

## UPSC Daily Current Affairs| Prelim Bits 28-12-2024

### Reforms initiated by Manmohan Singh

#### Why in News?

*The architect of India's economic liberalisation Dr Manmohan Singh breathed his last recently.*

- He is known for heralding the era of market economy in India.

*Manmohan Singh served as finance minister from 1991- 96 and as the prime minister from 2004 to 2014.*

#### Fiscal Reforms

- **Fiscal Discipline** - The government set the target of bringing down fiscal deficit to 3-4% in the medium-term.
- It set the target of bringing the fiscal deficit target of 1992-93 to 5%, down from 6.2% in the previous year.
- **Rationalising government spending** - Through major cuts in subsidies and non-planned expenditures.
- Thus, the government announced major tax reforms to boost its tax revenue.

#### Trade Policy Reforms

- **Rupee Devaluation** - Rupee was devalued 18% to make Indian exports competitive.
- **Import reforms** - Import restrictions for exporters were reduced.
- Import of capital goods was allowed without the need of government permission.
- **Export reforms** - Exports trading houses were allowed to have 51% foreign equity.
- The government rationalised tariff structure and removed of quantitative restrictions on imports.

#### Monetary Policy Reforms

- **Banking reforms** - Setting of interest rates by lenders were deregulated, new private bank licences issued.
- Public listing of banks and moving to a new framework of recognition of accounts and introduction of capital adequacy norms recommended by Narasimham committee.
- **Tighter policies** - Tighter monetary and credit policy was envisaged to contain the current account deficit and to reduce non-discretionary imports.
- **Introduced new monetary tools** - 364-day T-bills, 10 and 15-year securities were introduced for the government to borrow from the market.

#### Industrial Policy Reforms

<ul style="list-style-type: none"> <li>• <b>Licensing reforms</b> - <i>Industrial licensing was abolished</i> for all industries except 18 environmentally-risky sectors</li> <li>• <b>Amended Monopolies &amp; Restrictive Trade Practices</b> - MRTP Act was repealed to eliminate the need for prior approval for capacity expansion by companies.</li> <li>• <b>Increased Private role</b>- Greater private sector participation was allowed in core and basic industries.</li> <li>• <b>Decreased Government control</b> - Number of industries reserved for the public sector was <i>reduced to 8 from 17</i>.</li> <li>• Small-scale enterprises were allowed to sell 44% equity to large companies.</li> </ul>
<b>FDI Policy reforms</b>
<ul style="list-style-type: none"> <li>• The limit for <i>foreign equity holding raised from 40% to 51%</i> in priority sector industries</li> <li>• <i>Foreign Investment Promotion Board</i> was established to streamline the process of approval of FDI.</li> </ul>
<b>Telecom Policy reforms</b>
<ul style="list-style-type: none"> <li>• Introduced a unified access licensing regime for telecom services across the country in his tenure as PM between 2004-14.</li> </ul>

## Reference

[The Indian Express| Top Reforms initiated by Manmohan Singh](#)

## Matsya Seva Kendras (MSKs)

### Why in News?

*The need for strengthening last-mile fisheries and aquaculture extension services is highlighted recently by the Government of India.*

- It is a *fisheries extension and support services*.
- **Launched in** - **2020**.
- **Aim** - To provide a *one-stop solution for fishers and fish farmers* through a range of extension services provided by trained aquaculture professionals.
- **Umbrella Scheme** - Pradhan Mantri Matsya Samapada Yojana (PMMSY).
- **Nodal Ministry** - Ministry of Fisheries, Animal Husbandry & Dairying.
- **Government assistance** - Upto 60% covers women and weaker sections.
- **Fund dispersal** - Funds have been provided *to State governments and Union Territories* for operationalising **102 such Kendras**.
- **Functions** - It establishes lab for *water, soil, and microbial analysis* to conduct request-based disease tests.
- It focuses on *capacity building* for fishers/fish farmers on varied seed/feed inputs backed with the required technology infusion.
- **Future proposals** - Government advises MSKs to mobilise start-ups, cooperatives, fish farmers' producer organisations, joint liability groups, and self-help groups to share best practices.

## Other initiatives of Fisheries Extension Services

- **Sagar Mitras** - They are deployed in coastal States and U.T.s as a vital *interface between the government and sea-borne fishers*.

Compile Information on	Disseminate Information on
<ul style="list-style-type: none"> <li>• Daily marine catch</li> <li>• Price fluctuations</li> <li>• Marketing needs at fish landing centres/harbours</li> </ul>	<ul style="list-style-type: none"> <li>• Local regulations</li> <li>• Weather forecasts</li> <li>• Natural calamities</li> <li>• Hygienic fish handling</li> <li>• Potential fishing zones in the seas.</li> </ul>

- **National Fisheries Digital Platform** - It is a platform *to formalize the fisheries sector*.
- **AquaBazaar** - It is a *nationwide virtual learning platform*, initiated by National Fisheries Development Board.
- It enables experts to clarify basic concepts and provide practical demonstrations to fishers on breeding/seed production of commercially important fish.

### India's Fisheries Sector

- **National Fish Production** - It has witnessed an 83% since 2013-14, that stands at a record 175 lakh tons in 2022-23.
- With 75% of this coming from inland fisheries.
- India is the **2<sup>nd</sup> largest fish and aquaculture producer** globally.

### Reference

[The Hindu| Matsya Seva Kendras \(MSKs\)](#)

## Increased Risk H5N1 Virus in Humans

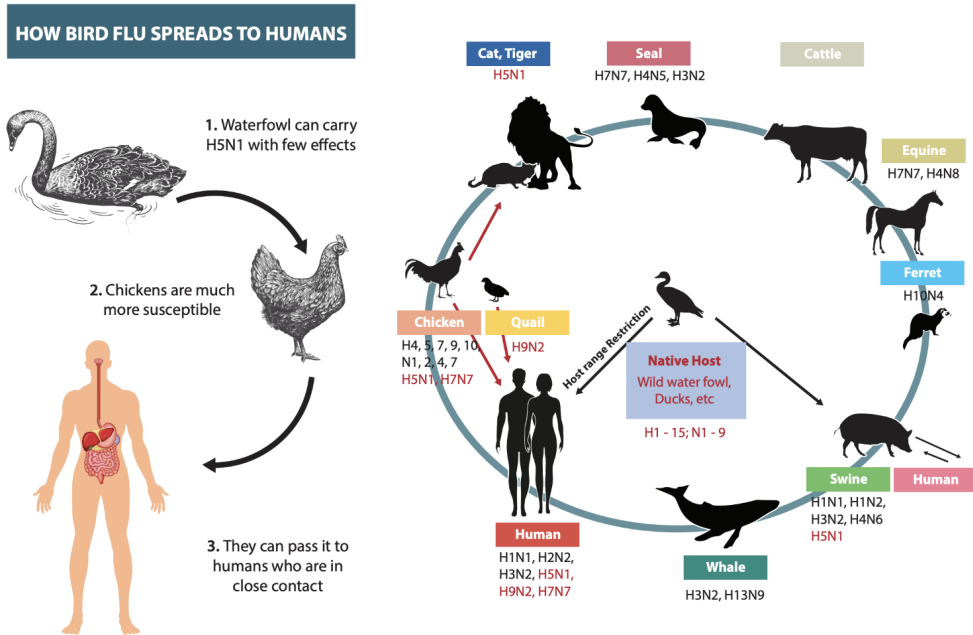
### Why in News?

Recently, the researchers found that circulating the H5N1 clade virus attached better in the human respiratory tract.

- **Avian influenza** - It is highly contagious and spreads through direct contact with infected birds or their secretions, including saliva, feathers, and faeces.

*Avian influenza is a zoonotic disease, meaning it can spread from animals to humans.*

- **H5N1** - It is a subtype of Avian Influenza A, was 1<sup>st</sup> detected in geese, China on 1996 and causing outbreaks in birds since then.
- **Key causes of spread**
  - Wildlife spillover
  - Large-scale poultry farming and poor biosecurity measures
  - Improper cooking practices



H5N1 Clade	
Clade 2.3.2.1a	• <u>Detected in a child</u> traveler returning to Australia from India, 2024.
Clade 2.3.4.4b	<ul style="list-style-type: none"> <li>• Identified in dead migratory birds in China, November 2021.</li> <li>• It is <u>affecting wild and domestic birds and mammals</u> worldwide.</li> <li>• Since 2020, it led to an unprecedented number of deaths in wild birds and poultry in many countries.</li> <li>• In 2021, spread to North America and in 2022 to Central and South America.</li> </ul>

**A *clade***, in biology, is a group of organisms that consists of a common ancestor and all of its descendants.

## H5N1 in Humans

- **H5N1 clade 2.3.4.4b** - Influenza A virus cross the species barrier and infect humans and spread from one person to another.
- It **infect the cells in the respiratory epithelium** of the upper respiratory tract.
- It is endowed with the ability to attach to and replicate in the upper respiratory tract lead to infection and transmission of the virus.
- The ability to attach to cells in the lower respiratory tract is associated with its ability to cause severe respiratory disease.
- **Increased risk** - The receptor binding repertoire of H5N1 virus has expanded to attach to receptors in the human upper and lower respiratory tracts.
  - There have been 64 confirmed human cases of H5N1 clade 2.3.4.4b in the U.S. as of December 2024.

*The H5N1 virus has now established its presence in 108 countries across 5 continents, impacting even endangered species like the California condor and polar bears. Alarmingly, bird flu was detected in gentoo and King penguins in*

*Antarctica for the first time in January 2024.*

## References

1. [The Hindu| H5N1 Infection on human](#)
2. [WHO| Avian influenza A\(H5N1\) virus](#)

## Parker Solar Probe

### Why in News?

*Recently, Parker Solar Probe made history by surviving the closest-ever approach to the Sun.*

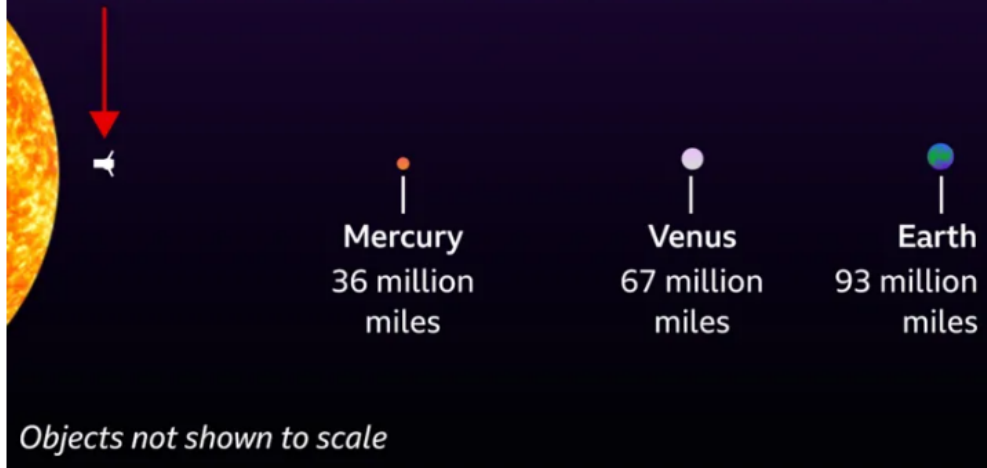
- **Launched in** - 2018.
- **Launched by** - NASA.
- **Mission** - To “Touch the Sun”.
- It is designed to fly within about 4 million miles (6.5 million kilometers) of the Sun's surface.
- **Aim** - To make observations of the **outer corona of the Sun**.

*It became the 1<sup>st</sup> spacecraft to fly through the corona, the Sun’s upper atmosphere in 2021.*

- **Study objectives** - To trace the energy flow, to study magnetic fields, plasma, energetic particles, and to image the solar wind.
- **Movement** - It gradually circling closer towards the sun, using flybys of Venus to gravitationally pull it into a tighter orbit with the sun.
- Every orbit bringing it closer, the probe faces brutal heat and radiation.
- **4 Instruments**
  - Fields Experiment (FIELDS)
  - Integrated Science Investigation of the Sun (ISIS)
  - Wide Field Imager for Solar Probe (WISPR)
  - Solar Wind Electrons Alphas and Protons (SWEAP)
- **Thermal protector** - An 11.5cm thick carbon-composite shield protect from temperatures of nearly 2,500 degrees Fahrenheit.
- **Speed** - It moves faster than any human-made object, up to 430,000 mph.
- **Significance** - It flies more than 7 times closer to the Sun than any spacecraft and over 7 years, it will complete 24 orbits around the Sun.

## Solar probe touches Sun's outer atmosphere

Parker Solar Probe is now only 3.8 million miles from the Sun



## References

1. [The Hindu| Parker Solar Probe Makes History](#)
2. [NASA| Parker Solar Probe](#)

### One Liners 28-12-2024

#### History, Art and Culture

##### Urs Festival

- Countdown for 813<sup>th</sup> Urs begins.
- It is an *annual festival* held *at Ajmer, Rajasthan*.
- **Commemoration** - For the death anniversary of Sufi saint Hazrat Khwaja Moinuddin Chishti.
- **Khwaja Moinuddin Chishti** - He arrived along with Sultan Illtutmish and promulgated the *Chishtiyya Order* of Sufism.
- He is also *known as Garib Nawaz*.

#### Geography

##### Three Gorges Dam

- **Located in** - China's Hubei Province.
- **Built on** - Yangtze River.
- It is *world's largest Dam*.

#### International Relations and Issues

### **India-china Trans-border River Sharing**

- India and China *don't have any agreements*.
- **2002 Memorandum of Understanding (MoU)** - For sharing hydrological information on the Brahmaputra River during the flood seasons.
- In the aftermath of the 2013 Doklam standoff, Beijing suspended data sharing, which resumed only in 2018.

### **Operation Poseidon Archer**

- It is a sustained *bombing campaign to degrade Houthi* military capabilities in Yemen.
- **Launched by** - United States, United Kingdom, and their allies.
- **Supplements** - *Operation Prosperity Guardian*, a maritime security operation begun in December 2023 to protect shipping in the Red Sea from attacks by the militants.

## **Agriculture**

### **Rambhog Paddy**

- **Features** - *Sweet smell*, and taste which makes it to differentiate from other paddy varieties.
- It is grown in Kanpur Dehat and Kanpur Nagar districts, located in the Terai region of Uttar Pradesh.

## **Environment**

### **Article 6 of the Paris Agreement**

- **Paris Agreement** - At COP 21 of UNFCCC in 2015.
- **Article 6** - It sets out how countries can pursue voluntary cooperation to reach their climate targets.
- It facilitates emission reduction through 3 pathways
  - Internationally Transferred Mitigation Outcomes
  - UN-regulated global carbon market
  - Non-market approaches.

### **The Bald Eagle**

- It is a key symbol of the United States, has been officially named the national bird.
- **Morphology** - White head, yellow beak, and brown feathers.
- **Historical Importance** - since 1782, it symbolizes freedom and bravery in USA.
- It has appeared on the Great Seal of the United States since its final design was approved.

## **Science**

### **Metabolic dysfunction-associated steatotic liver disease (MASLD)**

- It is the updated term for *non-alcoholic fatty liver disease*.
- It has connections to metabolic health, heart health, and cancer risk.
- **Causes** - It is *strongly linked to metabolic syndrome*, which includes obesity, diabetes, hypertension, and dyslipidemia.
- A *diet high in carbohydrates*, particularly refined sugars and starches, results in elevated insulin levels.
- Chronically high insulin levels lead to insulin resistance, resulting in the conversion of excess glucose into fatty acids that accumulate in the liver.

## **Miscellaneous**



### **INS Sarvekshak (J22)**

- Indian Navy Ship, INS Sarvekshak, arrived at Port Louis in Mauritius for undertaking Hydrographic Surveys.

- **Fitted with survey equipment** - Deep Sea Multi beam echo sounder system, Side Scan Sonars and a fully automated digital surveying and processing system.

### **Quality Council of India**

- **Formed in** - 1997.

- **Formed by** - Government of India and major industry groups like ASSOCHAM, CII, and FICCI.

- **1<sup>st</sup> chairman** - Mr. Ratan Tata.

- It is a national body for accreditation and is a non-profit organization under the Societies Registration Act XXI of 1860.

