

### OBESITY ON THE RISE, HIGH LEVELS OF UNDERNUTRITION PERSIST IN INDIA

#### Why in News?

- According to a new study published by the Lancet, India has become one of the countries with a high “**double burden,**” of **Obesity** and **Undernutrition**.

#### Meaning of Obesity & Undernutrition in Health-Related Studies:

- **Obesity:**
  - According to the World Health Organisation (WHO), obesity is an abnormal or excessive accumulation of fat that poses health risks.
  - **Adults** — anyone over the age of 20 years — are considered to be obese, if they have a **body mass index** (BMI) of 30 kg/m<sup>2</sup> or more.
    - BMI is a person’s weight in kilograms divided by the square of height in meters, according to the Centers for Disease Control and Prevention.
  - **School-aged children and adolescents** — anyone between the ages of 5 and 19 years — are considered obese, if their BMI is two standard deviations above the mean.
- **Underweight:**
  - Underweight is one of the four broad sub-forms of undernutrition.
  - An adult is considered underweight if their BMI is less than 18 kg/m<sup>2</sup>.
  - School-aged children and adolescents are considered underweight if their BMI is two standard deviations below the mean.

#### Key Highlights of the Study Published by the Lancet:

- **Obesity in India:**
  - Obesity in women has spiked in the past three decades — it increased from 1.2% in 1990 to 9.8% in 2022, according to the study.
  - There were **44 million women living with obesity in 2022**.
  - Meanwhile, obesity in men increased by 4.9 percentage points during the same period, with 26 million men living with obesity in 2022.

- Notably, there has also been a significant increase in childhood obesity.
- There has been a spike of 3 percentage points in girls and 3.7 percentage points in boys over the 32 years that the study examined.
- In 2022, 3.1% of girls and 3.9% of boys were obese.
- **Underweight in India:**
  - Despite a significant decline, the prevalence of underweight and thinness continues to be high across genders and age groups.
  - The study found that **13.7% of women and 12.5% of men were underweight.**
  - Thinness — a measure of being underweight in children — in Indian girls was found to be the highest in the world, with a prevalence of 20.3%.
  - And, it was the second highest in Indian boys, with a prevalence of 21.7%.
- **Why Women are more Obese than Men?**
  - Women are more prone to putting on weight because most of them do not have access to or time for physical activities such as walks or gyms.
  - They are also likely to put the nutrition of the family above theirs.
  - if central obesity were to be considered, obesity in women would be as high as 40% to 50% in many parts of the country.
  - A better predictor of future risk of diseases like diabetes and hypertension, **central obesity is an excess accumulation of fat in the abdominal area.**

## Impact of Obesity & Undernutrition on Health:

- The health consequences of obesity are obvious. An increase in obesity, especially in children, is likely to lead to an increase in diseases such as diabetes, hypertension, heart attacks, and strokes.
- The effect of undernutrition, however, is not so obvious. Undernutrition is likely to increase the burden of non-communicable diseases.
- Non-communicable diseases are diseases that are not spread through infection or through other people, but are typically caused by unhealthy behaviors.

## INNOVATIONS FOR DEFENCE EXCELLENCE-DEFENCE INNOVATION ORGANISATION (IDEX-DIO)

The iDEX-DIO, under the aegis of Department of Defence Production, Ministry of Defence, is organising DefConnect 2024.



- It is the flagship scheme of the **Ministry of Defence**, Govt of India launched in 2018.
- **Objective:** The objective of the scheme is to cultivate an innovation ecosystem in the Defence and Aerospace sector by collaborating with startups, innovators, MSMEs, incubators, and academia.

**Funding:** It will be funded and managed by a **‘Defence Innovation Organization (DIO)’** which has been formed as a ‘not for profit’ company as per the Companies Act 2013 for this purpose, by the two founder memberse. Defence Public Sector Undertakings (DPSUs) - HAL & BEL.

- It functions as the executive arm of DIO, carrying out all the required activities while DIO will provide high level policy guidance to iDEX.
- It offers **grants and support for R&D** with significant potential for future adoption in Indian defence and aerospace.

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## DRUGS AND MAGIC REMEDIES (OBJECTIONABLE ADVERTISEMENTS) ACT, 1954

Recently, the Supreme Court has prohibited a company from disseminating advertisements that claim to treat medical conditions such as BP, diabetes, fevers, epilepsy.



**Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954** is a legislative framework to **control the advertisement of drugs and prohibit** claims of magical qualities in remedies.

- It encompasses various forms of **advertisements, including written, oral, and visual mediums.**
- Under the Act, **the term “drug”** refers to medicines intended for human or animal use, substances for diagnosis or treatment of diseases, and articles affecting the body’s functions.
- Other than articles meant for consumption, the definition for **“magic remedy”** under this Act also extends to **talismans, mantras, and charms** that allegedly possess miraculous powers for healing or influencing bodily functions.
- It prohibits advertisements that give **false impressions, make false claims,** or are otherwise misleading.
- The term **“advertisement,”** under the Act, extends to all notices, labels, wrappers, and oral announcements.

### **Who comes under the Magic Remedies Act?**

- The Act applies to all **individuals and entities** involved in the publication of advertisements, **including manufacturers, distributors, and advertisers.**
- If a company violates the act, individuals in charge of its business operations may also be deemed guilty unless they can prove lack of knowledge or demonstrate due diligence in preventing the offense.
- Directors, managers, or officers of the company may also be held liable if they consented to or neglected the offense.

### **Punishment**

- Violating the Act can result in **imprisonment, fines, or both.**
- If this is the first conviction for the violator, they may face up to six months in prison, fines or both.
- For subsequent conviction, imprisonment may extend to one year, fine, or both.
- The Act does not include any limits for the fines that may be imposed on individuals or organisations.

## NATIONAL COMMISSION FOR PROTECTION OF CHILD RIGHTS



**National Commission for Protection of Child Rights** has been constituted by the Government of India, under the **Commission for Protection of Child Rights (CPCR) Act, 2005**.

- **Mandate:** The Commission is mandated under section 13 of the CPCR Act, 2005 "to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and the UN Convention on the Rights of the Child."
- It is also mandated to monitor the proper and effective implementation of **Protection of Children from Sexual Offences (POCSO) Act, 2012; Juvenile Justice (Care and Protection of Children) Act, 2015** and **Right to Free and Compulsory Education (RTE) Act, 2009**.

### Composition

- **A chairperson** who, is a person of eminence and has done outstanding work for promoting the welfare of children
- **Six members**, out of which at least **two are woman**, from the following fields, is appointed by the Central Government from amongst person of eminence, ability, integrity, standing and experience in Education, Child health, care, welfare or child development; Juvenile justice or care of neglected or marginalized children or children with disabilities, Elimination of child labour or children in distress, Child psychology or sociology; and Laws relating to children.
- These members are appointed by the Central Government for a term of 3 years.
- **Nodal Ministry:** It works under the Ministry of Women and Child Development.



### WHAT IS OPEC+?

OPEC+ members recently agreed to extend voluntary oil output cuts to boost prices following economic uncertainty.

- It is a **group of oil-exporting countries** which meets regularly to decide how much crude oil to sell on the world market.
- **Origin:** These nations came to an accord towards the end of 2016 “to institutionalize a framework for cooperation between **OPEC and non-OPEC** producing countries on a regular and sustainable basis.”
- These nations aim to work together on adjusting crude oil production to **bring stability to the oil market.**
- OPEC+ controls about **40% of global oil supplies** and more than **80% of proven oil reserves.**
- At the core of this group are the members of OPEC (the Organization of the Oil Exporting Countries), which are mainly Middle Eastern and African countries.
- **Members:** It comprises OPEC countries plus Azerbaijan, Bahrain, Brunei, Kazakhstan, Russia, Mexico, Malaysia, South Sudan, Sudan, and Oman.

## What is the Organization of the Petroleum Exporting Countries (OPEC)?

- It is a permanent intergovernmental **organization of oil-exporting countries.**
- **Formation:** It was founded in Baghdad, Iraq, with the signing of an agreement in September 1960 by five countries, namely the Islamic Republic of **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela.**
- Currently, it **has 12 members**, including Algeria, Congo, Equatorial Guinea, Gabon, Libya, Nigeria, and the United Arab Emirates.
- **Headquarters: Vienna, Austria.**

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## MOUNTAINS OF PLASTIC ARE CHOKING THE HIMALAYAN STATES

- **Plastic pollution** has become an **alarming global issue**, transcending geographical boundaries, and infiltrating even the remotest corners of the planet.
- **The Indian Himalayan Region, known for its pristine landscapes** and vital water sources, **is not immune to this crisis.**

- Therefore, it becomes imperative to explore the extent of plastic pollution in the Indian Himalayan Region, its impact on the environment, and the inadequacies in current waste management systems.

## An Analysis of Presence of Plastic in the Indian Himalayan Region and Its Implications

- **Microplastics in the Himalayas: A Silent Menace to Pristine Glacial Ecosystems**
  - The minute particles known as microplastics, a byproduct of larger plastic degradation, are silently infiltrating the Himalayan mountains.
  - Lying within glacial deposits, these microplastics pose a significant threat as they are released into rivers during the melting season.
  - This not only contaminates crucial water sources but also jeopardises downstream communities, showing the interconnected impact of plastic pollution on the region's pristine glacial ecosystems.
- **Plastic Invasion on Water Sources: Threatening Subcontinent's Lifelines**
  - The Indian Himalayan Region, renowned for its role as a vital water source, is facing a severe plastic invasion.
  - Major river systems like the Indus, Ganges, and Brahmaputra are contaminated by unscientific plastic disposal, leading to soil and water pollution.
  - The repercussions extend beyond environmental damage, impacting the region's rich biodiversity.
  - The toxic components of plastic leaching into the ecosystem disrupt the delicate balance, posing a threat to terrestrial and aquatic species alike.

## Conclusion

- The plastic pollution crisis in the Indian Himalayan Region demands urgent attention and comprehensive action.
- Balancing environmental conservation, regulatory frameworks, and community involvement is essential to curb the growing menace of plastic waste.
- The time has come for a collective effort to transform the region into a plastic-free haven.

## WHAT IS LAHORE RESOLUTION?

Pakistan has decided to hold its National Day celebrations in New Delhi again this year, which is observed on March 23, the day the Lahore Resolution was adopted in 1940 by the Muslim League.



**Lahore Resolution** was adopted by the **All-India Muslim League** during its general session in Lahore from March 22 to March 24, 1940, formally called for an independent state for India's Muslims.

- The resolution does not include the word 'Pakistan' anywhere.
- The Lahore Resolution was criticised by many Indian Muslims, like Abul Kalam Azad and the Deoband ulema led by Husain Ahmad Madani, who advocated for a united India.
- **What did the Resolution say?**
  - Geographically contiguous units are demarcated into regions which should be so constituted, with such territorial readjustments as may be necessary, that the areas in which the **Muslims are numerically in a majority** as in the North-Western and Eastern Zones of India, **should be grouped to constitute "Independent States"** in which the constituent units shall be autonomous and sovereign."
  - In other parts of India where the Mussalmans are in a minority, adequate, effective and mandatory safeguards shall be specially provided in the constitution for them and other minorities for the protection of their religious, cultural, economic, political, administrative and other rights and interests."

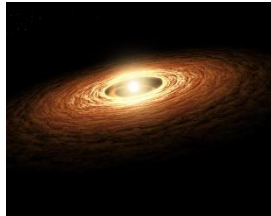
## **What was the lead-up to the Lahore Resolution?**

- Till the early 1930s, many Muslims had been agitating for better representation and safeguarding of their rights within the Indian Union, and the separate electorate granted to them in the Government of India Act, 1935, was a step towards that.
- The Muslim League session was held days after the **Khaksar tragedy**, when members of a Muslim group called the Khaksars, fighting for India's independence, were shot at by the British on March 19 in Lahore, killing many.



## WHAT IS PROTOPLANETARY DISK?

Observations by the James Webb Space Telescope (JWST) show that a protoplanetary disk around a young star in the Orion Nebula is losing massive amounts of hydrogen each year.



### About Protoplanetary Disk:

- A protoplanetary disk is a disk of gas (99% by mass) and dust (1%), orbiting a newly formed star, from which planets may eventually form or be in the process of forming.
- Disks are common by-products of star formation, and range in different mass and size.

### How are they formed?

- Stars form from cold interstellar molecular clouds. A molecular cloud is an interstellar cloud of gas and dust in which molecules can form, the most common of which is hydrogen (H<sub>2</sub>).
- As they collapse into protostars under the force of gravity, the remaining matter forms a spinning disk.
- Eventually, the star stops accreting matter, leaving the disk in orbit around it.
- The leftover gas and dust inside that protoplanetary disk become the ingredients for planet formation.
- Organic molecules present in the original molecular cloud become part of the protoplanetary disk and the planets that form from it.
- The chemical composition of the protoplanetary disk determines the composition of the eventual planets that form from it.
- Protoplanetary disks typically disperse after 2–3 million years through the coalescence of their matter into planets and photoevaporation by the stellar radiation.