

### Russia to pull out of ISS

- Russia will pull out of the International Space Station after 2024 and focus on building its own orbiting outpost
- NASA and other international partners hope to keep the space station running until 2030, while the Russians have been reluctant to make commitments beyond 2024.
- The space station is jointly run by the space agencies of Russia, the U.S., Europe, Japan and Canada.
- The first piece was put in orbit in 1998, and the outpost has been continuously inhabited for nearly 22 years.
- It is used to conduct scientific research in zero gravity and test out equipment for future space journeys.
- The International Space Station (ISS)
- The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit.
- Its first component launched into orbit in 1998, and the ISS is now the largest human-made body in low Earth orbit.
- It circles the Earth in roughly 92 minutes and completes 15.5 orbits per day.
- The ISS serves as a microgravity and space environment research

laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology, and other fields.

- The ISS programme is a joint project between five participating space agencies:
  - NASA (United States),
  - Roscosmos (Russia),
  - JAXA (Japan),
  - ESA (Europe), and
  - CSA (Canada)

### THE HINDU

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#### Third-party in CPEC

- Days after China and Pakistan held a meeting to bring other countries into the China-Pakistan Economic Corridor (CPEC), India on said that efforts to broaden CPEC's scope are "inherently illegal".
- "We have seen reports on encouraging proposed participation of third countries in the so-called CPEC projects. Any such actions by any party directly infringe on India's sovereignty and territorial integrity. India firmly and consistently opposes projects in the so called CPEC, which are in Indian Territory that has been illegally occupied by Pakistan,"
- CPEC consists of a number of infrastructure projects that are under construction across Pakistan

and is aimed at connecting China overland with the Gulf countries by cutting through the Himalayan range in Gilgit Baltistan and the Pakistan-occupied Kashmir.

- Soon after coming to power in Afghanistan last year, the Taliban had expressed desire to join the infrastructure project.

## **THE HINDU**

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### **New Ramsar site**

- India has added five more Ramsar sites, or wetlands of international importance, bringing the number of such sites in the country to 54
- These are the Karikili Bird Sanctuary, Pallikaranai Marsh Reserve Forest, and Pichavaram Mangrove in Tamil Nadu, the Sakhya Sagar in Madhya Pradesh and the Pala Wetlands in Mizoram.
- India's Ramsar wetlands are spread over 11,000 sq.km around 10% of the total wetland area in the country across 18 States.
- No other South Asian country has as many sites, though this has much to do with India's geographical breadth and tropical diversity.
- The U.K. (175) and Mexico (142) smaller countries than India have the most Ramsar sites, whereas Bolivia spans the largest area with 1, 48,000

sq. km under the Convention protection.

- Being designated a Ramsar site does not necessarily invite extra international funds, but the States and the Centre must ensure that these tracts of land are conserved and spared from encroachment.
- Acquiring this label also helps with a locale's tourism potential and its international visibility.
- Until 1981, India had 41 Ramsar sites, though the past decade has seen the sharpest rise 13 in designating new sites.

### **About Wetland**

- Wetlands, according to the Environment Ministry, are an "area of marsh, fen, peatland or water; whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres, but does not include river channels, paddy fields, human-made water bodies/ tanks specifically constructed for drinking water purposes and structures specifically constructed for aquaculture, salt production, recreation and irrigation purposes."

- To be a Ramsar site, however, it must meet at least one of nine criteria as defined by the Ramsar Convention of 1961, such as supporting vulnerable, endangered, or critically endangered species or threatened ecological communities or, if it regularly supports 20,000 or more waterbirds or, is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks are dependent upon.
- The National Wetland Inventory and Assessment compiled by the ISRO estimates India's wetlands to span around 1, 52,600 square kilometers.

## **THE HINDU**

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### **Tariff increase**

- On July 13, the Tamil Nadu Generation and Distribution Corporation (Tangedco) filed a general retail power tariff revision petition with the Tamil Nadu Electricity Regulatory Commission proposing to hike power tariffs by 10% to 35%.
- Mounting losses, outstanding loans and the consequent increase in interest burden, have compelled the Tangedco to file the petition.
- According to Niti Aayog's report of August 2021, most power DISCOMs

in the country incur losses every year the total loss was estimated to be ₹90,000 crore in the financial year 2021.

- Despite the Centre's prescription for annual or periodical revision of retail power tariff, States have not complied.
- The general approach is to use electricity as a tool for political agenda and make promises to allure people despite knowing that such assurances, if implemented, are not sustainable in the long run.

## **THE HINDU**

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### **Satellite and 5G network**

- As terrestrial 5G mobile networks are being rolled out across countries, there is a renewed interest in integrating Non-Terrestrial Networks, the primary one being the low latency Low Earth Orbit (LEO) satellite networks (SatNets), as a complement to terrestrial networks.
- Towards this, Starlink, operated by the Elon Musk-owned SpaceX, and One Web, promoted by Bharti Global, have launched about 2,500 and 648 LEO satellites respectively at an altitude of about 1,200 km with the objective of promoting global broadband connectivity.

- There are primarily three main use cases for integrating LEO SatNets with terrestrial 5G networks:
- Service continuity to provide seamless transition between terrestrial networks and SatNets in case of public safety, disaster management and emergency situations;
- Service ubiquity to provide 5G services in unserved and underserved areas of the world, thereby bridging the digital divide;
- Service scalability that utilises the unique capabilities of SatNets in multicasting and broadcasting similar content over a large geographical area.
- Wireless communications through LEO satellites over long distances is proven to be 1.47 times faster than communication over the same distance through terrestrial optic fibre.
- The other major challenge in LEO SatNets is the cost of user terminal and access charges to the end users.

### Steps

- Realising the advantages, the Government, in its National Digital Communications Policy 2018, has indicated a number of areas including the development of an ecosystem for local manufacturing of satellite communication systems and promoting participation of private players for the strengthening of satellite communication infrastructure in the country.
  - Accordingly, the New Space India Limited (NSIL), a public sector enterprise, was established in 2019 under the administrative control of the Department of Space, to reorient space activities from a 'supply driven' model to a 'demand driven' model, thereby ensuring optimum utilization of the space assets.
  - The Department of Space also established in 2020 a new regulatory body named the Indian National Space Promotion and Authorisation Centre (IN-SPACe).
  - IN-SPACe is intended to provide a level playing field for private companies to use Indian space infrastructure and to promote and guide the private industries in space
- ### Challenges
- This would necessitate addressing issues around frequencies to be allocated for satellite broadband, the methodology of allocation, the relatively higher cost of consumer equipment and the placement and interconnections of SatNets with terrestrial public landline/ mobile networks at the ground stations.

activities through encouraging policies and a friendly regulatory environment.

## **THE HINDU**

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### **GDP and Inclusiveness**

- It is amply clear that the correlation between formal sector jobs and GDP growth has weakened considerably.
- Ostensibly, high GDP growth now does not necessarily mean more jobs and incomes for people.
- Hence, GDP growth does not impact the common person today as much as it perhaps did four decades ago.
- GDP growth may be an important economic measure, but it is becoming increasingly irrelevant as a political measure, since it impacts only a select few and not the vast majority.
- This divorce of GDP growth and jobs is both a reflection of the changed nature of contemporary economic development with emphasis on capital-driven efficiency at the cost of labour and GDP being an inadequate measure.
- The excessive obsession over GDP growth by policymakers and politicians can be unhealthy and dangerous in a democracy.
- If growth in GDP does not translate into equivalent economic prosperity

for the average person, then in a one person-one vote democracy, exuberance over high GDP growth can backfire and trigger a backlash among the general public.

## **THE HINDU**

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### **USA new approach west Asia**

- The compulsions driving Mr. Biden's trip to West Asia have been evident.
- First, he faces the same challenges that several of his predecessors faced in navigating the U.S.'s West Asia policy, especially the Israel-Palestine conflict and Washington's strenuous relations with Iran.
- Second, Mr. Biden's trip to Saudi Arabia signalled a re-prioritisation of his administration's interests, compelled by the Russia-Ukraine war and its ramifications on the global food and energy situation.
- However, two developments from Mr. Biden's visit could result in positive externalities for the region: one, the consensus to sustain a UN-mediated truce in Yemen and two, the opening of Saudi airspace for civilian aircraft flying to and from Israel.
- At the heart of Mr. Biden's trip to West Asia lay the global energy situation, exacerbated by the conflict in Ukraine.



- There is a strong possibility that gas prices in the U.S. may surge as much as three times the current value before the U.S. midterm elections in November.
- As stricter Western sanctions on Russia kick in, Russia is expected to retaliate by even halting supplies to Europe.
- As Russia has cut oil and gas supplies to European countries significantly, there is a new energy scramble in Europe which is characteristically both long and short term. In the short term, European countries such as Germany and Austria are bracing for a harsh winter amid limited energy supplies and possibly the threat of a total cut-off by Moscow.
- In the long term, the U.S. has led the Western effort to establish alternative energy supply routes to ensure energy security for Europe even amid limited Russian supplies.
- The I2U2, beyond its promises of integration, is of strategic value to the U.S. on the back of troop pull-out from Afghanistan, a not-so-favourable relationship with Saudi Arabia and a hostile relationship with Iran.
- The group's limited focus in this meeting on food security and energy security is understandable given its recent launch, but its agenda of tying the West Asian region with South Asia through innovation, private sector investments, initiatives in water, energy, transportation, space, health, and the promotion and development of critical emerging and green technologies depict an integrated inter-regional future for the two regions.
- Since the beginning of his term, Mr. Biden has sought a reorientation in the U.S.'s West Asia policy. Resetting relations with Iran through a reworked Joint Comprehensive Plan of Action, which would have the U.S. back in the agreement; troop pull-out from Afghanistan, which is having regional security ramifications; and a principled support to democracies translating into a calibrated distancing from regional autocracies and dictatorships were all part of the recalibration.

## **THE HINDU**

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### **I2U2**

- With the first leaders' meet of the I2U2 group (comprising India, Israel, the UAE and the U.S.), sometimes referred to as the West Asian Quad, the Biden administration may have found a new toehold in West Asia.

