

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

- **Licensing reforms** - *Industrial licensing was abolished* for all industries except 18 environmentally-risky sectors
- **Amended Monopolies & Restrictive Trade Practices** - MRTP Act was repealed to eliminate the need for prior approval for capacity expansion by companies.
- **Increased Private role**- Greater private sector participation was allowed in core and basic industries.
- **Decreased Government control** - Number of industries reserved for the public sector was *reduced to 8 from 17*.
- Small-scale enterprises were allowed to sell 44% equity to large companies.

FDI Policy reforms

- The limit for *foreign equity holding raised from 40% to 51%* in priority sector industries
- *Foreign Investment Promotion Board* was established to streamline the process of approval of FDI.

Telecom Policy reforms

- Introduced a unified access licensing regime for telecom services across the country in his tenure as PM between 2004-14.

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

- Daily marine catch
- Price fluctuations
- Marketing needs at fish landing centres/harbours

Disseminate Information on

- Local regulations
- Weather forecasts
- Natural calamities
- Hygienic fish handling
- Potential fishing zones in the seas.

- **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% increase 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 **2nd largest fish and aquaculture producer** globally.

Reference

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

Increased Risk H5N1 Virus in Humans

Why in News?

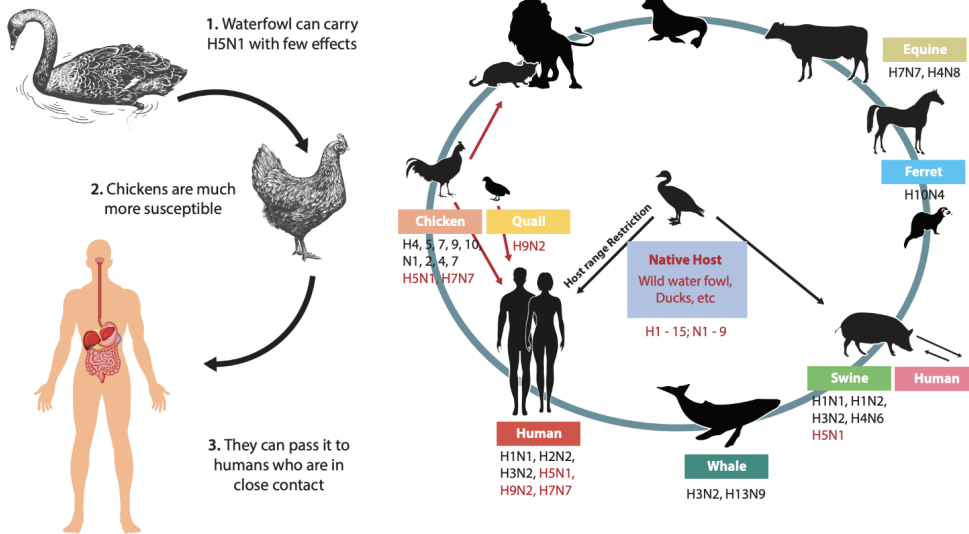
Recently, the researchers found that circulating the H5N1 clade virus attached better in the human respiratory tract.

- **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 1st 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

HOW BIRD FLU SPREADS TO HUMANS



H5N1 Clade

Clade 2.3.2.1a

- *Detected in a child* traveler returning to Australia from India, 2024.

Clade 2.3.4.4b

- Identified in dead migratory birds in China, November 2021.
- It is *affecting wild and domestic birds and mammals* worldwide.
- Since 2020, it led to an unprecedented number of deaths in wild birds and poultry in many countries.
- In 2021, spread to North America and in 2022 to Central and South America.

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 1st 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



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 813th 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.

• **1st 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.

