

#### **KOALAS**



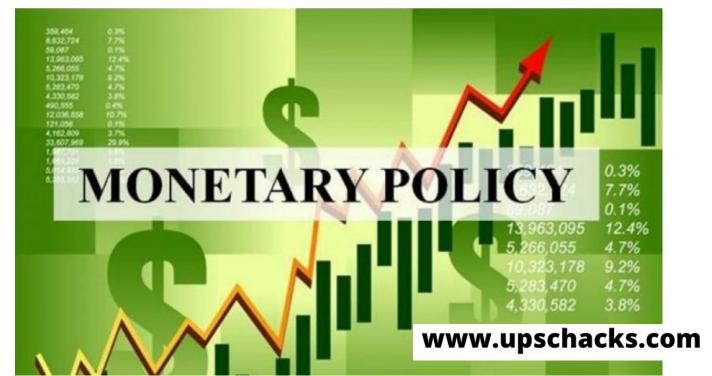
- Once found in abundance, Australia's much-loved koalas have now been officially classified as 'endangered' after widespread bushfires, drought and land clearing destroyed much of their eucalyptus-rich habitat.
- Government upgraded the conservation status of the marsupials from 'vulnerable' to 'endangered' in Queensland, New South Wales and the Australian Capital Territory, based on the recommendation of the threatened species scientific committee.
- Koala species have inhabited parts of Australia for at least 25 million years, a WWF report states. But today, only one species remains — the Phascolarctos cinereus. They are found in the wild in the southeast and eastern sides of Australia — in coastal Queensland, New South Wales, South Australia and Victoria.

## NABARD launched 'JIVA Programme' to promote natural farming



- National Bank for Agriculture and Rural Development (NABARD) has launched the 'JIVA programme' to promote natural farming under its existing watershed and wadi programmes in 11 states.
- To effectively implement the principles of agroecology longterm sustainability and transform the pre-existing social and natural capital towards efficient farming.
- JIVA is an agroecology-based programme, an amalgamation of several projects under the watershed programme of NABARD and will be implemented in 11 states covering five agroecological zones, which are in ecologically fragile and rain-fed areas.

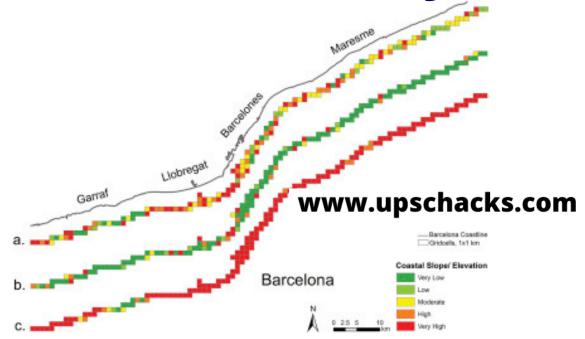
#### **MONETARY POLICY**



- The Reserve Bank of India maintained status quo in policy rates as the Monetary Policy Committee (MPC) voted unanimously to keep the policy reportate at 4% to keep the stance accommodative.
- While announcing the Bi-monthly policy RBI Governor Shaktikant Das said, MSF rate and bank rate will remain unchanged at 4.25%.
- Reverse repo rate will also remain unchanged at 3.35%.
- MPC has voted 5-1 to continue accommodative monetary policy stance as long as necessary to revive and sustain growth and mitigate impact of #COVID19 on the economy, while ensuring inflation remains within target.

- He projected real GDP growth at 9.2% for 2021-22 and said that it is modestly above level of GDP for 2019-20. Real GDP growth for 2022-23 was projected at 7.8%.
- He announced that Variable Rate Repo operations of varying tenures will henceforth be conducted as and when warranted.
- Variable rate repos and variable rate reverse repos of 14-day tenures will operate as the main liquidity management tool.
- He informed that from March 1, 2022, fixed rate reverse repo and MSF operations will be available only during 5.30 PM to 11.59 PM on all days, instead of from 9.00 AM to 11.59 PM.
- He also announced some additional measures like extension of On-tap Liquidity Facilities for Emergency Health Services and Contact-intensive Sectors, voluntary retention route (VRR) - Enhancement of Limits, Review of Credit Default Swaps (CDS) Guidelines, Permission for Banks to deal in Foreign Currency Settled - Rupee Derivatives Market etc.

### **Coastal Vulnerability Index**



- The CVI uses the relative risk that physical changes will occur as sea-level rises are quantified based on parameters like: tidal range; wave height; coastal slope; coastal elevation; shoreline change rate; geomorphology; and historical rate of relative sea-level change.
- From this CVI, it can be delineated that Gujarat's 124 coastal kilometers is going to get affected or 5.36%, Maharashtra 11 km or 1.22% and then Karnataka & Goa 48 km or 9.54%, Kerala 15 km or 2.39%, Tamil Nadu 65 km or 6.38%, Andhra Pradesh 6 km or 0.55 %, Odisha 37 km or 7.51% West Bengal 49 km or 2.56%, Lakshadweep Islands 1 km or 0.81%, Andaman Islands 24 km or 0.96km and Nicobar Islands 8 km or 0.97%.

- These maps determine the coastal risks due to future sealevel rise based on the physical and geological parameters for the Indian coast.
- The coastal vulnerability assessments can be useful information for coastal disaster management and building resilient coastal communities.
- A coastal Multi-Hazard Vulnerability Mapping (MHVM) was also carried out using parameters like sea level change rate, shoreline change rate, high-resolution coastal elevation, extreme water level from tide gauges and their return periods.
- These parameters were synthesized to derive the composite hazard zones that can be inundated along the coastal lowlying areas due to extreme flooding events.
- This MHVM mapping was carried for the entire mainland of India.

#### "SMILE" scheme



- This umbrella scheme, under the aegis of Department of Social Justice & Empowerment, is designed to provide welfare measures to the Transgender community and the people engaged in the act of begging.
- Additionally, Skill development/ vocational training will be provided to attain capacity, capability and desirability so that they can sustain and live a life of dignity by engaging in self-employment.
- Pilot projects initiated on Comprehensive Rehabilitation intercities namely Delhi, Bangalore, Chennai, Hyderabad, Indore, Lucknow, Mumbai, Nagpur, Patna and Ahmedabad.
- The scheme includes two sub-schemes-
- Central Sector Scheme for Comprehensive Rehabilitation for Welfare of Transgender Persons and

- Central Sector Scheme for Comprehensive Rehabilitation those engaged in the act of Begging'.
- The sub schemes will be implemented by a party consisting of National Coordinators along with a suitable team which will be created in the Ministry.
- The qualifications of the National Coordinator, emoluments, powers and functions and line of command will be as prescribed by the Department of Social Justice & Empowerment.
- Besides, the components will be monitored at regular intervals by the Ministry including Project Monitoring Unit (PMU) or any other agency/unit appointed by the Ministry of Social Justice & Empowerment.
- The Ministry has allocated Rs. 365 Crore for the scheme from 2021-22 to 2025-26.

#### Khaibar-buster missile

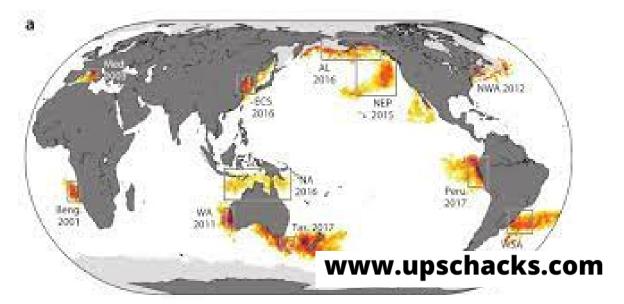


- Iran has unveiled a new missile called Khaibar-buster, with a reported range that would allow it to reach both US bases in the region as well as targets inside its archfoe Israel.
- The missile uses solid fuel and has a range of 1,450 kilometers, or 900 miles.
- It is called the Khaibar-buster, a reference to a Jewish castle overrun by Muslim warriors in the early days of Islam.
- This missile has high accuracy, is manufactured completely domestically, and can defeat missile shield systems.
- Israel's closest point to Iran is some 1,000 kilometers (620 miles) away.
- Iran has missiles that can travel up to 2,000 kilometers, 1250 miles.

- Iran, which has long said it does not seek nuclear weapons, insists its missile program is only a deterrent.
- Earlier in January Iran tested an engine for a solid-fuel rocket designed to launch satellites.



#### **Marine heatwaves**



- An underwater survey showed that 85% of the corals in the Gulf of Mannar near the Tamil Nadu coast got bleached after the marine heatwave in May 2020.
- The Western Indian Ocean region experienced the largest increase in marine heatwaves at a rate of about 1.5 events per decade, followed by the north Bay of Bengal at a rate of 0.5 events per decade.
- From 1982 to 2018, the Western Indian Ocean had a total of 66 events, while the Bay of Bengal had 94 events.
- The marine heatwaves in the Western Indian Ocean and the Bay of Bengal increased drying conditions over the central Indian subcontinent.
- Correspondingly, there is a significant increase in the rainfall over south peninsular India in response to the heatwaves in the north Bay of Bengal.

- These changes are in response to the modulation of the monsoon winds by the heatwaves.
- This is the first time that a study has demonstrated a close link between marine heatwaves and atmospheric circulation and rainfall.
- Climate model projections suggest further warming of the Indian Ocean in the future, which will very likely intensify the marine heatwaves and their impact on the monsoon rainfall.
- According to the National Oceanic and Atmospheric Administration of the United States, around 90 per cent of the warming caused by greenhouse gas emissions is absorbed by the oceans.
- The increase in marine heat waves was due to rapid warming in the Indian Ocean and strong El Nino events.
- This study was conducted by researchers and scientists from the Indian Institute of Tropical Meteorology, Pune, Kerala Agriculture University and Cochin University of Science and Technology.

#### **One Ocean summit**



- One Ocean Summit was organized by France (in the context of the French Presidency of the Council of the European Union) from 9-11 February, in Brest, France, in cooperation with the United Nations and the World Bank.
- The United Nations Environment Programme (UNEP) hosted two workshops on February 9 during the summit– Sustainable Tourism in the Blue Economy workshop and the Marine Protected Areas (MPA) workshop.
- The objective of the Summit is to mobilize the international community to take tangible action towards preserving and supporting healthy and sustainable ocean ecosystems.
- It also aims to raise the international community's level of ambition on maritime issues and translate our shared responsibility for the Ocean into concrete actions.

 It focuses in particular on the protection of marine ecosystems and sustainable fisheries, the fight against pollution (especially plastic), climate change, and ocean governance. The Summit contributes to the Decade of Ocean Science for Sustainable Development (2021-2030) that seeks to support transformative ocean science solutions for sustainable development, connecting people and our ocean.

#### The 7 Ocean Decade Outcomes are:

- A clean ocean where sources of pollution are identified and reduced or removed.
- A healthy and resilient ocean where marine ecosystems are understood, protected, restored and managed.
- A productive ocean supporting sustainable food supply and a sustainable ocean economy.
- A predicted ocean where society understands and can respond to changing ocean conditions.
- A safe ocean where life and livelihoods are protected from ocean-related hazards.
- An accessible ocean with open and equitable access to data, information and technology and innovation.
- An inspiring and engaging ocean where society understands and values the ocean in relation to human wellbeing and sustainable development.

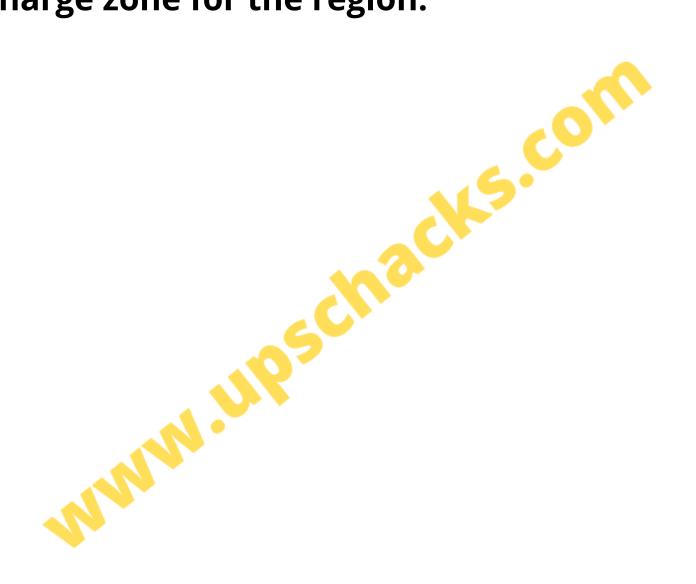
## India's first OECM site- Aravalli Biodiversity Park



- OECM is a geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity, with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.
- The OECM tag is given by the International Union for Conservation of Nature (IUCN) to areas that are not protected but support rich biodiversity.

- It does not bring any legal, financial or management implications, but designates the area as a biodiversity hotspot on the international map.
- The OECM areas were defined at the Convention on Biological Diversity that was held in 2018.
- The proposal to declare Aravalli Biodiversity Park an OECM site was sent by the National Biodiversity Authority to the IUCN in December 2020.
- It is spread across 390 acres near Gurgaon, Haryana and contains ecologically restored and semi-arid land vegetation.
- It has around 300 native plants, 101,000 trees, 43,000 shrubs, and several species of birds.
- The park was transformed into a city forest from a 40-yearold mining site through the efforts of citizens, ecologists and scientists along with the help of the urban local body of Gurugram.
- The park had several mining pits and large, barren valley-like spaces.
- These valleys were restored with native plants that helped in seasonal water accumulation, making them special micro-habitats within the larger Aravalli landscape.

- The work started in the year 2010, when a citizens group called IAmGurgaon, wanted to save the Aravallis and create a public space.
- In April last year, the MCG signed a memorandum of understanding (MoU) with Hero MotoCorp Limited for the ecological restoration and conservation of the Aravalli Biodiversity Park till 2031, and formally handed over its management in July.
- The Aravallis, one of the oldest mountain ranges in the world, are considered the green lungs of Delhi-NCR, a crucial water recharge zone for the region.



# New planet detected around star closest to the Sun: European Southern Observatory



A team of astronomers using the European Southern Observatory's Very Large Telescope (ESO's VLT) in Chile have found evidence of another planet orbiting Proxima Centauri, the closest star to our Solar System.

- This candidate planet is the third detected in the system and the lightest yet discovered orbiting this star.
- At just a quarter of Earth's mass, the planet is also one of the lightest exoplanets ever found.
- The newly discovered planet, named Proxima d, orbits Proxima Centauri at a distance of about four million kilometres, less than a tenth of Mercury's distance from the Sun. It orbits between the star and the habitable zone — the area around a star where liquid water can exist at the surface of a planet — and takes just five days to complete one orbit around Proxima Centauri.

## Brazil's Amazon deforestation hits record Jan high, 5 times higher than 2021



- Brazil recorded the most deforestation ever in the Amazon rainforest for the month of January, five times higher than January 2021, government data showed.
- Deforestation in Brazil's Amazon totalled 430 square kilometres last month, an area more than seven times the size of Manhattan, New York.
- This is the highest for January since the current data series began in 2015/2016.