

## Prelim Bits 22-06-2023 | UPSC Daily Current Affairs

### Guinness World Record

*PM Narendra Modi-led yoga session at United Nations headquarters, on the occasion of 9th International Yoga Day, created a Guinness World Record for participation of people of most nationalities in a yoga event.*

- Guinness World Records originally known as the Guinness Book of Records documents record-breaking achievements of *all kinds*, listing world records both of *human achievements* and the *extremes of the natural world*.
- It is a reference book published every year in different languages around the world.
- It was formed on 1955 by Sir Hugh Beaver, Managing Director of the Guinness Brewery.
- He invited 2 researchers, twins Norris and Ross McWhirter, to start working on the book.
- It has become the primary international source for cataloguing and verification of a huge number of world records.
- It has sold over 150 million books globally in 40 languages.

*A world record is defined as the best performance recorded in the world in any sphere of art or profession.*

- **Criteria** - A record must satisfy all of the following criteria to count.
  - It should be objectively measurable.
  - It should be breakable it cannot be something so unique that only one person can do it.
  - It should also be standardisable with a possibility to create a set of parameters and conditions that all challengers can follow.
  - It should be verifiable.
  - It should be based on only one variable.
  - It should be the best in the world.
  - For any new record, GWR sets a minimum standard that has to be met for the record to be broken.
- **Exceptions** - It states several types of records it will not accept for ethical reasons, such as those related to the *killing or harming of animals*.
- Environmentally unfriendly records (such as the releasing of sky lanterns and party balloons) are no longer accepted or monitored.
- In addition to records relating to tobacco or cannabis consumption or preparation are not accepted.

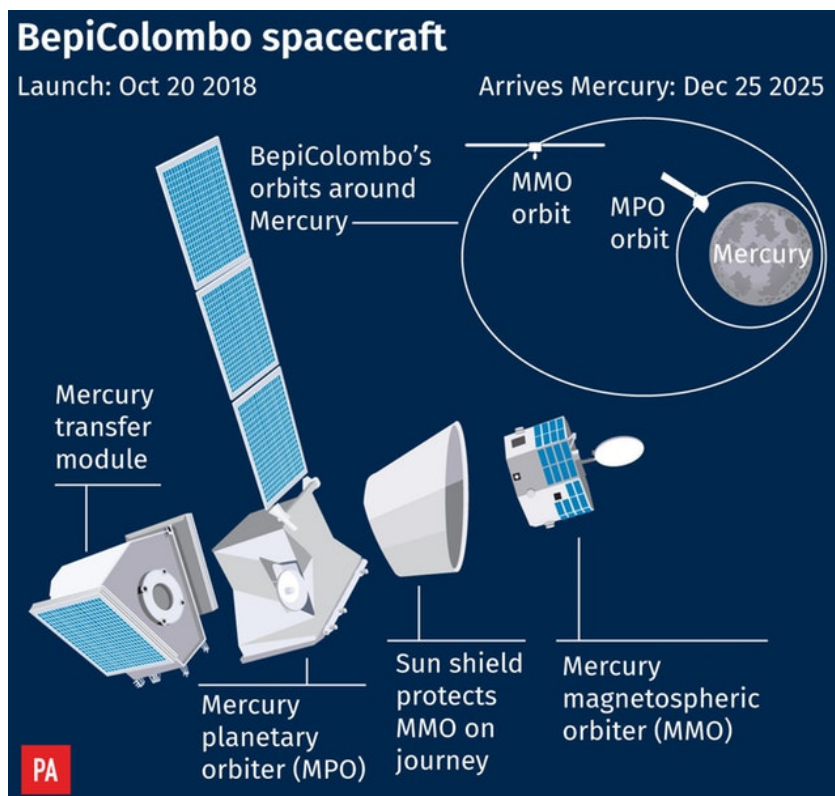
### Reference

## BepiColombo Spacecraft

Recently, BepiColombo spacecraft flew close to Mercury to take pictures of the planet.

- **Launched on** - 2018.
- **Launch Vehicle** - Ariane 5.
- **Aim** - It will study and understand the composition, geophysics, atmosphere, magnetosphere and history of Mercury, the least explored planet in the inner Solar System.
- **Agency** - It is a joint mission between the European Space Agency (ESA) and the Japan Aerospace Exploration Agency (JAXA).
- The BepiColombo mission is based on two scientific spacecraft and one transfer module:
  - Mercury Planetary Orbiter (MPO)
  - Mercury Magnetospheric Orbiter (MMO)
  - Mercury Transfer Module (MTM)
- It will chart the planet's mineralogy and elemental composition, determine whether the interior of the planet is molten or not, and investigate the extent and origin of Mercury's magnetic field.
- It made its first flyby of Mercury on 2021 and sent back several images.

*These are the first Mercury missions for the ESA and Japan.*



Other Mercury Missions	Countries	Launch
Mariner 10	NASA	1973
MESSENGER	NASA	2004

## Reference

[The Indian Express | bepicolombo-mercury-close-flyby](#)

## Global Gender Gap Report, 2023

WEF report says India climbs 8 places from 135 to 127 in global gender index.

- **Aim** - It *annually* benchmarks the current state and evolution of gender parity across 4 key dimensions.
  - Economic Participation and Opportunity,
  - Educational Attainment,
  - Health and Survival,
  - Political Empowerment.
- It benchmarks gender parity across 146 countries.
- **Released by** - World Economic Forum (WEF).
- **Adoption** - Adopted in 2006.
- It measures scores on a 0 to 100 scale and scores can be interpreted as the distance covered towards parity (i.e. the percentage of the gender gap that has been closed).
- **Global Scenario** - Overall, the Southern Asian region has achieved 63.4% gender parity.

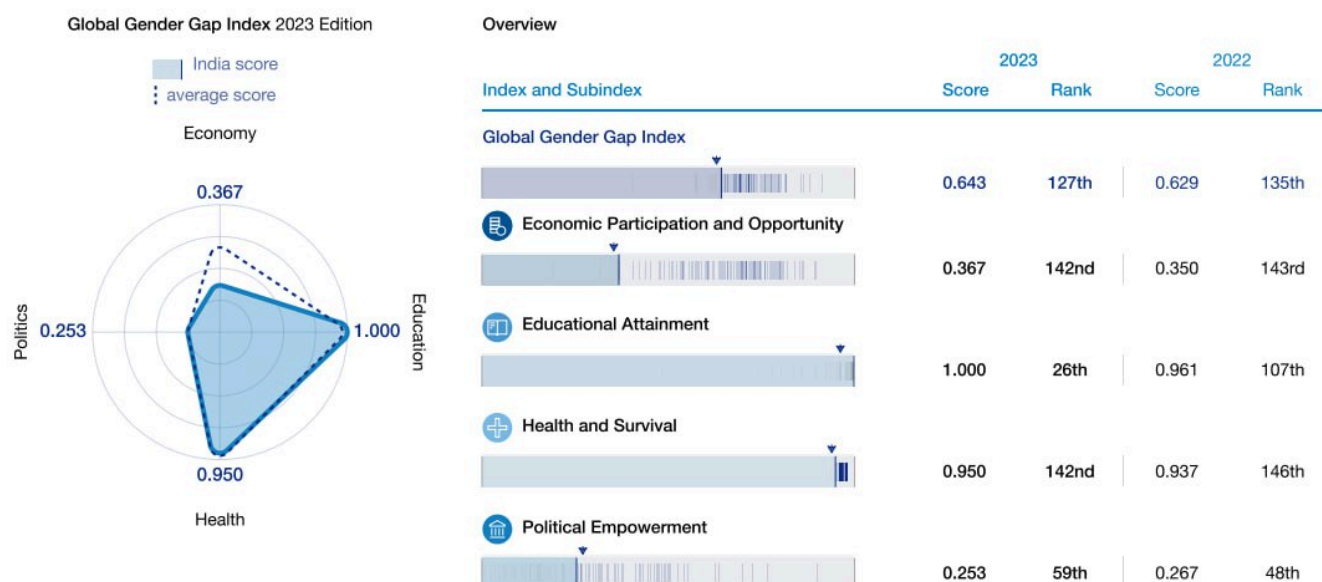


- According to 2023 report no country has yet achieved full gender parity.
- **Iceland** is the most gender-equal country in the world for the 14th consecutive year and the only one to have closed more than 90% of its gender gap.

GLOBAL RANK	COUNTRY	REGIONAL RANK	GENDER GAP CLOSED %	GENDER GAP SCORE
1	Iceland	(1)		0.912
2	Norway	(2)		0.879
3	Finland	(3)		0.863
4	New Zealand	(1)		0.856
5	Sweden	(4)		0.815

- **Scenario in India** - India had attained parity in enrolment across all levels of education.

Economy Profile	Score (imparity = 0, parity = 1)	Rank (out of 146 countries)	Index Edition
<b>India</b>	<b>0.643</b>	<b>127th</b>	<b>2023</b>



- It had closed 64.3% of the *overall gender gap* but had reached only 36.7% parity in economic participation.
- There was an increase in parity in wages and income but the shares of women in senior and technical roles dropped slightly compare to 2022.
- On **political empowerment**, India has registered 25.3% parity, with women representing 15.1% of parliamentarians, the highest for the country since the inaugural report in 2006.
- In *sex rate at birth* it is increased by 1.9% points compared to the 2022, index.
- Neighbouring Countries that ranks behind of India is Pakistan and ahead of the India were Nepal, Srilanka, China, Bhutan and Bangladesh.

## References

[The Hindu | India-climbs-8-places- in-global-gender-index-says-wef-report](#)

[Times of India | India-moves-up-8-placesin-wef-global-gender-gap-report](#)

## Disposal of Medical Waste using Clay

*Indian Institute of Technology-Guwahati (IIT-G) scientists proposes the use of compost natural clay to neutralise pathogens in waste.*

- **Bio-medical waste** -It means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities.
- **Top Producer - Canada** is the topmost producer of biomedical waste.
- *Biomedical Waste Management Rules 2016*, was notified by the Ministry of Environment, Forest and Climate Change.
- It categorises the bio-medical waste generated from the health care facility into 4 categories based on the segregation pathway and colour code.
- Various types of bio medical waste are further assigned to each one of the categories, as Yellow Category, Red Category, White Category, Blue Category.
- **Issues** - The waste from hospitals and residences of COVID-19 patients was treated in the same way as municipal solid waste (MSW) during the pandemic.
- This could lead to the escape of infectious viral pathogen waste, potentially causing secondary infections in humans.
- **Clay** - *Bentonite and kaolin* clays in powder form can prevent the viral contamination from entering into the environment.
- **Newcastle disease virus (NDV)** - It was earlier observed that the removal efficiency of the NDV depended on the quality of bentonite and multilayer sorption of the virus on clay surfaces.
- NDV is an infectious and contagious viral infection that affects more than 250 different bird species worldwide.

## References

[Down to Earth | Clay-the-solution-for-safe-disposal-of-biomedical-waste](#)

[India Today | IIT-guwahati-researchers-discover-solution-for-safe-disposal-of-waste](#)

## NATO Plus

*American Senator has said that the plans to introduce a bill to make India part of the NATO Plus grouping.*

- It is a security arrangement that brings together the grouping of the North Atlantic Treaty Organization (NATO) and 5 countries - Australia, New Zealand, South Korea, Japan and Israel.
- It was formalized in 2019.
- **Aim** - To boost defence and intelligence ties.
- **Benefits if India is added**
  - It would facilitate seamless intelligence sharing between these countries and India.

- It would access the latest military technology without much of a time lag.
- It would enhance the ties between U.S. and India.

## North Atlantic Treaty Organization (NATO)

NATO	
<b>Founded in</b>	1949
<b>Headquarters</b>	Brussels, Belgium
<b>India's membership</b>	<b>India is a not member</b>

- North Atlantic Treaty Organization, or NATO, is a 31-member alliance, with 29 European nations, and two American nations (United States and Canada).
- It was set up in 1949 by the US, Canada and several Western European nations to provide collective security against the Soviet Union.
- **Aim** - To protect peace and to guarantee the territorial integrity, political independence and security of the member states.
- It was the US's first peacetime military alliance outside the western hemisphere.
- **Headquarters** - Brussels, Belgium.
- Collective defence is laid out in *Article 5 of the North Atlantic Treaty* in which members of NATO are committed to mutual defence in response to an attack by any external party.
- India is *not a part* of NATO because it is a firmly non-aligned country and stakes its international reputation on remaining non-aligned.
- Membership is open to *any other European state* in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area.
- Finland has become the 31st member of the alliance.

## Reference

[The Hindustan Times | US-congressional-committee-recommends-nato-plus-with-india](#)

[The Hindu | Senate-to-introduce-bill-to-add-india-to-nato-plus-bloc](#)