



# DAILY CURRENT AFFAIRS - The Hindu

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## **Iran to Promote Chabahar Port**

### **Why in news?**

With U.S. sanctions threatening Iran's **main port of Bandar Abbas**, the Iranian government is planning to promote the Chabahar port being developed by India in a major conference on February 26, highlighting the potential of the Indian Ocean port beyond India-Afghan trade alone.

### **About the initiative:**



- The government of Iran wants to build Chabahar as the focal point with the entire coastline of 1,000 kilometres in the **Persian Gulf** to be developed for oil refineries, petrochemical and steel factories, and other projects
- Iran wants to promote Chabahar as a hub where big ships can enter, offload to smaller ships that can go easily to other ports as well.
- The potential for inland trade goes well beyond the present plan of **trade from India-Afghanistan via Chabahar**.
- Iranian government plans to connect 'via Turkmenistan to Central Asia, via Turkey to Europe, and via Iraq to Syria and the Mediterranean' countries.
- Once the railroad from **Chabahar connects to Zahedan**, many more opportunities will open up.

### **Challenge for India:**

- India is sending an official delegation to the event led by the Shipping

Ministry, where about 200 guests from 35 countries have been invited.

- The event will also bring into focus a tightrope India must walk, with the U.S. tensions with Iran on one side, in order to achieve the triple aims of trade with Afghanistan, bypassing Pakistan and posing a counter to the China-Pakistan developed Gwadar port nearby.

### **India-Iran Agreement:**

- India has committed to building **the 500-kilometre \$1.6 billion railway from Chabahar to Zahedan**, which are both in the **Sistan-Baluchistan province**, and an MoU worth \$2 billion was signed by the Railway Ministry last February during Iran President Hassan Rouhani's visit to India.
- In addition, Iran is planning a second airport near Chabahar and the development of a free trade zone, while energy infrastructure of a gas pipeline has been already built up to 200 km of Chabahar.

### **US Waiver on Chabahar:**

- Asked about the impact of sanctions, re-imposed in November 2018, Iranian Ambassador to India pointed out that the advantage of **Chabahar was that it had received a waiver from the U.S.**
- MEA officials dealing with the Chabahar project are advising some caution in the plans, given that the U.S. waiver for Chabahar was given by the Trump administration to facilitate trade to Afghanistan.
- This exception relates to reconstruction assistance and economic development for Afghanistan. These activities are vital for the ongoing support of Afghanistan's growth and humanitarian
- As a result, India is hoping that the February 26 event does not turn into a confrontation between the U.S. and Iran.

### **Trilateral cooperation:**

- **India, Iran and Afghanistan** have also stepped up work on trilateral cooperation to facilitate trade through Chabahar, after India sent a trial shipment of 100 MT of wheat to Kabul via the port last year. Since the port was officially opened on December 3, more than 135 containers have been processed at the **Shahid Beheshti and Shahid Kalantri terminals** in Chabahar
- Officials from India, Iran and Afghanistan also opened the office of the **India Ports Global Chabahar Free Zone (IPGCFZ)**, and India has subsequently taken over the logistics and cargo handling services of the

port.

- Iranian bank Pasargard is expected to begin operations at a branch in Mumbai to handle transactions along with the UCO bank branch in Teheran, while the Afghan Ghazanfar Bank is in the final phase of clearances to set up a branch in Chabahar.

### **Importance of Chabahar:**

- The push for Chabahar, which allows **India to bypass Pakistan for trade to Afghanistan** is likely to be speeded up, as the government looks at all diplomatic options to “isolate Pakistan” post the Pulwama attack.
  - On February 13, 27 border soldiers of Iran’s Islamic Revolutionary Guards Corps (IRGC) were killed in a similar suicide car bombing in the Sistan Baluchistan province that borders Pakistan.
  - The group identified as responsible, Jaish-e-Adl (JA), also runs bases in Pakistan’s Baluchistan province.
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### **Great Indian Hornbill**

#### **Why in news?**

Amid a changing environment, with natural homes of birds getting depleted as natural forests make way for plantations and other such modified terrain, comes the good news of how the great Indian hornbill (*Buceros bicornis*) adapts to such change.

#### **About the new study:**

- A group of researchers from **NCBS-TIFR in Bengaluru and Nature Conservation Foundation in Mysuru** observed eight hornbill nests, three located in contiguous forests and five located in modified habitats such as coffee plantations.
- They found that the birds followed similar nesting behaviour but adapted to the changed environment. The study is published in the journal *Ornithological Science*.

**About GIH:**

Very long bills are topped with a rectangular casque that extends over the head like a hat. **Prefers figs** to all other foods, using its huge bill to husk a variety of fruits. During the breeding season, the female may seal herself behind a wall she has built at the entrance of the nest. In India mainly found in **Nagaland, Karnataka, Kerala and Andaman and Nicobar**. The great Indian hornbill, also known as the great pied hornbill, is on **Appendix II of CITES and listed as vulnerable in IUCN red list** because of decreasing populations

- The team chose to study the **great Indian hornbills nesting in the Anamalai hills**. For comparison, the researchers located the study in the modified habitat in the **Valparai plateau** and the contiguous forests in the **Anamalai Tiger Reserve and the Vazhachal Reserve forests**. The modified habitat included tea, **coffee and cardamom plantations** and tribal settlements.
- Most of the nests were known as they have been studying hornbills and monitoring them for many years now. Some of the nests were discovered during the study with the help of local tribal assistants.
- The team started monitoring nests from the beginning of **breeding season in December**. After the females had entered the nests, we conducted direct nest observations on multiple nests using standard field protocols and taking care not to disturb the birds.

**Nesting habits:**

- Hornbills are **secondary cavity nesters and choose cavities formed in large trees for nesting**. Also, they are **monogamous**, and the female, after copulation, seals herself in the hole until the initial breeding period of two-four months is over.
- During this time, the female and the young ones are fed by the male bird, with fruit such as figs and animal matter. So, in principle, along with other **threats such as hunting, modified land use, ensuing forest fragmentation, felling of large trees with the potential for nesting, the loss of fruit bearing trees could also affect hornbill nesting habits**.
- Great hornbills may adapt to habitat modification provided that their key requirements for food and nesting are fulfilled in the habitats like coffee and forest fragments.

- Considering that hornbills use same nest over years, protection of these known nest trees and retention of large trees that can be potential nests is absolutely essential.
- In addition, it would be necessary to have a diversity of native tree species, particularly **figs, laurels and other food plants**, the study concludes.
- The study also highlights the potential of rainforest fragments and coffee plantation for conservation of hornbills outside of protected areas.

## **Rhododendrons**

### **Why in news?**

Neems are in bloom and mango trees fruiting in many parts of India now, but what determines such seasonal changes? At least, in the Sikkim Himalaya temperature, day length and genetic relatedness between species determine when rhododendrons put out their first buds, flowers and fruits, finds a new study.

### **About Rhododendron:**

- Rhododendron is a genus of 1,024 species of **woody plants** in heath family (Ericaceae).
- It is either evergreen or deciduous. Most species of Rhododendron have brightly coloured flowers which **bloom from late winter through to early summer**.
- It is also found **mainly in Asia** and also widespread throughout highlands of Appalachian Mountains of North America. It is the **national flower of Nepal**.
- Last year Foundation stone of **Rhododendron Park** was laid in Tawang district of Arunachal Pradesh by Chief Minister Pema Khandu.
- Tawang district was once home to about 100 species of rhododendron but now they have been reduced to only 50 plus species due to construction activities in border areas.

### **New Study:**

- Interest in tree phenology the timing of biological events such as flowering and fruiting has increased after climate change has been shown to alter it, especially of plants in high-altitudes.
  - Researchers at the **Ashoka Trust for Research in Ecology and Environment** including Shweta Basnett studied rhododendron trees in sub-alpine and alpine forests between 3,400-4,230 metres above sea level in **Sikkim's Kyongnosla Alpine Sanctuary**.
  - Between 2013 and 2015, the team monitored budding, flowering, fruiting (arrival of first fruits, immature green fruits and mature brown fruits) and fruit dehiscence (splitting open of fruit to release seeds) and the duration of phenology in 320 trees of 10 rhododendron species for every 15 days.
  - Simultaneously, they collected data on temperature. Results from these, combined with data on day length in this region, reveal that the onset of budding, flowering and initial fruiting were mainly associated with a longer day length (around 13 hours) and higher temperature.
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## **Pangolins**

### **Why in news?**

Obsession for its supposedly medicinal scales in China is believed to have made the **ant-eating Chinese Pangolin**, one of two species found in South Asia, extinct in India.

### **About Pangolin:**

- The pangolin is the most trafficked mammal in the world. Though **hunted for its meat** across the north-eastern States and in central India, the **demand for its scales in China** has made it the most **critically endangered animal** in less than a decade.

### **Possible Extinction:**

- On World Pangolin Day, wildlife experts mourned the “possible extinction” of the Chinese Pangolin in the northeast and the likelihood of the Indian Pangolin found elsewhere in India of being wiped out in a decade or so.



- The **third Saturday of February** is observed as the day of the scaly **nocturnal** ant-eater, which activists say is an animal very few even forest officials know about.
- The **Chinese Pangolin** was officially categorised as **critically endangered** in 2014, but it is extinct today. **The Indian Pangolin, marked endangered that year, is now critically endangered** and disappearing fast.
- The STF had busted one of the biggest international gangs of wildlife body parts smugglers. It arrested 159 people across 14 States and registered 12 cases, mostly for pangolin scale smuggling.

#### **North-eastern gateway:**

- Investigations by wildlife crime sleuths have revealed that almost 90% of smuggling of pangolin and pangolin scales is through the northeast.
- From elsewhere in India, the scales are smuggled out to China via **Myanmar at Moreh in Manipur and Champhai in Mizoram**. But there are numerous gateways along the border with Myanmar. This is why checking the smuggling network in the northeast is crucial for the survival of the last of the pangolins.
- Smaller animals like pangolins get indirect benefit of the focus on larger ones such as rhino, tiger, and elephant.

#### **Killed cruelly:**

- **There is no survey of pangolin, which get smoked out of their burrows and killed cruelly by being thrown into boiling water.**
- **The animal used to be killed for meat until people learnt there was illegal money in its scales.**
- **The Chinese Pangolin has not gone the way of the dodo. Conservation policies have to look beyond major species, but the world needs to tell China that pangolin scales like rhino horns are made of keratin that produces human hair and nails and has no medicinal value.**

## **Kochi-Muziris Biennale**

### **Why in news?**

Art ought to be an enabler but that is perhaps utopian. Exhibitions have now proliferated and there is a plethora of art events, but whom or what are these events for? For a privileged few who access these spaces which are deeply hierarchical in nature? Galleries in a traditional sense have remained the preserve of the elite. This has led to the emergence of non-normative, alternative art spaces where newer alliances and engagements can be embraced.

### **About Kochi-Muziris Biennale:**

- The Kochi-Muziris Biennale, which began in 2012, feels like redemption in many ways.
- It is one of India's **biggest achievements in making art inclusive**. Hordes of people show up at the venues every day, many of whom have limited or no prior exposure to the visual arts.
- These are the common masses who turn their Sunday trip to the city into a visit to the biennale.
- One of the major initiatives of the biennale during each edition has been to **reflect stories of the local people and their histories**. Thus, besides a lot of otherwise perplexing art from far removed contexts like Romania or Hungary, the visitors also find a representation of themselves in paintings, videos or photography.
- The current edition curated by artist Anita Dube is titled 'Possibilities for a Non-Alienated Life'. Dube's politics are at the forefront. She has tried to make the marginal visible, to situate the unheard and the unseen at the centre of her discourse.

### **Themes of the event:**

- Art without politics is no art at all and could you think of a better place than Kerala to rise up to the challenge? Feminism, identity politics, gender rights, LGBTQ representation and farmers' issues are replete in this edition. This is art of our 'contemporary' ethos because it is reflective of the times we live in.
- Contemporary is just not cutting-edge art practice, but art that takes a distinct position vis-à-vis the current sociopolitical climate of the



country. Amidst shrinking spaces of debate and dialogue and growing apathy for compassion, spaces like these are the need of the hour.

- In her curatorial note, Dube writes, “If we desire a better life on this earth our unique and beautiful planet, we must in all humility start to reject an existence in the service of capital. ‘Possibilities for a Non-Alienated Life’ asks and searches for questions in the hope of dialogue.

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## **Cannonballs from Machilipatnam’s Bandarkota**

### **Why in news?**

Most people are highly possessive of artefacts unearthed in their backyard, but residents of Machilipatnam’s Bandarkota area treasure something unusual: cannonballs. These solid metal shots from a past era of warfare have been turning up periodically in housing sites in the old parts of the town when they are excavated for construction.

### **About the findings:**

- Many households preserve the cannonballs, although a few simply dispose of them as scrap, unaware of their heritage value.
- Machilipatnam, in Andhra Pradesh, houses an old armoury dating back to the **Dutch era**, which is protected by the Archaeological Survey of India (ASI).

### **Famine and storm :**

- Part of the structure collapsed in heavy rain in 2016. The fortunes of Bandarkota changed decisively after a storm in the 19th century. Tracing the history of the fort, the Manual of Kistna District by Gordon Mackenzie says: “The pestilence that followed on the **famine of 1832-3** induced the authorities to **station no more European troops at Bandar** and the **storm wave of 1864** caused the withdrawal of the last sepoy regiment and ended the history of Masulipatam as a military station.
- A cannon was also kept on display at the entrance to the District Police grounds, after it was shifted from the railway station area. Until the

1960s, a cannon was operated by the local authorities without the use of cannonballs to avoid any untoward incident, producing just a deafening sound.

- Many families do not disclose their cannonball find, fearing that the ASI might recover them.

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### **Punjab's blackbuck fight for existence**

#### **Why in news?**

On the foggy winter afternoon of February 3, a phone call from a local resident, saying an injured blackbuck, apparently attacked by stray dogs, is lying on a farm in Sardarpur village. was enough to send a team of forest and **wildlife** personnel into rescue mode. They quickly rushed to the spot in the **Abohar Wildlife Sanctuary (AWS)** in a bid to save the blackbuck.

#### **Problems of barbed wires:**

- A young deer, about two years old, had been lying on the farm with multiple injuries, after being attacked by a group of stray dogs. Chased by dogs, the blackbuck had rammed into **barbed wires, which enclose agricultural fields to avoid crop damage from stray cattle.**
- Its injuries proved to be fatal, even though medical treatment was given, and the blackbuck succumbed to its injuries within a few hours of the attack. This is not an isolated incident. In 2019, so far, as many as eight blackbucks have died in the AWS, and a majority of them succumbed to their injuries, caused by barbed wires while running from an attack by stray dogs. **Other unnatural reasons for blackbuck deaths include road accidents, falling into water storage tanks, and concrete drains.**
- **For the blackbuck, Punjab's State animal, it's a fight for existence at the AWS in the Fazilka district.**
- It faces a **severe threat from stray cattle, attacks by stray dogs, and habitat fragmentation due to change in land use and cropping patterns** over the past few years.

## Avoidable casualties:

- State government data shows that, in 2018, as many as 25 blackbucks died, while the wildlife wing was successful in saving the lives of 18 injured blackbucks. In 2017, 42 blackbucks died in the sanctuary area, while 33 were saved after being provided medical treatment.
- Most of the blackbucks here are dying due to injuries caused by the **attack of stray dogs** on them. Feral dogs target young deer and expecting females. The problem has been aggravated in the past few years as **locals trying to save their crops from stray cattle have put up barbed wires and nets**. This fencing of agriculture fields restricts the free movement of blackbucks and results in fatal injuries during dog chase incidents.
- The **district administration has banned the sale and use of barbed wires** under Section 144 of the CrPC, yet it's use continues unabated in the sanctuary area.
- Fencing agricultural fields, especially with cobra wires that have blade-edged iron wire mesh, has been a major cause of worry, and a key reason behind causing fatal injuries to blackbucks during dog attacks.

## Increasing awareness

- The people are made aware of the ill-effects of barbed wires. Conservation team convinced two farmers to remove cobra wires from their farms. They are making efforts to convince locals to take off these wires for the safety of blackbucks.
- The **AWS is an open sanctuary**, spread across private land in 13 villages. The blackbuck was notified as the State animal of **Punjab** in 1989 and its presence in the State is confined to the **AWS due to the unique habitat of semi-arid plains consisting agricultural fields, intermittent fallow-barren lands, scattered sand dunes, sand mounds and ridges**.
- Locals who have been peacefully co-existing with this **near-threatened species of blackbuck** for several years are annoyed about the alleged indifference of the State government towards solving the problem of stray cattle.
- They say that if the problem of stray cattle is resolved, then there would be no need for them to fence their farms with barbed wires, which would eventually allow free movement of blackbucks and help them thrive.
- In AWS, where land is mainly owned by the **Bishnoi community**, there were 3,273 blackbucks according to the 2017 census, conducted jointly

by the Punjab Biodiversity Board (PBB) and the Department of Forest and Wildlife Preservation (DFWP), against 3,500 in the year 2011.

### **Habitat disturbed:**

- Over the years, with **habitat fragmentation due to change in land use and cropping pattern**, the natural habitat of blackbucks has been disturbed.
- Over the years, the fallow-barren lands have turned into lush green fields due to better irrigation facilities. **Scattered sand dunes and sand mounds, which provided a unique environment for blackbucks**, are now vanishing, as the area is being brought under farming with the help of the latest machines. All these factors have contributed to the fall in the population of this majestic species.

### **Stray cattle:**

- Successive governments have failed to find a solution to the problem of stray animals, which are not only destroying crops but have also caused the deaths of humans.
- While the government collects cow cess in the name of taking care of stray animals, the problem continues to grow. The growing population of **stray animals also competes with blackbucks** for the already shrinking open grasslands, resulting in their migration to adjoining areas outside the sanctuary.
- Local administration, along with the Wildlife Department, has been persuading locals to remove barbed wires, especially the 'cobra wires'.

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## **2011 Census for population figures in its calculations for allocations to States**

### **Why in news?**

The 15th Finance Commission will not alter its approach on solely using the 2011 Census for population figures in its calculations for allocations to States, **Chairman N.K. Singh**.

### **Terms of Reference:**



- However, he added that other measures would be included that would ensure that States that have performed well by controlling population growth would not be penalised.
- The final decision is that, as far as we are concerned, the Commission is a recipient of the **Terms of Reference (ToR)**.
- It is not the creator of the Terms. Having received the **Presidential Order**, it is obligated by the Constitution to act on the basis of the Presidential Order. It is very clear that wherever population has to be used as a criterion, that population should be what is in the Census of 2011.
- The ToR also says FC to look at incentives for States that have achieved success in terms of replacement rates and better demographic management.
- The intention of the Commission is to try and see that in no way is efficiency and performance penalised, so we will try to see what kind of a balance we are able to come up with.
- The recommendations of the Commission, especially to do with the quantum of devolution to the States, will have a bearing on not only the Central Budget but also those presented by the States for the year 2020-21.

#### **States' finances weaker:**

- In general, State finances are in a weaker position than the Centre's, but we need not be in a celebratory mood regarding the Centre's finances either, he said. Perhaps for very good reasons, they have kicked the can on the fiscal deficit and debt targets down the road.
- The Chairman, however, said the Commission had not yet finalised whether it would be altering the previous Commission's recommendation that **42% of the Centre's tax revenue** be shared with the States.

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### **Massive Mountains beneath the earth's crust**

#### **Why in news?**

Scientists have discovered massive mountains **in the Earth's mantle**, an advance that may change our understanding of how the planet was formed.



Most school children learn that the Earth has three layers: a crust, mantle and core, which is subdivided into an inner and outer core. While that is not wrong, it does leave out several other layers that scientists have identified within the Earth.

### Earthquake data:



- In a study published in the journal *Science*, scientists used data from an enormous **earthquake in Bolivia** to find mountains and other topography on a layer located 660 km straight down, which separates the upper and lower mantle.
- Lacking a formal name for this layer, the researchers simply **call it “the 660-km boundary.”**
- To peer deep into the Earth, scientists from the Princeton University in the U.S. and the Institute of Geodesy and Geophysics in China, used the most powerful waves on the planet, which are generated by massive earthquakes.
- Data from earthquakes that are magnitude 7.0 or higher send out shockwaves in all directions that can travel through the core to the other side of the planet and back again.
- For this study, the key data came from waves picked up after a magnitude 8.2 earthquake the second-largest deep earthquake ever recorded that shook Bolivia in 1994.
- Scientists used powerful computers to simulate the complicated behaviour of scattering waves in the deep Earth.

### Study of waves:

- The technology depends on a **fundamental property of waves: their ability to bend and bounce.**
- Just as light waves can bounce (reflect) off a mirror or bend (refract) when passing through a prism, earthquake waves travel straight through homogenous rocks but reflect or refract when they encounter any boundary or roughness.
- All objects have surface roughness and therefore scatter light and the scattering waves carry the information about the surface's roughness.
- In this study, scientists investigated scattered seismic waves traveling inside the Earth to constrain the roughness of the Earth's 660-km boundary.

### Findings:



- The researchers were surprised by just how rough that boundary is rougher than the surface layer that we all live on.
  - In other words, **stronger topography than the Rocky Mountains or the Appalachians is present at the 660-km boundary.**
  - Their statistical model did not allow for precise height determinations, but there's a chance that these mountains are bigger than anything on the surface of the Earth.
  - The roughness was not equally distributed, either; just as the crust's surface has smooth ocean floors and massive mountains, the 660-km boundary has rough areas and smooth patches.
  - The researchers also examined a layer 410 km down, at the top of the **mid-mantle "transition zone,"** and they did not find similar roughness. The presence of roughness on the 660-km boundary has significant implications for understanding how our planet formed and evolved.
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### **President Kovind lauds farmers of Haryana**

#### **Why in news?**

President Ram Nath Kovind praised the farmers of **Haryana** for **adopting new methods to manage stubble and crop residue** as he honoured some of them with 'Kisaan Ratna' and 'Krishi Ratna' awards.

#### **Kisaan Ratna' and the 'Krishi Ratna' awards:**

- The President honoured farmers with the 'Kisaan Ratna' and the 'Krishi Ratna' awards.
- He said that the people and the government of Haryana were making efforts for the overall development of the State, including in enhancing ease of doing business and improving social indicators such as the child sex ratio.
- Adoption of modern, 21st century technologies in agriculture was part of this process. The farmers would benefit from such collaborations.
- The President called for locating farming in a wider entrepreneurial context, and **linking traditional farming to the agricultural value chain.**

- Mr. Kovind appreciated that farmers in Haryana, with the help from the State government, were adopting new methods to manage stubble and crop residue. He also expressed confidence that farmers would help find a solution to the problem of pollution emanating from stubble burning.

### **Menace of stubble burning:**

- Stubble burning by farmers in many States has been one of the major causes for air pollution for years, prompting the governments to ban the practice and encourage the growers to adopt alternative ways to manage crop residue.
  - Every year, Punjab and Haryana are blamed for rising air pollution and smog caused by crop residue burning by growers. The two States annually generate 220 lakh tonne and 65 lakh tonne of paddy stubble, respectively.
  - Farmers find stubble burning as an easy option as a way of its disposal in the wake of limited time available for next crop sowing.
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## **NBFC**

### **Why in news?**

After a steady growth over the past few fiscals, the trajectory of NBFCs (non-banking financial companies) and housing finance companies (HFCs) is set to change again after the latest round of liquidity challenges.

### **What is an NBFC:**

- A Non-Banking Financial Company (NBFC) is a company registered under the Companies Act, 1956 engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business but does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property.

- A non-banking institution which is a company and has a principal business of receiving deposits under any scheme or arrangement in one lump sum or in instalments by way of contributions or in any other manner is also a non-banking financial company (Residuary non-banking company).

### **How they are different from commercial Banks:**

- NBFC cannot accept demand deposits;
- NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself.
- Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs, unlike in case of banks.
- Unlike Banks which are regulated by the RBI, the NBFCs are regulated by multiple regulators; Insurance Companies- IRDA, Merchant Banks- SEBI, Micro Finance Institutions- State Government, RBI and NABARD.
- The norm of Public Sector Lending does not apply to NBFCs.
- The Cash Reserve Requirement also does not apply to NBFCs.



### **New Changes:**

- This fiscal, interest rates and borrowing costs started swinging north. This, coupled with liquidity issues faced by NBFCs in the last five months or so, have resulted in funding access challenges.
- Measures by the Government of India, the Reserve Bank of India, the State Bank of India, and the National Housing Bank have for sure mitigated the stress to an extent, but it's not business as usual yet.

### **Cutting disbursements:**

- In the third quarter of this fiscal, non-banks have curtailed disbursements by 20-40%, even more in the non-retail segments. Consequently, growth in assets under management (AUM) is expected to halve in the second half, and lower the entire fiscal's AUM growth to about 15%.
- The annualised growth of NBFCs in the first half of this fiscal was a healthy 20%, similar to the 18% compound annual growth seen between fiscals 2014 and 2018.
- This was because of their inherent strengths such as excellent customer relationships, adaptability, local knowledge and innovativeness.

- Their share of overall financial system credit, which rose 500 basis points (bps) since March 2014 to 18% in March 2018, is unlikely to change this fiscal, despite the expected moderation in growth. Over the medium term, as access to funding improves, retail asset classes should exhibit a relatively steady growth.

### **Intense competition:**

- Nevertheless, competition will remain intense, especially from private sector banks and potentially from some large public sector banks, as they find their mojo back after asset quality challenges recede.
- Further, wholesale lending, which has been one of the growth engines in the recent times for NBFCs, will decelerate.
- This could have second-order effects on the asset quality for this book. Delinquencies could increase, given the fact that credit flow to the sector is slowing down. We also remain watchful of the asset quality in small and medium enterprises financing, especially the loans against property (LAP) segment. That is because of the sensitivity of borrowers to prolonged funding crunch.
- Since 2015, stress in LAP has been coming to the fore. With seasoning of the portfolios and reduction in balance transfer cases, non-performing assets (NPAs) in LAP are expected to rise further and cross 3% in the medium term.
- However, quality in the traditional retail asset classes such as vehicle finance and home loans is unlikely to be impacted much, given the granularity of loan books.

### **Major shifts ahead:**

- One, there will be a structural shift in the liquidity and liability management of NBFCs. The quantum and quality of liquidity cushion would become a key differentiator, going ahead.
- Low interest rates between fiscals 2015 and 2018 led to higher capital market borrowings, especially short-term, by NBFCs.
- This led to a mismatch in asset-liability maturity profiles for entities with longer-term assets. While most NBFCs had maintained adequate bank lines for these, access in a timely manner became challenging, putting the spotlight on cash and equivalents in balance sheets. Diversification in bank lines and ensuring steady access to sanctioned bank lines will also be a focus area.

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## **Policy bias against rainfed agriculture**

### **What is the issue?**

Three out of five farmers in India grow their crops using rainwater, instead of irrigation. However, per hectare government investment into their lands may be 20 times lower, government procurement of their crops is a fraction of major irrigated land crops, and many of the government's flagship **agriculture** schemes are not tailored to benefit them.

### **Rainfed agriculture atlas:**



- A new rainfed agriculture atlas released this week not only maps the **agro biodiversity and socio-economic conditions** prevailing in such areas, but also attempts to document the policy biases that are making farming unviable for many in these areas.
- There has been “negligence” toward rainfed areas which is leading to **lower incomes for farmers in these areas**, admitted **Ashok Dalwai, CEO of the National Rainfed Area Authority**.
- He also heads the **government's Committee on Doubling of Farmers' Income**.

### **Difference between rainfed and irrigated agriculture:**

- Speaking on the side-lines of a conference on revitalising agriculture in rainfed areas, he said farmers in rainfed areas are **receiving 40% less of their income from agriculture in comparison to those in irrigated areas**.
- Sabyasachi Das, coordinator of the **Revitalising Rainfed Agriculture (RRA) Network, which published the atlas**, laid out the stark differences in government policy and expenditure.
- Lands irrigated through big dams and canal networks get a per hectare investment of ₹5 lakh. Watershed management spending in rainfed lands is only ₹18,000-25,000 and the difference in yield is not proportionate to the difference in investment.

### **Policy bias:**

- When it comes to procurement, over the decade between 2001-02 and

2011-12, the government spent ₹5.4 lakh crore on wheat and rice. Coarse cereals, which are grown in rainfed areas, only had ₹3,200 crore worth of procurement in the same period.

- It's not just the quantum, but also the nature of investment that needs to change. Flagship government schemes, such as seed and fertiliser subsidies and soil health cards, are designed for irrigated areas and simply extended to rainfed farmers without taking their needs into consideration.
- For example, many hybrid seeds notified by the government scheme need plenty of water, fertiliser and pesticides to give high yields and are thus not useful to most rainfed farmers.
- Commercial fertilisers will simply burn out the soil without sufficient water. The government has no system to channelize indigenous seeds or subsidise organic manure in the same way.
- More balanced approach was needed, to give rainfed farmers the same research and technology focus, and production support that their counterparts in irrigation areas have received over the last few decades.
- In the long run, cash incentives and income support like the PM-KISAN scheme announced in the budget earlier this month were better than extensive procurement.
- It's secular in character, and doesn't distinguish between farmers in one area or another, growing one crop or another.
- While income support was important to help farmers through the current crisis, it is now the time to design better structured interventions for the future.
- Everyone talks of the ease of doing business, but no one is talking of the ease of doing farming. If we don't ease the problems of seeds, soil, water in rainfed areas, farmers will simply leave agriculture in the long term.



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### **Thoothukudi Sterlite plant closure**

#### **Why in news?**

The Supreme Court's decision on a batch of appeals against an order by the National Green Tribunal directing reopening of Sterlite Copper at Thoothukudi is awaited with more than customary interest by a host of downstream units, especially the electrical and telecom industries.



## **SC verdict:**

- The apex court is expected to give verdict on the appeals on Monday. The consumption of refined copper is estimated at about 6.5 lakh tonnes.
- Electrical industry accounts for about 40% of copper consumption, followed by wire and cable which account for 28%.
- The growth of the copper industry is highly dependent on the demand for products such as power and telecommunication cables, transformers, generators, radiators and other ancillary components.
- Hence, its growth is closely linked with the country's economic and industrial growth," said an industry source.
- The share of electrical and telecom industry in total consumption is 56%. This is followed by transport (8%), consumer durables (7%), building and construction (7%), general engineering goods (6%) and others (16%).

## **Impacts of closure:**

- Since the closure of the Sterlite unit, consuming units have been forced to rely on costlier imports. Some have also been forced to scale down operations or even shut shop due to the copper shortage.
  - The consuming units are under tremendous pressure especially since the closure of the Sterlite unit. Many a consuming unit has been forced to rely on costlier import for its copper needs.
  - Instances are also aplenty where downstream units have either been forced to scale down operations or shut down completely in the wake of copper shortage.
  - Import of copper cathode, rods and wires is expected to increase over 40%.
  - FDI in telecom helped raise tele-density from 0.4%-9% in the last 10 years. This success will create a huge opportunity for copper in the last mile in the form of structured wiring and coaxial cables in India.
  - In fact, two of the country's major telecom major units BSNL and MTNL consume 10% of the copper production. Given this, the industry is hoping that Supreme Court verdict will break the logjam in the Sterlite imbroglio.
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## **HAM Radio**

### **Why in news?**

Members of the **Amateur Radio Society of Odisha** got together at an uninhabited island within the Chilika lake to test their operational skill and technology to help the public during natural calamities such as cyclonic storms.

### **About the test:**



- The team had chosen this island as it is inaccessible by conventional telecommunication network.
- During their two-day camp at the island eight licensed private HAM radio operators of Odisha experimented transmission of messages to the outside world through radio signals.

### **Used solar power:**

- It was an attempt to simulate real-life situation during any natural calamity when all conventional modes of communication cease to exist. To simulate such a situation, they remained cut-off from the outside world for two days and used solar power to operate our HAM radios. A bamboo pole was used as an antenna tower.
- Amateur radio operators can link up with other HAM enthusiasts through 'short wave' radio frequency.

### **Contacted 130 operators:**

- During the event, these operators, despite their lack of infrastructure, managed to contact around 130 Amateur radio operators around the world.
- Around 90 of these were from different parts of India while others were from countries including Denmark, Russia, Indonesia, Thailand and Australia. They made contacts with HAM enthusiasts of neighbouring countries except Pakistan.
- According to ARSO members, the importance of HAM radios during natural calamities has not diminished in this era of advanced communication.
- According to them, during the Titli cyclone, Gajapati district was completely cut-off from the outside world for a few hours. During that

time HAM radio with the Odisha Disaster Rapid Action Force became the main means of communication of the district administration with the outside world.

**A big help:**

- ARSO members feel that an increase in the number of Amateur radio enthusiasts in the State can be a major help to society in a cyclone and flood-prone State like Odisha.
- Puri district administration representatives arrived at the island to watch the experiments being conducted by the Amateur radio activists.
- There are youths with technical education in electronics and telecommunication in all parts of Odisha who can take up Amateur radio as a hobby and help society at the time of need.

