

## Prelim Bits 27-10-2021 | UPSC Daily Current Affairs

### RoIP in Syama Prasad Mookerjee Port

*A Radio over Internet Protocol (ROIP) System is being introduced as a marine communication mode at Syama Prasad Mookerjee Port (SMP), Kolkata, for the first time in any Major Indian Port.*

- This system may provide an effective long range Marine communication.
- It shall cover the entire Hugli River Estuary from Kolkata to Sandheads, having base stations at 4 Locations.
- With this facility, vessels at Sandheads can be directly communicated via Radio, from Kolkata, especially during storms and inclement weather.

### Radio over Internet Protocol

- Radio over Internet Protocol (RoIP) is a technology for transmitting radio communication signals using the Internet Protocol (IP) standard.
- RoIP provides the same performance as well-enhanced radio communication but uses a digital IP network to enable communication and connection between 2 or more analog radio devices or networks.
- **RoIP is similar to a Voice over Internet Protocol (VoIP)**, but with radio communication features and abilities.

*VoIP is a technology that allowing you to make voice calls over a broadband Internet connection instead of an analog (regular) phone line.*

- At its core, RoIP is the integration of VoIP technology in two-way radio. Rather than transmitting voice data through traditional means, RoIP uses internet to send data from one user to another.
- RoIP works in a **half-duplex mode** where only one radio device can communicate at a time.
  - The user must push the push-to-talk (P2T) each time before communicating.
- Besides radio communication features, RoIP enables the connection of 2 or more radio sites together using digital-to-analog converting receivers at both ends, which are directly connected to an Internet backbone.
- Moreover, RoIP also enables interoperability between different radio networks with different and non-compatible architecture.

### Syama Prasad Mookerjee Port

- Syama Prasad Mookerjee Port (Erstwhile Kolkata Port) is **India's first Major Port**, which was constructed by the British East India Company.
- It has two dock systems viz.
  1. Kolkata Dock System and
  2. Haldia Dock Complex (A deep water dock).
- Despite being India's **only riverine port**, SMP has been maintaining its pivotal position in

Indian Major Ports for the past 152 years.

- SMP is administered under the Ministry of Shipping through Major Port Trusts Act, 1963.

## Superiority of Hybrid Immunity

*Multiple studies have shown that the Hybrid Immunity had a higher neutralising antibody response than either natural infection without vaccination or full vaccination in infection-naïve individuals.*

*Hybrid Immunity is the combination of natural immunity from an infection and immunity provided by the vaccine.*

- People without prior infection but fully vaccinated with a vaccine showed a decline in neutralising antibodies over a period of 3 to 7 months.
- But the decline was much less in vaccinated people with prior infection.
- After a single vaccine in people who have recovered from COVID-19, antibody levels skyrocket up.
  - But, a study showed that boosting of pre-existing immunity from prior infection with vaccination resulted in a brief benefit to **antibody levels** with little-to-no long-term increase in **cellular immune memory**.
- **Immunological advantage** from hybrid immunity arises mostly from memory B cells.

In general, the antibody levels after infection or vaccination decline after a short period. But, the memory B cells get triggered on subsequent infection or vaccination.

- So when people recovered from COVID-19 are re-exposed to the virus, the memory B cells are capable of churning out highly potent antibodies.

## National Traffic Management Policy Framework for Drones

*Ministry of Civil Aviation has notified a National Unmanned Aircraft System (UAS or drones) Traffic Management (UTM) Policy Framework that will manage drone movement in the UTM airspace.*

UTM Airspace is the airspace up to 1000 feet above ground level.

- This framework will allow both public and private third-party service providers to manage the drones in lower airspace.
- To handle the traffic from unmanned aircraft, UTM Service Providers (UTMSPs) will extend automated software services instead of voice communication as in traditional Air Traffic Management (ATM) systems.
- They will primarily be responsible for segregating and separating a drone from other drones and manned aircraft in the lower airspace.
- All drones (except Nano drones operating in the green zone) shall mandatorily share their real-time location through the network to the Centre either directly or through third-party UTM service providers.
- **SSP** - UTM service providers will be assisted by Supplementary Service Providers (SSPs).
- SSPs will maintain data about terrain, weather, and location of manned aircraft and provide

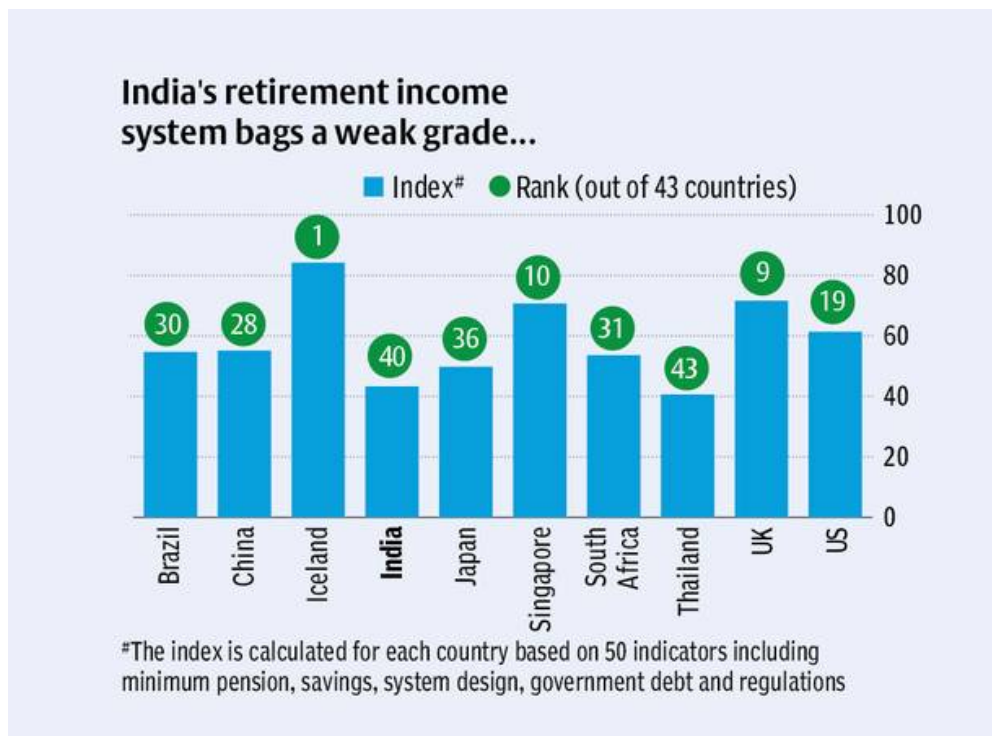
services such as insurance, data analytics and drone fleet management.

- **Integration** - The policy requires UTM to be integrated with ATM so that flight plans & real-time location of manned aircraft can be recorded to continuously separate manned & unmanned aircraft from each other.
- Law enforcement and security agencies will also have access to some information in the UTM ecosystem on a need-to-know basis.
- **Service fee** - The policy also allows UTMSPs to levy a service fee on users, a small portion of which will also be shared with the Airports Authority of India.

## Global Pension Index 2021

The 13th Global Pension Index 2021 is published by Mercer, in collaboration with CFA Institute and the Monash Centre for Financial Studies.

- The report compared 43 retirement income systems from around the world, highlighting strengths and weaknesses.
- As the world continues to grapple with the economic implications of the pandemic, the study also reveals factors causing the **gender pension gap** around the world.
- **Findings** - In 2021, new entrant Iceland is named as having the world's best pension system overall.
- India has ranked at 40<sup>th</sup> position out of 43 countries in the 2021 Index.
- [In 2020, India was ranked at 34<sup>th</sup> position out of 39 countries.]
- The report reveals that the financial well-being of Indian future retirees is left to chance. Also, it shows that the minimum pension of Indians (as a % of average wage) will be the lowest across the nations.



## Highest home ownership is a silver lining for Indian retirees

Score for some of the countries on home ownership (out of ten)



## India has the least minimum pension amount

which is represented by 'adequacy' sub-index

India's rank (out of 43 countries)



\*This index measures the financial viability of pension system

\*\*Integrity index considers role of governance and regulations that improves the credibility of the system

## Recommendations for the Indian pension system

- Introducing a minimum level of support for the poorest aged individuals



- Increasing pension coverage for the unorganised working class

- Improving the regulatory requirements for overseeing the functions of the private pension system



Source: 2021 Mercer CFA Institute Global Pension Index report

Graphic: Visveswaran V

## Report on Cryptocurrency Ownership

- According to data by comparison firm Finder, internet users in Nigeria have the world's highest rates of cryptocurrency ownership, followed by Malaysia and Australia.
- Japan ranked lowest in the list with only 4.6% of the population owning the virtual asset.
- India secured the 7<sup>th</sup> place with nearly 15.4% respondents saying they own at least one cryptocurrency.
  - In India, nearly 48% women have invested in at least one cryptocurrency, against 52% owned by men.
  - This indicates that both genders are at par in terms of ownership, which is in contrast to other countries like Japan and Norway where less than 30% women own the asset.
- Among all crypto assets, **Bitcoin emerged as most popular**, with the highest adoption seen in Japan with 76.7% people saying they own it.
- About 57% Indians who own cryptocurrency have invested in Bitcoin, according to the Cryptocurrency Adoption Index 2021.

# Cryptocurrency Adoption Index 2021

The Global Crypto Adoption Index 2021 was released by the crypto analysis platform Chainalysis.

- The Index ranked 20 countries to measure the level of cryptocurrency adoption and usage by individuals between July 2020 and June 2021.
- Chainalysis ranks countries by their peer-to-peer (P2P) cryptocurrency trade volume and weights it to favour countries with lower purchasing power parity (PPP) per capita and fewer internet users.
  - This is done to highlight countries where more residents are putting a larger share of their overall wealth into P2P transactions.
- **Findings** - Global adoption of cryptocurrency grew over 800% in the past year, especially in emerging market economies.
- This indicates that people turn to virtual money to preserve their savings in the face of currency devaluation, to send and receive remittances and carry out business transactions.
  - Emerging markets took the top spots due to huge transaction volumes on P2P platforms when adjusted for purchasing power parity per capita and internet-using population.
- India ranked second in a list of 20 countries with the highest cryptocurrency adoption rate.
- Vietnam secured the first spot, and Pakistan came third.

## Reference

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1766540>
2. <https://www.techopedia.com/definition/4532/radio-over-internet-protocol-roip>
3. <https://www.thehindu.com/news/national/kolkata-port-renamed-after-syama-prasad-mookerjee/article31742128.ece>
4. <https://www.thehindu.com/sci-tech/science/more-studies-show-the-superiority-of-hybrid-immunity/article37129327.ece>
5. <https://www.thehindu.com/todays-paper/tp-national/framework-to-manage-drone-traffic-notified/article37182776.ece>
6. <https://www.hindustantimes.com/india-news/india-notifies-framework-for-traffic-management-of-drones-in-lower-air-space-101635256073340.html>
7. <https://www.livemint.com/news/india/india-notifies-traffic-management-policy-for-drones-11635254607202.html>
8. <https://www.thehindubusinessline.com/opinion/columns/statistalk/indian-retirement-system-scores-low-on-global-pension-index/article37180563.ece>
9. <https://www.thehindu.com/sci-tech/technology/india-ranks-second-in-chainalysis-2021-global-crypto-adoption-index/article36057776.ece>



**SHANKAR**  
**IAS PARLIAMENT**  
*Information is Empowering*