



C.A Dated On 08-07-2019

UNESCO World Heritage list:

Why in News?

The Walled City of [Jaipur](#), known for its iconic architectural legacy and vibrant culture, on July 6 made its entry into the UNESCO World Heritage Site list.

The announcement was made after the 43rd Session of the UNESCO World Heritage Committee (WHC), underway at Baku (Azerbaijan) from June 30 to July 10, examined the nomination of the Walled City of Jaipur for inclusion in the World Heritage list.

About The City:

- The historic walled city of Jaipur in Rajasthan, was founded in 1727 AD under the patronage of Sawai Jai Singh II. It serves as the capital city of the culturally-rich state of Rajasthan.
- The city was proposed to be nominated for its value of being an exemplary development in town planning and architecture that demonstrates an amalgamation and important exchange of ideas in the late medieval period.
- In town planning, it shows an interchange of ancient Hindu, Mughal and contemporary Western ideas that resulted in the form of the city," UNESCO Office in New Delhi had earlier said.
- In addition, Jaipur City is an exceptional example of a late medieval trade town in South Asia and defined new concepts for a thriving trade and commercial hub. In addition, the city is associated with living traditions in the form of crafts that have national and international recognition, it said.

About the Committee:

- The World Heritage Committee is composed of representatives of 21 States Parties to the World Heritage Convention who meet annually.
- The Committee is in charge of implementing the Convention.
- To date, 1,092 sites in 167 countries have been inscribed on the World Heritage List.



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Doubling Farmer's Income:

Why in News?

The Centre aims to double farmers' income by 2022. A 2017 NABARD survey shows high levels of inter-State income inequality among agricultural households.

Income inequality

- The map depicts the average monthly income of agricultural households in 2017. Households in Punjab earned more than Rs. 16,000, the highest among States.
- Those in Andhra Pradesh earned the least -- Rs. 5,842 on average.

What remains in the purse?

- Consumption expenditure is measured because it is less volatile over time. Agricultural households in Andhra Pradesh ended up with a surplus of Rs. 95 on average in 2017, which was the lowest among States, while households in Punjab had the highest: Rs. 4,314.

Sources of income

- Among the Centre's plans to improve farmers' income was to shift farmers to non-farm jobs.
- Cultivation, for instance, was the source of income for 35% of the agricultural households in rural India.

Right to Information Act:

Why in News?



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The Central Information Commission (CIC) has rebuked the Department of Personnel and Training, the nodal ministry for [Right to Information](#) Act, for denying records related to appointment of Information Commissioners and framing of rules of the transparency law, saying it stifles "the very letter and spirit" of the legislation.

Details:

- The Commission admonishes the then Central Public Information Officer (CPIO) for invoking Section 8(1)(i) of the RTI Act without assessing its applicability and the present CPIO is also warned against mindlessly endorsing the reply.
- He directed that this order be placed before the Secretary of the Ministry to take note of "adverse findings" of the Commission.

What is Section 8(1)(i)?

Notwithstanding anything contained in this Act, there shall be no obligation to give any citizen,—

[\(i\)](#) cabinet papers including records of deliberations of the Council of Ministers, Secretaries and other officers: Provided that the decisions of Council of Ministers, the reasons thereof, and the material on the basis of which the decisions were taken shall be made public after the decision has been taken, and the matter is complete, or over: Provided further that those matters which come under the exemptions specified in this section shall not be disclosed;

About RTI act, 2005:

- **Right to Information (RTI)** is act of the [Parliament of India](#) to provide for setting out the practical regime of the right to information for citizens and replaces the erstwhile [Freedom of information Act, 2002](#).
- Under the provisions of the Act, any citizen of India may request information from a "public authority" (a body of Government or "instrumentality of State") which is required to reply expeditiously or within thirty days.
- The Act also requires every public authority to computerise their records for wide dissemination and to proactively certain categories of information so



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that the citizens need minimum recourse to request for information formally.

Proxy Voting:

Why in News?

The government is learnt to have withheld its plan to introduce a fresh bill in Parliament to extend the facility of 'proxy voting' to overseas Indians, pending "reconciliation" of varied views on the issue.

Background:

- There have been demands from various parties to extend similar facility to domestic migrants who are unable to vote when elections are held in their native places as most cannot afford to travel or miss work.
- The Bill proposes that overseas Indians, who are entitled to vote in India, could now appoint a proxy voter to cast their vote.
- As of now, overseas Indians were free to cast their votes in the constituencies where they were registered.
- The Bill seeks to give them the option of proxy [voting](#), which till now was only available to service personnel.
- According to estimates of Ministry of External Affairs, there are about 3.10 crore NRIs living in different countries across the world.

Suggested Reforms:

- An expert committee of the Election Commission, working on the issue, had in 2015 forwarded the legal framework to the Law Ministry to amend the electoral laws to allow the overseas Indians to use proxy voting.



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- Unofficial data with EC shows that only 10,000 to 12,000 overseas voters have exercised their franchise because they do not want to spend foreign currency to come to India and vote.
- The bill said the necessary provision of coming to India to cast ballot caused hardship for overseas electors.

Other Salient Provisions:

- Another provision in the amendment bill relates to the spouses of service voters.
- As of now, an armyman's wife is entitled to be enrolled as a service voter, but a woman army officer's husband is not, according to the provisions in the electoral law.
- The bill proposes to replace the term 'wife' with 'spouse', thus making the provision gender neutral.
- Members of the armed forces, central armed police forces, personnel of state police forces posted outside their state and the central employees posted outside India are eligible to be enrolled as service voters.

GS-3.

Union Budget:Farmer Friendly Measures:

When doubling of farmers' income agenda is being rigorously pursued by the government, a fresh slew of measures through this Budget will only firm up the prospects of the agriculture and rural development sectors. The crux of the Budget is 'sustainability' in every aspect, be it agriculture practices or economic viability.

Steps Taken:

- An announcement of formation of 10,000 new FPOs over the next five years is a step towards the same.



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With this, the economies of scale can be harnessed to achieve the goal of doubling farmer's income by reduction in input costs and assuring better price realisations by the farmers for their output.

- The government's impetus is to promote non-farm activities to boost economic viability of farmers. Owing to climate change challenges, it has become imperative to explore viable and sustainable non-farm means of income generation.
- A new scheme — ***Pradhan Mantri Matsya Sampada Yojana*** — will give enough confidence to those who are in fisheries sector, to enhance their income with better fisheries management, infrastructure creation, increasing production and productivity, improved post-harvest management bringing economic viability of the sector.
- As the government wants to extend the parameters of ease-of-doing business and ease-of-living to the rural areas too, the emphasis of '***Gaon, Garib and Kisan***' will see the uplift of rural lives of farmers and the poor, equally.
- The government has shown that every person having potential to bring economic revolution will be given an equal opportunity.
- Another new scheme — ***SFURTI*** — is an attempt in this direction.
- Now, under Pradhan Mantri Gram Sadak Yojana, a road network of 1.25 lakh km will bring more villages to rural markets.
- Enhancing the prospects of agripreneurs, the ***ASPIRE scheme*** will create 50,000 skilled rural entrepreneurs, especially in the rural agriculture sector.

Power generation

- To expand the income sources of our farmers, there is a proposal to enable them to take up power generation activities on their field to transform the ***Annadata*** to an ***Urjadata***.
- In the dairy sector, cooperatives will be encouraged to create infrastructure for cattle field management, milk production, processing and marketing.
- For relieving farmers from uncertain prospects, the States will be forced to implement e-NAM mechanism for better operations under the APMC Act.
- The goal of "***Har Ghar Jal***" by 2024 shows the sensitivity to the issue of water availability and its scarcity, equally.



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Integration of funds from various Ministries to fund the ***Jal Shakti Abhiyan*** may see critical water blocks being regained. In a nutshell, 'sustainability' has largely remained at the centre of this Budget.

Desalination technology :

The story so far:

With warnings from India's top policy-makers and reports of major cities in India struggling to stave off a water crisis, there's talk about exploring technologies to harness fresh water. The one idea that's been around for a while is desalination, or obtaining freshwater from salt water. Desalination technology is not an esoteric idea — the city of Chennai already uses desalinated water. However, it only has a limited application, given the operation costs.

What is desalination technology?

- To convert salt water into freshwater, the most prevalent technology in the world is reverse osmosis (RO).
- A plant pumps in salty or brackish water, filters separate the salt from the water, and the salty water is returned to the sea. Fresh water is sent to households.
- Osmosis involves 'a solvent (such as water) naturally moving from an area of low solute concentration, through a membrane, to an area of high solute concentration.
- A reverse osmosis system applies an external pressure to reverse the natural flow of solvent and so seawater or brackish water is pressurised against one surface of the membrane, causing salt-depleted water to move across the membrane, releasing clean water from the low-pressure side'.

Global Distribution:

- There are about 18,000 desalination plants in the world across 150 countries and nearly half of Israel's water is sourced through desalination.



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How popular is it in India?

- Years of water crises in [Chennai](#) saw the government set up two desalination plants between 2010 and 2013.
- Last November, [Gujarat](#) Chief Minister, Vijay Rupani, announced plans of setting up a 100 MLD RO plant at the Jodiya coast in Jamnagar district.
- This would go a long way in 'solving' the water availability problems in the drought-prone Saurashtra region.
- Other plants of a similar size are expected to come up in Dwarka, Kutch, Dahej, Somnath, Bhavnagar and Pipavav, which are all coastal places in Gujarat.
- There are also a slew of desalination plants that cater to industrial purposes. For now, India's real-world experience with desalination plants is restricted to Chennai.

What are the problems with RO plants?

Because RO plants convert seawater to fresh water, the major environmental challenge they pose is the deposition of brine (highly concentrated salt water) along the shores.

- Ever since the Chennai plants have started to function, fishermen have complained that the brine being deposited along the seashore is triggering changes along the coastline and reducing the availability of prawn, sardine and mackerel.
- Environmentalists second this saying that hyper salinity along the shore affects plankton, which is the main food for several of these fish species.
- Moreover, the high pressure motors needed to draw in the seawater end up sucking in small fish and life forms, thereby crushing and killing them — again a loss of marine resource.
- Another unexpected problem, an environmentalist group has alleged, was that the construction of the RO plants required troves of groundwater.
- This was freshwater that was sucked out and has since been replaced by salt water, rendering it unfit for the residents around the desalination plants.



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- On an average, it costs about ₹900 crore to build a 100 MLD-plant and, as the Chennai experience has shown, about five years for a plant to be set up.
- To remove the salt required, there has to be a source of electricity, either a power plant or a diesel or battery source.

Is RO water healthy?

- In the early days of RO technology, there were concerns that desalinated water was shorn of vital minerals such as calcium, magnesium, zinc, sodium, potassium and carbonates.
- They are collectively referred to as TDS.
- Higher quantities of these salts in desalination plants tend to corrode the membranes and filtration system in these plants.
- So ideally, a treatment plant would try to keep the TDS as low as possible.
- Most RO plants, including the ones in Chennai, put the water through a 'post-treatment' process whereby salts are added to make TDS around 300 mg/l.
- Several of the home-RO systems that are common in affluent Indian homes, too employ post-treatment and add salts to water.

Are there technological alternatives?

- The alternative desalination technology used is thermal energy sourced from the ocean.
- There is a low-temperature thermal desalination (LTTD) technique for instance which works on the principle that water in the ocean 1,000 or 2,000 feet below is about 4° C to 8° C colder than surface water.
- So, salty surface water is collected in a tank and subject to high pressure (via an external power source).
- This pressured water vapourises and this is trapped in tubes or a chamber.
- Cold water plumbed from the ocean depths is passed over these tubes and the vapour condenses into fresh water and the resulting salt diverted away.

Indigenous Aircraft Carrier (IAC) Vikrant

Why in News?



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The country's first Indigenous Aircraft Carrier (IAC), Vikrant, is in advanced stage of construction and will be delivered to the Navy in 2021 for advanced trials, .

About Vikrant:

- Vikrant, weighing 40,000 tonnes, is being built by Cochin Shipyard Limited.
- It works on Short Take-Off But Arrested Recovery (STOBAR) mechanism similar to the present carrier INS Vikramaditya with an angular ski-jump.
- The ship is powered by four General Electric (GE) gas turbines.
- It will operate Russian origin MiG-29K fighters, which also fly from Vikramaditya.
- The ship's combat management system (CMS) was developed by [Tata Power Strategic Engineering Division](#) in collaboration with Weapon and Electronics System Engineering Establishment and MARS, Russia.
- It is the first CMS developed by a private company for the Indian Navy.

Significance of Aircraft Carrier:

- An **aircraft carrier** is a [warship](#) that serves as a seagoing [airbase](#), equipped with a full-length [flight deck](#) and facilities for [carrying, arming, deploying, and recovering aircraft](#).
- Typically, it is the [capital ship](#) of a fleet, as it allows a naval force to [project air power](#) worldwide without depending on [local bases for staging aircraft operations](#).
- While heavier aircraft such as fixed-wing [gunships](#) and [bombers](#) have been launched from aircraft carriers, it is currently not possible to land them.
- By its diplomatic and tactical power, its mobility, its autonomy and the variety of its means, the aircraft carrier is often the centerpiece of modern combat fleets. \
- One of its great advantages is that, by sailing in international waters, it does not interfere with any territorial sovereignty and thus obviates the need for overflight authorizations from third party countries, reduce the times and transit distances of aircraft and therefore significantly increase the time of availability on the combat zone