

REAL ESTATE (REGULATION AND DEVELOPMENT) ACT, 2016

The Supreme Court recently held that homebuyers cannot be treated differently from other "financial creditors" under the Insolvency and Bankruptcy Code (IBC) 2016 just because they have secured orders from the authority under the Real Estate (Regulation and Development) Act 2016.



About Real Estate (Regulation and Development) Act, 2016:

- It is an act passed by the Indian Parliament in 2016 for the regulation and promotion of the real estate sector in the country.
- This Act establishes a Real Estate Regulatory Authority (RERA) in every state to regulate the real estate sector and serve as the adjudication body to enable quick resolutions.
- It makes it mandatory to register a real estate project with RERA, where the land area is more than 500 square meters or the number of apartments exceeds 8.
- It applies to both residential and commercial real estate, whether undertaken by a private or public body.

Salient Provisions:

- **Security:**
 - At least 70% of the buyer's and investor's money will be deposited in a special account.
 - The remaining 30% will then be allocated to the builders for construction and land-related expenses only.
 - Developers and builders are not allowed to claim more than 10% as an advance payment on the property before the sale contract is signed.
- **Transparency:** Builders are required to provide the original plans for all projects they carry out. They are not allowed to alter the plans without the buyer's permission.
- **Fairness:**
 - RERA has mandated that developers sell properties on the basis of carpet area rather than high-density area.

- If the project is delayed, buyers have the right to recover the full amount of their investment, or they can opt for an investment and receive a monthly return on their investment.
 - **Quality:** The builder must rectify any issue faced by the buyer within 5 years of purchase. This issue must be rectified within 30 days of the complaint.
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KAZIRANGA NATIONAL PARK

Recently, the Kaziranga National Park and Tiger Reserve reopened with a literary tribute to a British-era forest officer Patrick D. Stracey who rid its name of any hunting connotations.



About Kaziranga National Park:

- It is located in the state of Assam.
 - It is part of the **Eastern Himalayan biodiversity hotspots**.
 - It is also a **UNESCO World Heritage Site** and houses two-thirds of the total world population of greater one-horned rhinoceros.
 - It is recognized as an Important **Bird Area** by **BirdLife International** for the conservation of avifaunal species.
 - **Flora:**
 - It is a mix of eastern wet alluvial grasslands, semi-evergreen forests and tropical moist deciduous forests.
 - It is primarily famous for its dense and tall elephant grasses intermixed with small swamplands.
 - It also includes an abundant cover of water lilies, water hyacinths and lotus.
 - **Fauna:**
 - It is home to the **One-horned rhinoceros**, Leopard, Fishing Cat, other Lesser cats, royal Bengal tiger, Large Indian Civet and Small Indian Civet etc
 - It is also one of the last remaining homes of the endangered and endemic western hoolock gibbon, the only species of apes found in India.
 - It is one of the last homes of the critically endangered **Bengal florican**.
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FAST RADIO BURSTS

According to the recent study by the astronomers from the University of Tokyo, bolsters support for a starquake source for these colossal outbursts of Fast Radio Bursts.



About Fast Radio Bursts:

- A fast radio burst is a **bright and brief burst of electromagnetic radiation** (light) seen in radio-wave frequencies.
- They usually last for **very short period of time**.
- Some FRBs repeat, but the vast majority happen once and disappear forever.
- They reach earth **from faraway galaxies**, emitting as **much energy** in a millisecond as the **sun does over weeks**.
- Scientists don't know for sure what causes fast radio bursts.
- However, the current prevailing theory is that at least some FRBs are emitted by **neutron stars**.
- These stars form when a supergiant star collapses, going from eight times the mass of our sun (on average) to a superdense core only 20–40 kilometers across.
- **Magnetars are neutron stars** with extremely strong magnetic fields, and these have been observed to emit FRBs.

What recent study says?

- Previous studies have **noted broad similarities between** the energy distribution of **repeat FRBs, and that of earthquakes and solar flares**.
- However, new research at the University of Tokyo has looked at the time and energy of FRBs and found distinct differences between FRBs and solar flares, **but several notable similarities between FRBs and earthquakes**.



WHAT IS A STOCK SPLIT?

Sigachi Industries (SIGACHI) recently initiated its long-anticipated 10:1 stock split.

About Stock Split:

- A stock split happens when a company increases the number of its shares to boost the stock's liquidity.
- It is a corporate action in which a company issues additional shares to shareholders, increasing the total by the specified ratio based on the shares they held previously.
- Although the number of shares outstanding increases, there is no change to the company's total market capitalization as the price of each share will split as well.
- The most common split ratios are 2-for-1 or 3-for-1 (sometimes denoted as 2:1 or 3:1). This means that for every share held before the split, each stockholder will have two or three shares, respectively, after the split.
- The number of shares increases, but the price per share goes down in proportion.

Why is a stock split done?

- It is done to infuse liquidity and to make shares affordable for various investors who could not buy the shares of that company before due to high prices.
- It is sometimes aimed at helping a company meet the minimum requirements to remain listed on an exchange. This is because some stock indexes are price-weighted, meaning a company wishing to join the index would need to have, among other criteria, a price that falls within a certain band.

What is a Reverse Stock Split?

- It is the opposite transaction, in which a company lowers, instead of increasing, the number of shares outstanding, raising the share price accordingly.
- The total value of your shares would remain consistent.

HOW INDIA CAN MINIMISE CLIMATE RISK IN AGRICULTURE

Context

- **October 16** is observed as **World Food Day** to mark the founding of the **UN Food and Agriculture Organisation (FAO)** in **1945**. The theme for this year's World Food Day is 'Water is Life. Water is Food.'
- In this context, it is important to review **how far India has progressed in achieving food security, and how it is using its water resources in agriculture.**

What Should be India's Strategy with Respect to Water in Agriculture?

- **On Supply Side:** India must expand buffer stocking of water during the monsoon season in its reservoirs, and recharge groundwater through check dams and watersheds, etc.
- **On Demand Side:** India must work on the demand side to **ensure more rational allocation and efficient use of water across crops.**
- **Institutional Reforms in Irrigation Along with Pricing and Power for Irrigation**
 - To work on supply and demand side, **India not only needs institutional reforms in the Indian irrigation sector but also in the pricing of water and power for irrigation.**
 - While almost half of India's gross cropped area is irrigated today, **India needs to take it to at least 75 per cent if India has to cope with weather uncertainties** associated with climate change.

Way Ahead for India to Minimise Climate Risk in Agriculture

- **Need a Paradigm Shift in Thinking**
 - First and foremost, the government needs to shift focus from land productivity to water productivity. **For example, the government need not look at so much tonne/hectare, but of kg of grain per cubic metre of irrigation water.**
- **Reward Farmers for Switching to Less Water Intensive Crops**
 - The government should start rewarding farmers **for switching from water-guzzling crops like paddy and sugarcane to less water-intensive crops** like millets, pulses and oilseeds. The Green water credits can play a significant role in this.
- **Promote Innovative and New Farming Techniques**

- Farming practices such as direct seeded rice (DSR) and alternate wet and dry (AWD) irrigation, or zero till, etc., can also be rewarded as they will save water.
 - Also, drip irrigation, especially in sugarcane, can save half the water.
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WHAT IS JERICHO MISSILE SYSTEM?

An Israeli legislator's recent calls for the use of a "doomsday" weapon against Hamas and Palestine have once again put the spotlight on nuclear weapons in West Asia, particularly the Jericho missile system.



About Jericho Missile System:

- Jericho is Israel's original ballistic missile programme, initiated in the 1960s and named after the biblical city located in the West Bank.
 - This programme was initially a collaboration with the French aerospace company Dassault, but when France withdrew in 1969, Israel continued its development.
 - **Jericho-1:**
 - It had a weight of 6.5 tonnes, a length of 13.4 metres, and a diameter of 0.8 metres.
 - It had a range of 500 kilometres and could carry a 1,000-kilogram payload, though it had a 50 percent chance of hitting within a 1,000-metre radius of its target.
 - It was retired in the 1990s.
 - **Jericho-2:**
 - It was developed in the late 1980s, with a length of 15 metres and a diameter of 1.35 metres, while maintaining the same payload capacity.
 - It had a range between 1,500 and 3,500 kilometres.
 - **Jericho-3:**
 - It is the first Israeli Intercontinental Ballistic Missiles (ICBM).
 - It was first tested in 2008 and entered service in 2011.
 - It featured improvements over the previous models, with a longer length than Jericho-2 and a larger diameter of 1.56 metres.
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- It has an estimated **launch weight of 29,000 kg** and a **payload of 1,000 to 1,300 kg**.
- It has a **range of 4,800 to 6,500 km** and uses **inertial guidance** with a **radar-guided warhead**.
- The missile is reportedly equipped with a **750-kg nuclear warhead**.

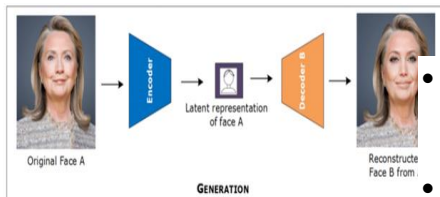
CITING DEEPPAKES, GOVERNMENT TO MAKE WHATSAPP DISCLOSE SOURCE

ID

Why in News?

- The Central government is looking to invoke a law that would require WhatsApp to share details about the first originator of a message.
- The basis for this are multiple deepfake videos of politicians circulating on WhatsApp.

About Deepfake:



- A deepfake is a **digitally forged image or video of a person that makes them appear to be someone else**.
- It is the next level of fake content creation that takes advantage of **Artificial Intelligence (AI)**.
- Artificial intelligence refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions.
- It can create people who do not exist and it can fake real people saying and doing things they did not say or do.

Origin of the Term ‘Deepfake’:

- The term deepfake originated in 2017, when an anonymous Reddit user called himself “Deepfakes.”
- This user manipulated Google’s open-source, deep-learning technology to create and post pornographic videos.
- The videos were doctored with a technique known as face-swapping. The user “Deepfakes” replaced real faces with celebrity faces.

How this Technology is Being Misused?

- Deepfake technology is now being used for nefarious purposes like –
 - Scams and hoaxes,
 - Celebrity pornography,
 - Election manipulation,
 - Social engineering,
 - Automated disinformation attacks,
 - Identity theft and financial fraud.
- Deepfake technology has been used to impersonate former U.S. Presidents Barack Obama and Donald Trump, India's Prime Minister Narendra Modi, etc.

What are Countries Across the World Doing to Combat Deepfakes?

- **China:**
 - In China, it is mandatory for deep synthesis service providers and users to ensure that any doctored content using the technology is explicitly labelled and can be traced back to its source.
 - The regulation also **mandates people using the technology to edit someone's image or voice, to notify and take the consent of the person in question.**
 - When reposting news made by the technology, the source can only be from the government-approved list of news outlets.
- **European Union:**
 - The EU has an updated Code of Practice to stop the spread of disinformation through deepfakes.
 - The revised Code **requires tech companies including Google, Meta, and Twitter to take measures in countering deepfakes and fake accounts on their platforms.**
 - They have six months to implement their measures once they have signed up to the Code.
 - If found non-compliant, these **companies can face fines as much as 6% of their annual global turnover.**
- **United States:**
 - In July 2021, the US **introduced the bipartisan Deepfake Task Force Act** to assist the Department of Homeland Security (DHS) to counter deepfake technology.

- The measure directs the DHS to conduct an annual study of deepfakes — assess the technology used, track its uses by foreign and domestic entities, and come up with available countermeasures to tackle the same.
- **India:**
 - In India, currently, **there are no legal rules against using deepfake technology.**
 - However, specific laws can be addressed for misusing the tech, which include Copyright violation, Defamation, etc.

Provision of Disclosing the Identity of a Person under the IT Rules:

- The IT Rules say that online messaging companies will be required to divulge the identity of a person who first sends a particular message on their platform.
- The order for the requirement, colloquially known as traceability, can be passed either by a court, or the government.
- The orders, however, can only be issued for the purposes of prevention, detection, investigation, prosecution or punishment of an offence related to national security issues, public order, friendly relations with a foreign government, among other things.
- No order, the rules say, shall be passed in cases where other less intrusive means are effective in identifying the originator of the information.

Stand of WhatsApp

- WhatsApp, which is the most used messaging platform in India, has said that the provision is a threat to its end-to-end encryption system which keeps communications between two people private from even the company itself.
- It has questioned the technical feasibility of enforcing the measure, saying it will break its security systems and lead to mass surveillance.