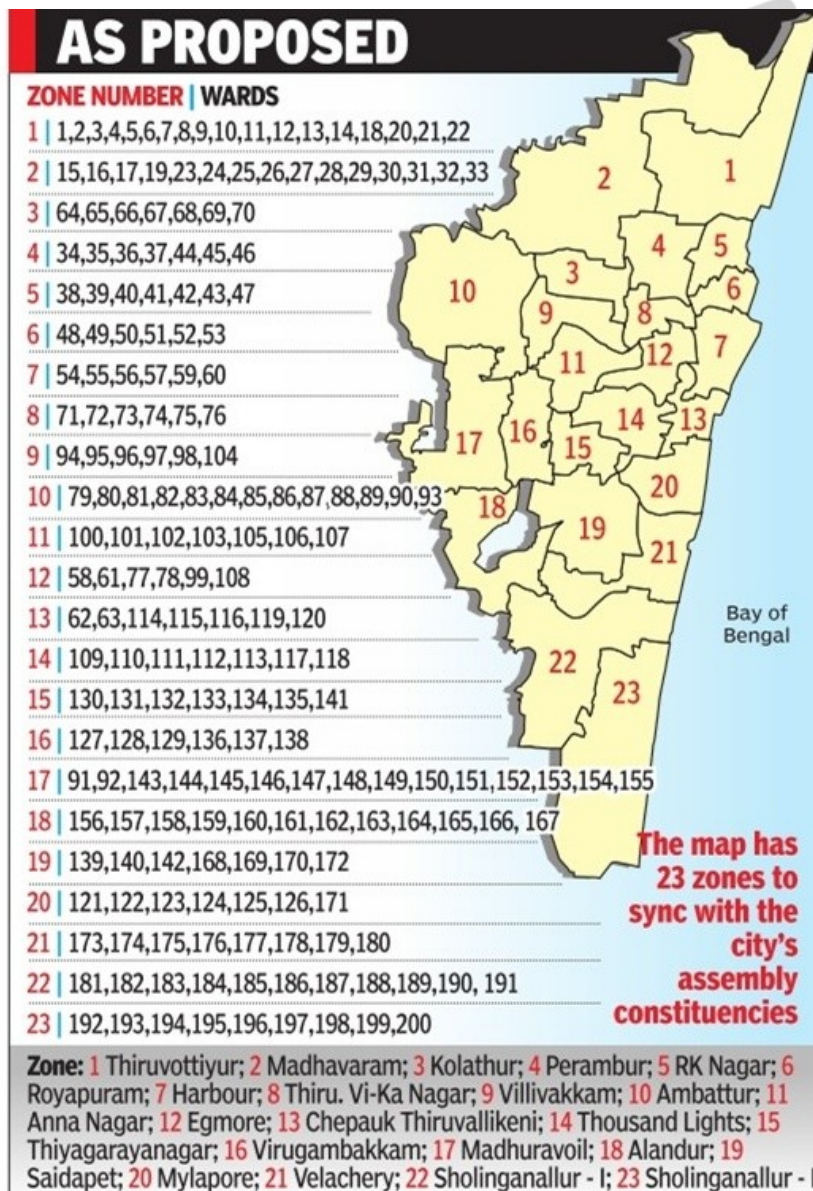
The research ship that will undertake seven days of study under water to look for signs of the ancient city that traded with Rome 2,000 years ago

equipped with flap rudders for manoeuvring

➤ Will operate between 3km and 10 km away from shore covering a stretch of 13 km from Tuticorin Port to Tiruchendur

➤ She will be looking for any signs of ancient shipwreck, structures and other possible evidence in the seafloor that can link to an ancient port city

- ✓ The research vessel will operate 3 kilometres to 10 kilometres off the shore from Tuticorin to Tiruchendur coast for the next seven days.
 - ✓ During the event, Archaeology minister Thangam Thennarasu said that chief minister M K Stalin has sanctioned Rs.15 crore to the state archaeology department to undertake studies.
 - ✓ Further, related excavations are happening at seven places in the state and this study was part of them.
 - ✓ On the archaeological work at the present-day Korkai village in Srivaikundam taluk, the Minister said it is completed on land.
 - ✓ The department has found important evidence like rouleted pot shreds linking the port with Rome as well as evidence to connect it with Ganges Valley civilization.
- **Greater Chennai Corporation - has drawn up a map that has 23 zones instead of the current 15 to match with the city's assembly constituencies.**



- ✓ It could take at least a year for the new arrangement to come into effect as the civic body has to build new zonal offices and recruit staff accordingly.
 - ✓ At present, the north, central and south Chennai regions had five zones each.
 - ✓ The new map shows north and central Chennai will have eight zones each, and south Chennai will have seven zones.
 - ✓ The largest Sholinganallur constituency alone will be bifurcated into two zones.
 - ✓ After the reorganisation, Thiruvottiyur zone will have the highest number of wards at 18, followed by Madhavaram and Maduravoyal zones with 15 each, Ambattur with 13 and Alandur with 12.
- **Puducherry - bagged three awards in the field of new and renewable energy**
 - ✓ The awards are instituted by the Union ministry of new and renewable energy and the Association with the Renewable Energy Agencies of States (AREAS)
 - ✓ The Union territory bagged the awards for installing the highest number of biogas plants, achieving the second highest rooftop solar power capacity, and for adding the highest rooftop solar power capacity in 2021-22.
 - ✓ Union minister of state for new and renewable energy, chemicals and fertilizers Bhagwanth Khuba presented the awards to the UT of Puducherry in Kerala
 - **A school student from Chennai - won a gold medal in the international Earth Science Olympiad**
 - ✓ Kyishong Bharali Das, a Class X student of Sir Mutha School in Chetpet, bagged the medal for a project titled carbon sequestration in weathered rocks and its application in reducing global warming.
 - ✓ He had also won a bronze medal on the earth sciences topic.
 - ✓ Das was the only student to represent Tamil Nadu in the eight-member Indian team in the Olympiad.

STATES

- **Meghalaya Chief Minister Conrad K Sangma – rolled out Phase 1 of the ambitious flagship programme ‘Rural Backyard Piggery Support scheme’ for farmers at Byrnihat**



- ✓ The programme is funded by the Central Government under National Livestock Mission alongwith the contribution of the state government
 - ✓ Under this scheme 4 piglets, 3 female and 1 male piglets will be distributed to farmers to promote pig breeding to provide regular income to farmer
 - ✓ This scheme is envisaged to benefit 6000 poor and marginal farmers and also increase pork production in the State.
 - ✓ During the event, the CM also announced Phase 2 of the 'Rural Backyard Piggery Scheme' dubbed as 'PROGRESS'- Prosperity of Grassroot families through Livestock Intervention at a financial outlay of Rs. 25 crore.
 - ✓ Meghalaya buys 18,000 MT of pork from different states and there is a huge shortfall in supply and demand
 - ✓ Through the piggery scheme, the state envisions to address the shortage of pork supply.
 - ✓ To make the state self-sufficient in pork, the state government is implementing one of the largest piggery development programme the 'Meghalaya Piggery Mission'
 - ✓ Under this mission, zero interest loan is provided for setting up of fattening and pig breeding
- **The annual Nuakhai harvest festival – was celebrated in Odisha recently on September 1**



- ✓ Celebrated a day after Ganesh Chaturthi, this festival is the most auspicious and important social festival in western Odisha.
- ✓ The nuakhai is a festival to celebrate newly harvested food by the farmers.
- ✓ People staying in distant lands come back to their native places, wear new clothes and offer prayers before the God and eat delicious foods prepared from the newly harvested crops
- ✓ In Nuakhai, nua means new and khai means food

NATIONAL

- **Union Home Minister Amit Shah - inaugurated the 30th southern zonal council meeting of the south Indian states and Union Territories in Thiruvananthapuram on September 3, 2022**

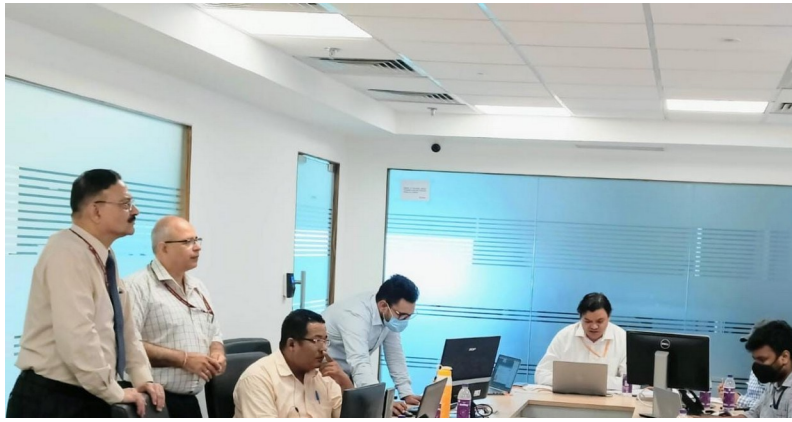


- ✓ Tamil Nadu Chief Minister M.K. Stalin, Kerala Chief Minister Pinarayi Vijayan, Karnataka Chief Minister Basavaraj Bommai and Telangana governor and Puducherry lieutenant governor (additional charge) Tamilisai Soundararajan attended the meeting
- ✓ Senior ministers from Andhra Pradesh and Telangana, Lieutenant Governor from Andaman Nicobar, Lakshadweep administrator, and senior officials of the central and state governments were also among the participants.
- ✓ A total of 26 issues were discussed in the meeting in which 9 issues were resolved, 17 issues were reserved for further consideration out of which 9 issues are related to the reorganization of Andhra Pradesh
- ✓ During his speech, Tamil Nadu Chief Minister M.K. Stalin asked the Union government to extend the GST Compensation period by two more years and sought immediate release of disaster relief and other such funds to the State.
- ✓ He also asked the Union government to create a high speed rail corridor in the State connecting major Tamil Nadu cities and neighbouring states
- ✓ The CM further asked the Centre to expedite allocation of blocks for offshore wind energy in Tamil Nadu, which has the country's highest offshore wind potential of 27 Giga Watt.
- ✓ He also called for a simplified mechanism by the Centre to allow States to enter into MoUs with other countries, especially in the sectors of investment promotion and strengthening academia-industry network
- ✓ Further, CM Stalin urged the Centre to declare Raigarh-Pugalur-Trissur 800 KW HVDC system as an asset of national and strategic importance to avoid tariff shock to southern States
- ✓ He also requested the Union Home Minister for the early Presidential assent to the Tamil Nadu Admission to Undergraduate Medical Degree Courses Bill, which was passed unanimously by the Tamil Nadu Legislative Assembly.
- ✓ The CM requested Home Minister to initiate steps to withdraw Electricity (Amendment) Bill, 2022, and allow State-owned distribution licensees to continue the supply of quality power at affordable rates to the people.

- ✓ CM Stalin also sought a proportionate share of the value realised through transfers of assets to third parties by the Airports Authority of India / Government of India at a later date, with the state government.
 - ✓ He also expressed his desire to host the next southern zone council meeting in Tamil Nadu.
 - ✓ The southern zonal council meeting discussed matters of interest among the states and also between the states and the central government
- **On September 2, Union Home Minister Amit Shah - launched 'eAwas' portal for the Central Armed Police Forces (CAPFs) personnel**



- ✓ The web-portal will enable online registration and allotment of residential quarters to eligible personnel of CAPFs and Assam Rifles
 - ✓ It will allow CAPF personnel to find houses among themselves rather than just looking for accommodation within the force
 - ✓ The portal has been developed on the lines of the online allotment system of 'General Pool Residential Accommodation' (eSampada)
 - ✓ During the event, the Minister said that the housing satisfaction rate of CAPF personnel, which was 33% in 2014, will go up to 73% by 2024
 - ✓ Apart from the Assam Rifles, the CAPFs comprise the Central Reserve Police Force (CRPF), Border Security Force (BSF), Indo-Tibetan Border Police (ITBP), Central Industrial Security Force (CISF) and Sashastra Seema Bal (SSB).
- **Indian Computer Emergency Response Team (CERT-In) under the Ministry of Electronics and IT – has recently designed and conducted a Cyber Security Exercise "Synergy" with the participation of 13 Countries**
- ✓ The exercise was conducted in collaboration with Cyber Security Agency of Singapore on August 31
 - ✓ It was aimed at exchanging best practices among member-states to build network resiliency against ransomware and cyber extortion attacks
 - ✓ The exercise was carried out as part of the International Counter Ransomware Initiative- Resilience Working Group.



- ✓ The Group is being led by India under the leadership of National Security Council Secretariat.
- ✓ The theme of the exercise was “Building Network Resiliency to counter Ransomware Attacks”.
- **The All-India Council for Technical Education (AICTE) - has recently signed an agreement with Adobe to promote digital creativity skills across the country**



- ✓ The partnership aims to empower over 75,000 faculty in 10,000 higher education institutions over the next two years by providing access to Adobe Express
- ✓ As a part of the agreement, Adobe will offer courses and expertise for upskilling faculties, and integrate digital creativity into the curriculum, to better prepare students with the essential creative and digital literacy skills
- ✓ Adobe Express is a new web and mobile-based app that makes it easy for everyone, independent of skill level, to create and communicate their ideas through great design

INTERNATIONAL

- **On September 2, the Joe Biden administration - announced more than \$1 billion arms sale to Taiwan**
- ✓ The \$1.1 billion sale includes \$355 million for Harpoon air-to-sea missiles and \$85 million for Sidewinder air-to-air missiles.

- ✓ The largest portion of the sale, however, is a \$655 million logistics support package for Taiwan's surveillance radar program, which provides air defense warnings.
- ✓ Early warning air defense systems have become more important as China has stepped up military drills near Taiwan
- ✓ China, calling Taiwan a part of its territory, urged the US to “immediately cancel” the arms sales.

INDIA AND OTHER COUNTRIES

- **India - has overtaken the UK to emerge as the fifth largest economy in the world and is set to become the third largest by 2029, according to Bloomberg**



- ✓ India's ‘nominal’ GDP on an adjusted basis using the dollar exchange rate on the last day of the March quarter stood at \$854.70 billion, while that of Britain was \$816 billion, says the report
- ✓ With India being the world's fastest growing major economy, its lead over the UK will widen in the next few years.
- ✓ The calculations were done using the IMF database and historic exchange rates on the Bloomberg terminal.
- ✓ In a separate report, State Bank of India (SBI) said in a note that India had surpassed UK as the fifth-largest economy as early as December 2021.
- ✓ The calculation is based in US dollars, and India extended its lead in the first quarter, according to GDP figures from the International Monetary Fund.
- ✓ The IMF's own forecasts show India overtaking the UK in dollar terms on an annual basis this year, putting it behind just the US, China, Japan and Germany
- ✓ A decade ago, India ranked 11th among the largest economies, while the UK was 5th

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **On September 3, space agency NASA - had to abort its Artemis-1 mission to the moon for the second time in a week**
 - ✓ The mission is postponed after the discovery of a liquid hydrogen leak during the fuelling of the rocket engine's tanks.
 - ✓ A similar leak in one of its four RS-25 engines had aborted the scheduled launch of the mission on August 29 as well
 - ✓ The \$4.1 billion mission aims to launch the debut test flight of its giant, next-generation Space Launch System (SLS) rocket and its Orion crew capsule
 - ✓ Both SLS and Orion will travel a distance of around 40,000 miles (64,000 kilometers) to the Moon and back, breaking the record of the previous Apollo 13 mission
 - ✓ Artemis 1 is an uncrewed mission but the world's most powerful SLS rocket will be carrying passengers - three mannequins armed with a variety of sensors.
 - ✓ Artemis-1 is supposed to be the first of series of interplanetary space missions whose specific purpose is to get humans back on the moon, and then much deeper into space, hopefully on other planets as well

- **On September 3, the Indian Space Research Organisation (Isro) - demonstrated a new technology with Inflatable Aerodynamic Decelerator (IAD)**
 - ✓ The IAD was successfully test flown in a Rohini sounding rocket from TERLS, Thumba
 - ✓ It was designed and developed by Isro's Vikram Sarabhai Space Centre (VSSC)
 - ✓ The new technology is considered as a game changer with multiple applications for future missions.
 - ✓ The IAD can be employed in a variety of space applications like recovery of spent stages of rocket, for landing payloads on to Mars or Venus and in making space habitat for human space flight missions.
 - ✓ Rohini sounding rockets are routinely used for flight demonstration of new technologies being developed by Isro and by scientists from India and abroad.

DEFENCE

- **The Prime Minister Narendra Modi-led Cabinet Committee on Security (CCS) – has recently approved the project to develop LCA Tejas Mark 2 multirole fighter jet, a more capable and powerful version of the indigenous aircraft.**
 - ✓ The fighter jet will be developed at a cost of over Rs 6,500 crore, in addition to the Rs 2,500 crore previously sanctioned for the project

- ✓ The Rs. 6,500 crore will reportedly be used for prototypes, flight testing and certification.
- ✓ While the Tejas Mark-1 is a lightweight aircraft, the Tejas Mark-2 will be a medium-weight aircraft and has been designed to be used for offensive operations in enemy territories

THE CONTINUING SAGA OF

Tejas Light Combat Aircraft

Aug 1983: LCA project is approved with initial cost of ₹560 crore to replace aging MiG-21s

Jan 2001: First prototype of lightweight multi-role fighter flies

Dec 2013: Tejas gets initial operational clearance (IOC)

Mar 2015: First fighter, in IOC configuration, to be handed over to IAF

Dec 2015: Tejas likely to get final operational clearance (FOC)

2017-2018: All 20 jets of first IOC squadron slated to be delivered

Post-2018: Second squadron, with 20 Tejas in FOC configuration

2012-2022: IAF likely to begin getting 80 Tejas Mark-II to form 4 squadrons

INDIGENOUS CONTENT: 65%
(American engines & ejection seats, Canadian canopy sheaths, etc)



TEJAS CHARACTERISTICS	
Weight (fully-loaded)	12tonne
Length	13.2metre
Height	4.4metre
Wing Span	8.2metre
Service Ceiling	15km
Speed	1,350 kmph
Radius of Action	Over 400km (without refuelling)

TOTAL COSTS:
At least ₹55,000cr. Developmental cost (including air force & naval variants, trainers & failed Kaveri engine) stands at ₹17,269cr now. With each jet to cost ₹220cr-250cr, 120 Tejas will cost ₹37,440cr



- ✓ The Tejas Mark-1 was designed to replace obsolete MiG-21s, while Tejas Mark-2 would succeed Mirage-2000s, Jaguars and MiGs-29s in Indian Air Force's (IAF's) combat fleet.
- ✓ The development of new advanced 17.5-tonne single-engine Tejas Mark 2 aircraft will be completed by 2027
- ✓ Tejas is a single-engine and highly agile multi-role supersonic fighter developed by the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL)
- ✓ India has already ordered 40 Tejas Mark-1 aircrafts, 10 Mark-1 trainers and 73 Tejas Mark-1A aircrafts.
- ✓ So far, IAF has inducted about 30 of the 123 Tejas jets ordered previously from Hindustan Aeronautics
- ✓ The upgraded version of the jet will have a bigger fuselage, longer range, better maintainability, greater load carrying capability, much stronger engine power and superior net-centric warfare systems
- ✓ Tejas is a potent platform for air combat and offensive air support with reconnaissance and anti-ship operations as its secondary roles

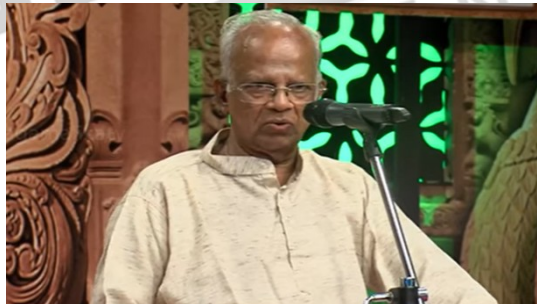
OBITUARY

- **Former Soviet leader Mikhail S Gorbachev – passed away at a hospital in Moscow on August 30 at the age of 91 after a "serious and prolonged illness"**
- ✓ He was buried on September 3 at Novodevichy Cemetery in Moscow after a farewell ceremony attended by thousands of mourners even though Russian President Vladimir Putin not attending due to 'busy schedule'

- ✓ The Russian government also refused to formally declare a state funeral for the last Soviet leader, who launched drastic reforms that led to the collapse of communism, the breakup of the Soviet Union and the end of the Cold War



- ✓ Putin once lamented the collapse of the Soviet Union as the “greatest geopolitical catastrophe of the century”
 - ✓ Gorbachev was the leader of the Soviet Union from 1985 until its collapse in 1991
 - ✓ He visited India in 1986 and signed the famous Delhi Declaration on the Principles of a Nuclear Weapon Free and Non-Violent World on November 27
 - ✓ Gorbachev was awarded the Nobel peace prize in 1990 for negotiating a historic nuclear arms pact with the then United States President Ronald Reagan
- **Renowned Carnatic singer T V Sankaranarayanan – passed away in Chennai on September 2 at the age of 77.**



- ✓ Sankaranarayanan was born in Mayiladuthurai in 1945, while the family shifted base to Chennai in the 1950s.
- ✓ Nephew of famed Carnatic vocalist Madurai Mani Iyer, he followed in his footsteps, becoming known for the same style and flourish of song.
- ✓ Sankaranarayanan was awarded the Sangita Kalanidhi by the Music Academy in 2003.
- ✓ The same year, the Government of India honoured him with the Padma Bhushan, the country’s third highest civilian award.

SPORTS

- **Tennis legend Serena Williams – announced her retirement from the sport after the loss in US Open 2022**



- ✓ She lost in three sets to Ajla Tomljanovic in Round 3 of Women's singles on September 2
- ✓ The tennis star had already announced that this will be her last singles outing in the US Open
- ✓ Serena retires after having won 92 matches in Australian Open, 69 in French Open, 98 at the prestigious Wimbledon and 108 wins at her home Grand Slam US Open.
- ✓ She has won a record total of 23 Grand Slam titles, one less than Margaret Court who holds the record for most Grand Slam titles won in history of women's singles tennis.
- ✓ Serena was the No 1 women's singles players in the WTA rankings for a record number of 186 consecutive weeks
- ✓ She has won four Olympic gold medals, three in women's doubles which is an all-time joint record shared with her sister Venus Williams

