

# News Analysis (18 Feb, 2021)

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## India Energy Outlook 2021: IEA

## Why in News

Recently, the **International Energy Agency (IEA)** has released the **India Energy Outlook 2021 Report** which explores the opportunities and challenges ahead for India as it seeks to ensure reliable, affordable and sustainable energy for a growing population.

The India Energy Outlook 2021 is a new special report from the IEA's World Energy Outlook series.

## **Key Points**

- Third Largest Energy Consumer by 2030:
  - o India will make up the biggest share of energy demand growth at 25% over the next two decades, as it overtakes the European Union as the world's thirdbiggest energy consumer by 2030.

Presently, India is the fourth-largest global energy consumer behind China, the **United States** and the **European Union**.

- India's energy consumption is expected to nearly double as the nation's Gross **Domestic Product (GDP)** expands to an estimated USD 8.6 trillion by 2040 under its current national policy scenario.
- **Prior** to the global **pandemic**, India's energy demand was **projected to increase** by almost 50% between 2019 and 2030, but growth over this period is now closer to 35%.
- Industrialisation is a Major Driving Force:
  - Over the last three decades, India accounted for about 10% of World Growth in Industrial Value-added [in Purchasing Power Parity (PPP) terms].
  - By 2040, India is set to account for almost 20% of Global Growth in Industrial value-added, and to lead global growth in industrial final energy consumption, especially in steelmaking.

### • Reliance on Imports:

- India's growing energy needs will make it more reliant on fossil fuel imports as its
  domestic oil and gas production has been stagnant for years despite
  government policies to promote petroleum exploration and production and renewable
  energy.
- Rising oil demand **could double India's oil import bill** to about USD 181 billion by 2030 and nearly treble it to USD 255 billion by 2040 compared with 2019.

#### • Oil Demand:

- India's oil demand is seen rising by 74% to 8.7 million barrels per day by 2040 under the existing policies scenario.
- A **five-fold increase in per capita car ownership** will result in India leading the oil demand growth in the world.
- Its **net dependence on oil imports** taking into account both the import of crude oil and the export of oil products **increases to more than 90% by 2040 from the current 75%** as domestic consumption rises much more than production.

#### • Gas Demand:

- India will become the **fastest-growing market for Natural gas**, with demand **more than tripling by 2040.**
- Natural gas import dependency increased from 20% in 2010 to almost 50% in 2019 and is set to grow further to more than 60% in 2040.

#### • Coal Demand:

- Coal currently dominates India's electricity sector, accounting for over 70% of overall generation.
- Coal demand is seen rising to 772 million tonnes in 2040 from the current
   590.

### • Renewables Energy Resources Demand:

India's share in the **growth** in **renewable energy** is the **second-largest** in the world, **after China**.

#### **International Energy Agency**

- The International Energy Agency is an **autonomous Intergovernmental Organisation** established in 1974 in Paris, France.
- IEA mainly focuses on its energy policies which include **economic development**, **energy security and environmental protection**. These policies are also known as the 3 E's of IEA.
- India became an **Associate member of IEA in March 2017** but it was in engagement with IEA long before its association with the organization.

Recently, India has **inked a <u>Strategic Partnership Agreement with the IEA</u>** to strengthen cooperation in global energy security, stability and sustainability.

- The World Energy Outlook Report is released by the IEA annually.
- <u>IEA Clean Coal Centre</u> is dedicated to providing independent information and analysis on how coal can become a cleaner source of energy, compatible with the UN Sustainable Development Goals.

## **Way Forward**

- As the world seeks ways to accelerate the pace of transformation in the energy sector, **India** is in a unique position to pioneer a new model for low-carbon, inclusive growth. If this can be done, it will show the way for a whole group of energy-hungry developing economies, by demonstrating that robust economic expansion is fully compatible with an increasing pace of emissions reductions and the achievement of other development goals.
- India is already a global leader in solar power, and **solar combined with batteries will play a massive part in India's energy future.** But India will need a whole host of technologies and policies to chart this new path.
- As new industrial sectors emerge and clean energy jobs grow, India will also need to ensure that no one is left behind, including in those regions that are heavily dependent on coal today.

#### Source:IE

# **Draft Blue Economy Policy**

## Why in News

Recently, the Ministry of Earth Sciences (MoES) has rolled out the **draft Blue Economy policy**, inviting suggestions and inputs from various stakeholders.

It is in line with the Government of India's Vision of New India by 2030.

## **Key Points**

- About:
  - The policy document highlighted the blue economy as **one of the ten core dimensions for national growth.**
  - It emphasizes policies across several key sectors to **achieve holistic growth** of India's economy. It recognizes the following seven thematic areas:
    - National accounting framework for the blue economy and ocean governance.
    - Coastal marine spatial planning and **tourism**.
    - Marine **fisheries**, **aquaculture**, and fish processing.
    - Manufacturing, emerging industries, trade, technology, <u>services</u>, and <u>skill</u> <u>development.</u>
    - Logistics, infrastructure and shipping, including trans-shipments.
    - Coastal and deep-sea mining and offshore energy.
    - Security, strategic dimensions, and international engagement.

#### • Aims:

• Enhance contribution of the blue economy to India's **Gross Domestic Product (GDP)**.

The blue economy, which consists of economic activities dependent on marine resources, comprises **4.1% of India's economy.** 

- Improve lives of coastal communities.
- Preserve marine biodiversity.
- Maintain the national security of marine areas and resources.

## • Reason and Need for a Blue Economy Policy:

- Vast Coastline:
  - With a coastline of nearly 7.5 thousand kilometers, India has a unique maritime position.
  - Nine of its 28 states are coastal, and the nation's geography includes 1,382 islands.
  - There are nearly **199 ports**, including **12 major ports** that handle approximately **1,400** million tons of cargo each year.



### • Utilisation of Non-living Resources:

India's <u>Exclusive Economic Zone</u> of over 2 million square kilometers has a huge living and non-living resources with significant recoverable resources such as **crude oil and <u>natural gas</u>**.

#### Sustenance of Coastal Communities:

The coastal economy sustains over 4 million **fisherfolk and coastal** communities.

### • Other Related Initiatives by India:

## • India-Norway Task Force on Blue Economy for Sustainable Development :

It was inaugurated jointly by both the countries in 2020 to **develop and follow up joint initiatives** between the two countries.

### Sagarmala Project:

- The <u>Sagarmala project</u> is the <u>strategic initiative for port-led</u> development through the extensive use of IT enabled services for modernization of ports.
- It aims at developing Inland <u>waterways</u> and coastal shipping which will revolutionize maritime logistics, creating million new jobs, reducing logistics costs etc.
- It focuses on the **development of coastal communities and people** in the sustainable use of ocean resources, modern fishing techniques and coastal tourism.

#### • O-SMART:

India has an umbrella scheme by the name of **O-SMART** which aims at regulated use of oceans, marine resources for sustainable development.

### • Integrated Coastal Zone Management:

It focuses on conservation of coastal and marine resources, and improving livelihood opportunities for coastal communities etc.

#### National Fisheries Policy :

India has a National Fisheries policy for promoting 'Blue Growth Initiative' which focus on sustainable utilization of fisheries wealth from the marine and other aquatic resources

### Global Steps:

<u>Sustainable Development Goal (SDG)- 14</u> seeks to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

#### **Blue Economy**

- The concept was introduced by **Gunter Pauli in his 2010 book-** "The Blue Economy: 10 years, 100 innovations, 100 million jobs".
- It is the sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.
- It **advocates the greening of ocean development strategies** for higher productivity and conservation of ocean's health.

- It encompasses-
  - <u>Renewable Energy</u>: Sustainable marine energy can play a vital role in social and economic development.
  - **Fisheries:** Sustainable fisheries can generate more revenue, more fish and help restore fish stocks.
  - **Maritime Transport:** Over 80% of international goods traded are transported by sea.
  - **Tourism:** Ocean and coastal tourism can bring jobs and economic growth.
  - <u>Climate Change</u>: Oceans are an important carbon sink (blue carbon) and help mitigate climate change.
  - Waste Management: Better waste management on land can help oceans recover.
- Blue Economy emphasizes on integration of development of the ocean economy with social inclusion, environmental sustainability, combined with innovative business models.

## **Way Forward**

- With its vast maritime interests, the blue economy occupies **a vital potential position in India's economic growth.**
- It could well be the **next multiplier of GDP and well-being**, provided sustainability and socio-economic welfare are kept center-stage.
- Therefore, India's draft blue economy policy is envisaged as a **crucial framework towards unlocking the country's potential** for economic growth and welfare.

### **Source: PIB**

### **Certified Jute Seeds**

### Why in News

The **Ministry of Textiles** has launched a **Certified Jute Seed Distribution Plan** under **Jute ICARE Program.** 

Jute Corporation of India (JCI) had in 2019, signed an MoU (Memorandum of Understanding) with National Seeds Corporation for commercial distribution of 1,000 Metric Tonne certified jute seeds for the year 2021-22.

## **Key Points**

#### • Certified Jute Seed Distribution Plan:

- It will expand usage of certified seeds to over 55% area under Jute Cultivation.
   Certified seed shall be the progeny of foundation seed and its production shall be so handled as to maintain specific genetic identity and purity according to the standards prescribed for the crop being certified.
- It will extend the benefit of certified seeds to nearly 5 lakh farmers.
- Usage of certified jute seeds has **resulted in improved quality of jute by 1 grade** and **enhanced productivity by 15%** thereby **increasing income of jute farmers by about Rs. 10,000/hectare.**

## • Jute ICARE Program:

Launch: Improved Cultivation and Advanced Retting Exercise for Jute
 (Jute ICARE) was launched in 2015.

The programme was **initiated by the National Jute Board (NJB)** in association with **Central Research Institute for Research in Jute and Allied Fibres (CRIJAF)** & Jute Corporation of India (JCI).

- **Aims:** At **mechanization** in jute farming in a farmer-friendly way and **accelerated retting using microbial consortium** for improved income for jute farmers.
- Following Inputs are Provided:
  - 100% **Certified Seeds** at subsidized rate.
  - Demonstration of scientific jute cultivation practices for adoption at farmers' fields with mechanical intervention distribution of seed drill / Nail Weeder/Cycle Weeder.
  - Demonstration of Microbial retting using CRIJAF SONA, a microbial consortium and also distribution to the farmers.

**Retting** is the process of extracting fiber from the stem of the plants.

• So far, Government has **supported 2.60 lakhs farmers** under ICARE Program.

- Other Steps Taken to Promote Jute Industry:
  - **Increased in MSP:** The **Minimum Support Price** (MSP) for Jute has been increased from Rs. 2400 in 2014-15 to Rs. 4225 in 2020-21.
  - Retting Tanks: Construction of 46000 Retting Tanks has been approved for increasing productivity, quality and income of Jute Farmers, which will be done by the convergence of Central Government Schemes like <u>MNREGA</u>, <u>PMKSY</u>, <u>RKVY</u> and ICARE.

This will **reduce retting time by 7 days** and **generate 46 lakh man-days of employment** for the rural mass of Jute Growing States.

• Jute Packaging Materials Act, 1987: Through the <u>Jute Packaging Materials</u> (JPM) Act, the Government is protecting the interests of about 4 lakh workers and 40 lakh farm families.

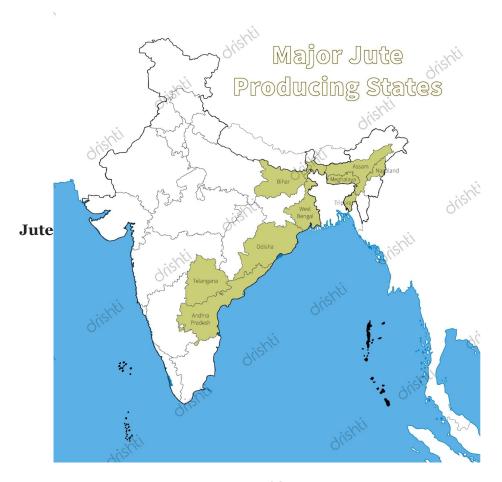
The Act provides for the compulsory use of jute packaging material in the supply and distribution of certain commodities in the interests of production of raw jute and jute packaging material, and of persons engaged in the production thereof, and for matters connected therewith.

Jute Geo-Textiles (JGT): The <u>Cabinet Committee on Economic Affairs</u>
 (CCEA) has approved a <u>Technical Textiles Mission</u> which includes Jute <u>Geo-</u>
 Textiles.

JGT is one of the most important diversified jute products. It can be applied in many fields like **civil engineering**, **soil erosion control**, **road pavement construction and protection of river banks**.

- Jute SMART:
  - It is an e-government initiative which was launched in December 2016 to promote transparency in the jute sector.
  - It provides an integrated platform for procurement of sacking by Government agencies.
- Collaboration between the National Jute Board and the National Institute of Design, Ahmedabad:

A **Jute Design Cell** for development of Jute Shopping Bags and Lifestyle Accessories has been set up at the Innovative Centre for Natural Fibres (ICNF) of National Institute of Design (NID), Ahmedabad.



• **Temperature:** Between 25-35°C

• Rainfall: Around 150-250 cm

• **Soil Type:** Well drained alluvial soil.

• Production:

- India is the **largest producer of jute.**
- It is mainly concentrated in eastern India because of the rich alluvial soil of Ganga-Brahmaputra delta.
- Major jute producing states include **West Bengal**, **Bihar**, **Odisha**, **Assam**, **Andhra Pradesh**, **Meghalaya and Tripura**.
- Uses:

It is known as the **golden fibre**. It is used in making **gunny bags**, **mats**, **ropes**, **yarn**, **carpets and other artefacts**.

• Government Initiatives:

Golden Fibre Revolution and Technology Mission on Jute and Mesta are two of the government initiatives to boost jute production in India.

Due to its **high cost**, it is **losing market to synthetic fibres and packing materials**, particularly nylon.

#### Source:PIB

### **RBI Directives to HFCs**

## Why in News

Recently, the **Reserve Bank of India (RBI)** issued directives to **Housing Finance Companies (HFCs).** 

• HFCs are specialized <u>Non-Banking Financial Company (NBFC)</u>. Recently, the RBI came up with the new definition of HFCs. To qualify as HFCs, a NBFC must have **50%** assets as housing loans and **75%** of which should be for individual homebuyers.

The RBI took over the powers to regulate HFCs from the National Housing Bank (NHB) in 2019.

• The directions, which shall come into force with an **immediate effect**, are aimed at **preventing the affairs of any HFCs** from being conducted in a manner **detrimental to the interest of investors and depositors**.

## **Key Points**

### • Liquidity Risk Management:

- All non-deposit taking HFCs with asset size of Rs.100 crore and above and all deposit taking HFCs (irrespective of asset size) shall pursue **liquidity risk management.**
- It should cover adherence to gap limits, making use of **liquidity risk monitoring tools** and adoption of stock approach to liquidity risk.

## • Liquidity Coverage Ratio (LCR):

HFCs shall maintain a **liquidity buffer** in terms of **LCR**, which will promote their resilience to potential liquidity disruptions by ensuring that they have sufficient **High-Quality Liquid Asset (HQLA)** to survive any acute liquidity stress scenario lasting for 30 days.

### • Loan-To-Value (LTV) Ratio:

- HFCs lending against the collateral of listed shares shall maintain a LTV ratio of 50%.
- For loans granted **against the collateral of gold jewellery**, HFCs shall maintain an LTV ratio **not exceeding 75%.**

### • Investment Grade Rating:

The central bank also **prevented HFC to accept or renew public deposits** unless it has obtained a minimum investment grade rating for fixed deposits from any one of the approved **credit rating agencies**, at least once a year.

### • Cover For Public Deposits:

• The RBI asked HFCs to ensure that at all times, there is full cover available for public deposits accepted by them.

In case an HFC **fails to repay** any public deposit or part thereof as per the terms, **it shall not grant any loan or other credit facility or make any investment or create any other asset** as long as the default exists.

• The central bank also barred HFCs to lend against their own shares.

## • Capital Adequacy Ratio (CAR):

Every housing finance company **shall maintain a minimum** <u>CAR</u> on an ongoing basis.

It shall not be less than 13% as on March, 2020, 14% on or before March, 2021, and 15% on or before March, 2022.

## • Lending Limit:

An HFC also cannot lend to any single borrower exceeding **15% of its owned fund**, and any single group of borrowers exceeding twenty-five per cent of its owned fund.

## • Investment in other Companies:

It also cannot invest in the shares of another company exceeding **15% of its owned fund** and in shares of a single group of companies exceeding **25% of its owned funds.** 

## • Market Exposure:

The RBI said the aggregate exposure of an HFC to the capital market in all forms (both fund based, and non-fund based) **should not exceed 40% of its net worth** as on March 31 of the previous year.

#### **Key Words**

## • Liquidity:

It is the ability of a firm, company, or even an individual to pay its debts without suffering catastrophic losses.

### • Liquidity risk:

It stems from the **lack of marketability of an investment that can't be bought** or sold quickly enough to prevent or minimize a loss. It is typically reflected in unusually wide bid-ask spreads or large price movements.

## • Liquidity Risk Management:

Liquidity risk management encompass the processes and strategies a bank uses to:

- Ensure a **balance sheet earns a desired net interest margin**, without exposing the institution to undue risks from the interest rate volatility.
- Plan and structure a balance sheet with a proper mix of assets and liabilities, to optimize the risk/return profile of the institution going forward.
- Assess its ability to meet its cash flow and collateral needs (under both normal and stressed conditions) without having a negative impact on day-to-day operations or its overall financial position.
- Mitigate that risk by developing strategies and taking appropriate actions designed to ensure that necessary funds and collateral are available when needed.

### • Liquidity Coverage Ratio (LCR):

It refers to the proportion of highly liquid assets held by financial institutions, to ensure their ongoing ability to meet short-term obligations.

#### • Loan-To-Value (LTV) Ratio:

It is a financial term used by lenders to express the ratio of a loan to the value of an asset purchased.

### • Liquidity Buffer:

It refers to the stock of liquid assets that a banking organization manages to enable it to meet expected and unexpected cash flows and collateral needs without adversely affecting the banking organization's daily operations.

## • Capital Adequacy Ratio (CAR):

It is the ratio of a bank's capital in relation to its risk weighted assets and current liabilities. It is also known as **Capital-to-Risk Weighted Asset Ratio (CRAR).** It is decided by central banks to prevent commercial banks from taking excess leverage and becoming insolvent in the process.

#### Source:TH

## **Gangetic River Dolphin**

## Why in News

Recently, a **Gangetic Dolphin** was beaten to death in Pratapgarh, Uttar Pradesh.

Killing the Gangetic River Dolphin is a punishable offence under the **Wildlife Protection Act**, **1972**.

## **Key Points**



About:

- Scientific Name: Platanista gangetica
- The Ganges River Dolphin was officially discovered in 1801.
- Ganges river dolphins live in the Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu river systems of Nepal, India, and Bangladesh.
  - The Ganges river dolphin can **only live in freshwater** and is essentially blind.
  - They hunt by emitting ultrasonic sounds, which bounces off of fish and other prey, enabling them to "see" an image in their mind. They are also called 'susu'.
- Population of Gangetic river Dolphin is 1200-1800.

#### • Significance:

- It is a **reliable indicator** of the **health of** the entire **river ecosystem.**
- It was recognised as the **National Aquatic Animal** in 2009, by the Government of India.

#### • Threats:

- **Bycatch:** These dolphins and people both favor areas of the river where fish are plentiful and the water current is slower. This has led to fewer fish for people and more dolphins dying as a result of accidentally being caught in fishing nets, also known as bycatch.
- Pollution: Industrial, agricultural, and human pollution is another serious cause of habitat degradation.
- Dams: Construction of dams and other irrigation-related projects make them susceptible to inbreeding and more vulnerable to other threats because they cannot move to new areas.

Dolphins below a dam are threatened by heavy pollution, increased fishing activities and vessel traffic. They also have less food because dams disturb the migration, breeding cycles and habitat of fish and other prey.

#### • Conservation Status:

## • Steps Taken:

- Project Dolphin: The Prime Minister announced the government's plan to launch a
  Project Dolphin in his Independence Day Speech 2020. It will be on the lines of
  Project Tiger, which has helped increase the tiger population.
- Dolphin Sanctuary: Vikramshila Ganges Dolphin Sanctuary has been established in Bihar.
- **Conservation Plan:** The Conservation Action Plan for the Ganges River Dolphin 2010-2020, which "identified threats to Gangetic Dolphins and impact of river traffic, irrigation canals and depletion of prey-base on Dolphins populations".
- National Ganga River Dolphin Day: The <u>National Mission for Clean Ganga</u> celebrates 5<sup>th</sup> October as National Ganga River Dolphin Day.

#### Wildlife Protection Act, 1972

- This Act provides for the **protection of the country's wild animals, birds, and plant species,** in order to ensure environmental and ecological security. Among other things, the Act lays down restrictions on hunting many animal species. The **Act was last amended in the year 2006.**
- The Act **created six schedules** which gave varying degrees of protection to classes of flora and fauna.
  - **Schedule I and Schedule II** get absolute protection, and offences under these schedules attract the maximum penalties.
  - Schedule 5 includes species that may be hunted.

#### **Related Constitutional Provisions**

#### • Article 48A:

It directs the State to protect and improve the environment and safeguard wildlife and forests. This Article was added to the Constitution by the **42**<sup>nd</sup> **amendment** in 1976.

### • Article 51A:

Article 51A imposes certain **fundamental duties** for the people of India. One of them is to protect and improve the natural environment including forests, lakes, rivers, and wildlife and to have compassion for living creatures.

#### **Source-TH**

#### **Beema Bamboo Crash Barrier**

## Why in News

Experts from the **Visvesvaraya National Institute of Technology (VNIT), Nagpur**, are working on the **design of crash barriers made of beema bamboo and coir.** 

These are being developed as **a low-cost alternative to steel barriers** to reduce accident deaths on highways.

## **Key Points**

## • Background:

- Road Accidents:
  - Around 1.5 lakh people die every year in close to 5 lakh <u>road accidents</u> in India. Over a third of those accidents happen on the highways.
  - Currently, India is engaged in a project to remove accident-prone "black spots" and rectify road designs on highways with loans to the tune of Rs. 14,000 crore from the <u>Asian Development Bank</u> and <u>World Bank</u>.
- Cost of Conventional Crash Barriers:
  - Crash barriers are typically meant to prevent vehicles from going off highways and should there be an accident, the barrier will cushion the impact and minimise the chance of fatality to the extent possible.
  - Conventional crash barriers made of metal and alloy may cost around Rs. 2,000 per metre. Around 5% of the cost of the entire bouquet of work involved in making India's highways go into road furniture.
- About Beema Bamboo Crash Barrier:
  - Crash Barrier:
    - There will be five feet fencing of the bamboo installed deep into concrete slabs and held together by strong coir ropes.
    - The beema bamboo barrier cost is estimated to be one-third of conventional metal barriers.
  - Beema Bamboo:

Beema or Bheema bamboo is a type of bamboo engineered to be a stronger, durable, fast-growing and tall clone of the traditional bamboo found in the Indian subcontinent, especially the North-East. This variety of Bamboo grows well in southern India.

It is the local product of mainly Karnataka and adjoining areas.

#### • Coir:

- Coir, or coconut fibre, is a natural fibre extracted from the outer husk of coconut and used in products such as floor mats, doormats, brushes and mattresses.
- The name Coir comes from *kayar*, the Tamil and Malayalam word for cord or rope.

## • Significance:

• Tensile Strength:

Bamboo has higher tensile strength than steel because its fibers run axially.

• Fire Resistance:

Capability of bamboo to resist fire is very high and it can withstand temperatures up to 400 degree Celsius.

• Elasticity:

Bamboo is widely preferred in earthquake prone regions due to its elastic features.

Weight of Bamboo:

Bamboos due to their low weight are easily displaced or installed making it very easy for transportation and construction.

#### **Source: IE**

## **Mandarin Duck**

## Why in News

Recently, **Mandarin ducks** have been sighted in the **Maguri-Motapung beel in Assam's Tinsukia district** after a century.

## **Key Points**

• Scientific Name: Aix galericulata





Mandarin duck was **first identified by Swedish** botanist, physician and zoologist **Carl Linnaeus in 1758.** 

- Characteristics:
  - It is **considered the most beautiful duck** in the world.
  - Male mandarins have elaborate plumage (feathers) with orange plumes on their cheeks, orange 'sails' on their back, and pale orange sides; females are dull in comparison, with grey heads, brown backs and white eyestripe.

#### • Diet:

These birds may feed on seeds, acorns, small fruit, insects, snails, and small fish.

#### • Habitat:

- These birds **inhabit temperate forests near wetlands** including rivers, streams, bogs, marshes, swamps, and freshwater lakes.
- It is **native to East Asia** but has established **populations in Western Europe** and America too.

It breeds in Russia, Korea, Japan and northeastern parts of China.

#### • Presence in India:

- The duck **rarely visits India** as it does not fall in its usual migratory route.
- It was **recorded in 1902 in the Dibru river** in the Rongagora area in Tinsukia (Assam).
- More recently, it was sighted in Manipur's Loktak Lake in 2013, and in Saatvoini Beel in Manas National Park and Tiger Reserve in Assam's Baksa district in 2014.
- Status on IUCN Red List: Least Concern.
- Maguri-Motapung Beel:
  - The Maguri Motapung wetland, an Important Bird Area as declared by the <u>Bombay</u>
     <u>Natural History Society</u> is located close to the <u>Dibru Saikhowa National Park</u>
     in Upper Assam.
  - In May 2020, the Beel was adversely affected by a **blowout and fire at an Oil India Limited-owned** gas well.

The resulting oil spill killed a number of fish, snakes as well as an endangered Gangetic dolphin.

#### Source: IE

# World's Smallest Reptile

## Why in News

Scientists believe they may have discovered the **smallest reptile on earth - a Chameleon subspecies** that is the size **of a seed.** 

Two of the tiny lizards were discovered by a **German-Madagascan** expedition team in **Madagascar**.



## **Key Points**

- About the Discovery:
  - The team found **one male and one female of the species, named** *Brookesia* **nana,** during an expedition in 2012.
  - The *Male Brookesia Nana*, or *Nano-Chameleon*, has a body of just **13.5 mm**. Its length from top to tail is 22 mm. The **female** is far **bigger** at around **29 mm**.
  - According to the Bavarian State Collection of Zoology in Munich, Nano-Chameleon is the smallest of about 11,500 known species of reptiles.
    - Previously, the chameleon species *Brookesia micra* was thought to be the smallest. The average length of adults of this species is 16 mm (29 mm with tail), while the smallest adult male has been recorded at 15.3 mm.
    - The longest, the reticulated python, at 6.25 m is almost as long as 289 Brookesia nanas.
  - The New Chameleon is only known from a degraded Montane Rainforest in Northern Madagascar and might be threatened by extinction.
    - Nano-chameleons have **previously suffered deforestation**, but their habitat is now protected.
  - In their report, scientists recommended that the chameleon be listed as Critically endangered in the <u>International Union for Conservation of Nature's</u> (IUCN)
     Red List of Threatened Species to help protect it and its habitat.
- About Chameleons:
  - Chameleons (family Chamaeleonidae) are a distinctive and highly specialized Clade of Old World Lizard with 202 species described as of June 2015.
     Madagascar is home to nearly two-thirds of all chameleon species.
  - Chameleons are adapted for climbing and visual hunting. They live in warm habitats
    that range from **Rainforest** and **Desert** Condition. They are best known for their
    ability to change body colour.
  - The Indian chameleon is found in India, Pakistan, and Sri Lanka.

#### **Source-IE**