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Global Slavery Index 2023

G20 countries including India are fuelling modern slavery, says new report.

- The Global Slavery Index 2023 shows the world's 20 richest countries account for more than half the estimated 50 million people living in modern slavery.
- The Group of 20 nations are contributing to this increase, as their trade operations and global supply chains allow for human rights abuses.
- Among the G20 nations, India tops the list with 11 million people working as forced labourers, followed by China, Russia, Indonesia, Turkey and the U.S.

The Index

- It is published by the Australia-based human Rights Group Walk Free Foundation.
- It includes data on three key variables -
    1. Prevalence of modern slavery in each country
    2. Vulnerability
    3. Government responses to modern slavery
- Modern slavery refers to situations of exploitation that a person cannot leave because of threats, violence, coercion and abuse of power or deception.
- The index uses data released by the International Labour Organisation (ILO), Walk Free, and the International Organisation for Migration (IOM).

Reference

1. The Hindu | G20 countries including India are fuelling modern slavery

MBR Explorer

United Arab Emirates is heading for the asteroid belt.

- The spacecraft, named MBR Explorer after Sheikh Mohammed bin Rashid al-Maktoum, the ruler of Dubai and prime minister of the UAE, is scheduled to launch in 2028.
- Building off the success of its Hope spacecraft, which is still circling and studying Mars, the United Arab Emirates announced plans for an ambitious follow-up mission.
- The mission aims to take a grand tour of the asteroid belt.
- In February 2030, the spacecraft will arrive at Wester Wald, a 1.4-mile-wide asteroid, zipping past at 20,000 mph on its way to visit 6 more objects in the asteroid belt between Mars and Jupiter.
- The mission would get a more detailed look at the surface of the asteroid.
- This helps to understand the interior density and the structure of the asteroid.

- **Justitia –** The seventh asteroid, Justitia, is the most intriguing.
- About 30 miles wide, Justitia is very reddish, an unusual colour for an asteroid.
- Indeed, it looks more like one of the small icy worlds found in the Kuiper belt, circling the sun beyond the orbit of Neptune.
- That has led planetary scientists to speculate that Justitia formed in the outer reaches of the solar system and then was scattered inward by the shifting orbits of the giant planets, eventually joining the asteroid belt.
- A visit to Justitia would provide a close-up study of a Kuiper belt object without the long trip to the solar system's distant reaches.
- The MBR Explorer is scheduled to sidle up within a few hundred feet of Justitia in October 2034.
- It will spend at least 7 months studying it with cameras and spectrometers that will be able to identify the asteroid's composition, including the presence of water.
- The reddish colour is believed to point to carbon-based molecules that are the building blocks for life.
- The spacecraft will also drop off a small lander to set down on Justitia's surface.

References

1. The Indian Express │UAE is heading for the asteroid belt
2. NY times │The UAE Is Heading for the Asteroid Belt

PRL Advanced Radial-velocity Abu-sky Search spectrograph (PARAS)

Indian scientists discover new exoplanet with mass 13 times that of Jupiter.

- **Exoplanet –** An exoplanet is any planet beyond the solar system.
- Massive giant exoplanets are those having mass greater than four times that of Jupiter.
- A new Jupiter-size exoplanet with the highest density has been discovered by an international team of scientists.
- The newly discovered exoplanet is found around the star called TOI4603 or HD 245134.
- NASA's The Transiting Exoplanet Survey Satellite (TESS) initially declared TOI4603 as a possible candidate to host a secondary body of unknown nature.
- Using PARAS, scientists discovered it as a planet by measuring the mass of the secondary body and hence, the planet is called TOI 4603b or HD 245134b.
- It is located 731 light years away.
- It orbits a sub-giant F-type star TOI4603 every 7.24 days.
- **PARAS –** PARAS (PRL Advanced Radial-velocity Abu-sky Search) Spectrograph is a ground-based device designed for the purpose of detecting extrasolar planets.
- Located at the Mt. Abu observatory in India, it operates on a 1.2m telescope.
- The spectrograph used in PARAS operates at a resolution of 67000, allowing for precise measurements of radial velocity.

References

1. The Hindu │ Indian scientists discover new exoplanet

2. PRL | PARAS

Indian Olympic Association (IOA)

IOC steps in support of the protesting wrestlers.

Indian Olympic Association (IOA)

- The Indian Olympic Association is the governing body for the Olympic Movement and the Commonwealth Games in India.
- It is an affiliated member of the International Olympic Committee (IOC), Commonwealth Games Federation (CGF), Olympic Council of Asia (OCA) and Association of National Olympic Committees (ANOC).
- The IOA administers various aspects of sports governance and athletes' welfare in the country.
- In this regard, the IOA oversees the representation of athletes or teams participating in the Olympic Games, Commonwealth Games, Asian Games and other international multi-sport competitions of IOC, CGF, OCA and ANOC.
- The Indian Olympic Association is recognised by the Ministry of Youth Affairs and Sports.

International Olympic Committee

- The International Olympic Committee is the guardian of the Olympic Games and the leader of the Olympic Movement.
- It acts as a catalyst for collaboration between all Olympic stakeholders, including the athletes, the National Olympic Committees, the International Federations and Olympic broadcast partners.
- It also collaborates with public and private authorities including the United Nations and other international organisations.
- The vision of the International Olympic Committee is to build a Better World through Sport.

United World Wrestling (UWW)

- United World Wrestling (UWW) is the international governing body for the sport of amateur wrestling; its duties include overseeing wrestling at the Olympics.
- It presides over international competitions for various forms of wrestling, including Greco-Roman wrestling, Freestyle wrestling, Grappling, for men and women, as well as others.
- The flagship event of UWW is the Wrestling World Championships.

Reference

1. The Indian Express | IOC steps in, supports wrestlers

City Investments to Innovate, Integrate and Sustain 2.0 (CITIIS 2.0)

Cabinet approves City Investments to Innovate, Integrate and Sustain 2.0 (CITIIS 2.0) from 2023 to 2027.

- CITIIS 2.0 is a program conceived by the Ministry of Housing and Urban Affairs (MoHUA).
- It is conceived in partnership with the French Development Agency (AFD), Kreditanstalt für Wiederaufbau (KfW), the European Union (EU), and National Institute of Urban Affairs (NIUA).
- The program will run for a period of 4 years, i.e., from 2023 till 2027.
- The program envisages to support competitively selected projects promoting circular economy with focus on integrated waste management at the city level, climate-oriented reform actions at the State level.
- The program also promotes institutional strengthening and knowledge dissemination at the National level.
- The funding for CITIIS 2.0 would include a loan of Rs.1760 crore and a technical assistance grant of Rs.106 cr. from the EU.
- CITIIS 2.0 aims to leverage and scale up the learnings and successes of CITIIS 1.0.
- CITIIS 1.0 was launched jointly in 2018 by MoHUA, AFD, EU, and NIUA, with a total outlay of ₹933 crore.
- CITIIS 1.0 consisted of three components:
    1. Component 1: 12 city-level projects selected through a competitive process.
    2. Component 2: Capacity-development activities in the State of Odisha.
    3. Component 3: Promoting integrated urban management at the national level through activities undertaken by NIUA, which was the Program Management Unit (PMU) for CITIIS 1.0.
- Technical assistance was made available under the program at all three levels through domestic experts, international experts, and transversal experts.

References

1. PIB | City Investments to Innovate, Integrate and Sustain 2.0 (CITIIS 2.0)
2. CITIIS | How does CITIIS work?

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