

NATIONAL STATISTICS DAY

SYLLABUS: GS PAPER-I (IMPORTANT PERSONALITIES), GS PAPER-III (PLANNING)

CONTEXT: To mark the occasion of National Statistics Day, the MoSPI along with Indian Statistical Institute will unveil a coin of Rs.125. The Coin will be unveiled by Hon'ble Vice President of India N. Venkaiah Naidu in an event in Kolkata.

ABOUT NATIONAL STATISTICS DAY

- Every year June 29 is marked as the National Day of Statistics on the occasion of the birth anniversary of P. C. Mahalanobis as a tribute to his great contributions in the field of Statistics and economic planning.
- **Theme 2022: "Data For Sustainable Development"**.
- Every year, Statistics Day is celebrated with a theme of contemporary national importance. As data is crucial in forming developmental socio-economic policies, correct use of it ensures the development in a sustainable way so the theme of 2022 is decided accordingly.
- This year the National Day of Statistics 2022 is to be celebrated on virtual-cum-online mode.
- The day was first observed in 2007 after the notification regarding the same was published in the Gazette of India on June 5, 2007.

OBJECTIVES

- To popularise the use of Statistics in everyday life and sensitise the public as to how Statistics helps in shaping and framing policies.
- To raise public awareness, especially among the younger generation, about the role of statistics in socio-economic planning.

ABOUT P.C. MAHALANOBIS

- Mahalanobis was born to a wealthy and academically-oriented Bengali family in Calcutta on June 29, 1893.
- A few of his major contributions were:
 - a. Established a Statistical Laboratory in the Presidency College
 - b. Established the Indian Statistical Institute in Calcutta on December 17, 1931
 - c. He is remembered for the **Mahalanobis Distance**, which is denoted as D^2 . It is a multivariate distance measure that is used for comparing and grouping populations
 - d. His greatest contribution lay in the field of large-scale sample surveys

- e. He was bestowed with multiple prizes and awards including the Weldon Memorial Prize (1944, Oxford University), Foreign Member of the Academy of Sciences of the USSR (1958), Srinivasa Ramanujan Gold Medal (1968), Durgaprasad Khaitan Gold Medal (1961), and the Padma Vibhushan (1968)
- He is considered the **father of modern statistics in India**, founded the Indian Statistical Institute (ISI), shaped the Planning Commission (which was replaced by the NITI Aayog on 1st January 2015) and pioneered methodologies for large-scale surveys.

SINGLE USE PLASTICS

SYLLABUS: GS PAPER-III (ENVIRONMENT POLLUTION AND DEGRADATION)

CONTEXT: The Union government has announced a ban on single-use plastic from July 1, 2022.

ABOUT SINGLE-USE PLASTICS

- Single-use or throwaway plastics are only used one time before being discarded or recycled. Plastic containers, straws, coffee stirrers, soft drink and water bottles, and the majority of food packaging are examples of these goods.
- Single-use plastics are products that are created mostly from chemicals derived from fossil fuels (petrochemicals).
- As per a report by an Australian organization in the year 2021, single use plastics account for a third of all plastics produced globally with 98% manufactured from fossil fuels.
- About 300 million tonnes of plastic are produced annually, and half of it is throwaway. Only 10% to 13% of plastic products are recycled globally.

REASONS FOR THE BAN

- Petroleum-based plastic is non biodegradable and usually goes into a landfill where it is buried or it gets into the water and finds its way into the ocean.
- Although throwaway plastics are non-biodegradable, it disintegrates into tiny particles over the years.
- In the process of breaking down, it releases toxic chemicals (additives that were used to shape and harden the plastic) which make their way into our food and water supply.
- On the current trajectory of production, it has been projected that single-use plastic could account for 5-10% of greenhouse emissions by 2050.

SINGLE-USE PLASTIC IN INDIA

- According to industry estimates, India used 18.45 million tonnes of plastic in the year 2018.
- The plastic produced in the same period was 17 million tonnes.

- As per a report published by TERI in the year 2018, the average per capita consumption of plastic in India is about 11 kg. It would increase to 20 kg by 2022.
- Only 60% of the total plastic waste is being recycled.
- Plastic Waste Management Rules 2016 mandated the producers and brand owners to devise a plan in consultation with the local bodies to introduce a **collect-bank system**. This system is known as **Extended Producer's Responsibility**.

MEASURES TAKEN BY THE GOVERNMENT

- In September 2021, the Ministry already prohibited polythene bags smaller than 75 microns; the previous maximum was 50 microns.
- From December 2022, the ban will be extended to polythene bags under 120 microns.
- The ban is being introduced in phases to give manufacturers the time to shift to thicker polythene bags that are easier to recycle.

PRELIM FACTS

UN OCEAN CONFERENCE

- The 5 day UN Ocean Conference took off with the Governments of **Kenya and Portugal** being the co-hosts.
- Leaders from over 130 countries from across the world will deliberate for five days to find **an international agreement on protecting the world's oceans, seas and marine resources**.
- The conference comes at a crucial juncture when the world is seeking to address many of the challenges requiring structural transformations as well as innovative and green solutions to achieve SDG Goal 14.

GREAT DYING

- The term 'Great Dying' refers to the planet's **biggest mass extinction** that has wiped out most newly evolved lives in oceans.
- It occurred around **252 million years ago** and marked the end of the **Permian geological period**.
- Roughly 96% of marine species and 70% of land species disappeared. The cataclysm was so severe that it wiped out most of the planet's trees, insects, lizards and even microbes.

MICRO-PLASTICS & VIRUSES LINKAGE

- A study has found that plastic pollution can help keep **viruses alive and infectious in freshwater for days**.

- A layer of **microbial cells or biofilm** forms on the surface of the microplastics soon after they are released into freshwater.
- This nutrient-rich coating becomes a hospitable surface for microorganisms that hop onto the floating microplastics.

URANIUM DEPOSITS IN RAJASTHAN

- Uranium deposits have been found in the **Rohil area of Sikar district of Rajasthan**.
- Uranium is a silvery-white metallic chemical element assigned the chemical symbol U.
- It is a **naturally radioactive element**.
- One of its isotopes, **Uranium-235**, is only naturally occurring isotope capable of sustaining a nuclear fission reaction.
- **Atomic Minerals Directorate for Exploration and Research** is mandated to identify and evaluate uranium resources for the indigenous nuclear power program.
- **Other Uranium deposit areas:** Jadugoda in Jharkhand and in Andhra Pradesh.

SAWA LAKE

- It is a biodiverse wetland situated near the city of **Samawa (south of Baghdad)** that has **disappeared largely due to human activity and climate change**.
- It is formed over limestone rock and studded with gypsum formations. The lake has no inlet or outlet.
- Sawa lake was declared a Ramsar site in 2014.
- Studies have shown that the lake is fed by underground water sources through a system of crack and fissures.