Lancet report on obesity

A new global analysis, published by The Lancet, found that 12.5 million children (7.3 million boys and 5.2 million girls) in the country, aged between five and 19, were grossly overweight in 2022, up from 0.4 million in 1990.

Obesity, as defined by the World Health Organisation (WHO), is an abnormal or excessive accumulation of fat that poses health risks. A body mass index (BMI) over 25 is considered overweight and over 30 is obese.

India	1990	2022	World	1990	2022
Men	1.1	26	Men	67	374
Women	2.4	44	Women	128	504
Boys	0.2	7.3	Boys and girls (total)	31	160
Girls	0.2	5.2			

Source: Lancet

All figures in million

The report showed more than three per cent prevalence among children **and teens**, an increase of over three percentage points from 1990. Obesity is also a concern among adults, with female obesity prevalence increasing sharply — women had a 9.8 per cent prevalence, an increase of 8.6 percentage points from 1990. For men, this number stood at 5.4 per cent, an increase of 4.9 percentage points. The new study reveals that 44 million women and 26 million men aged above 20 in India were found to be obese, this figure being 2.4 million women and 1.1 million men in 1990. India ranks 182 among 197 countries for the prevalence of obesity in women and 180 for men in 2022. The country ranked 174 in the world for both girls and boys.

This finding is significant at a time when India already has a high burden of non-communicable diseases — heart disease, strokes, and diabetes topping them. Obesity is a major risk factor and a trigger for early onset of these diseases, even Type 2 diabetes among teens.

The countries facing the highest combined rates of underweight and obesity are found in the Pacific, the Caribbean, the Middle East, and North Africa. These countries are Tonga and American Samoa for women and American Samoa and Nauru for men, with some 70-80% of adults living with obesity.

India ranks 182 out of 197 countries for women with obesity and 180 for men. The country ranked 174 for both girls and boys. India not only showed a burden of obesity, it also showed a burden of underweight among children.

The countries with the largest number of underweight adults in 2022 were India, China, Japan (for women only), Indonesia, Ethiopia, and Bangladesh.

As per the report, the countries with the largest absolute numbers of adults with obesity in 2022 were the USA, China, and India.

4th mass coral reef bleaching event

The world is on the verge of a fourth mass coral bleaching event which could see wide swathes of tropical reefs die, including parts of Australia's Great Barrier Reef, according to the U.S. National Oceanic and Atmospheric Administration (NOAA). Marine biologists are on high alert following months of record-breaking ocean heat fuelled by climate change and the El Nino climate pattern.

Triggered by heat stress, coral bleaching occurs when corals expel the colourful algae living in their tissues. Without these helpful algae, the corals become pale and are vulnerable to starvation and disease.

Coral bleaching can be devastating for the ocean ecosystem, as well as fisheries and tourism-based economies that depend on healthy, colourful reefs to attract scuba divers and snorkellers.

The last global mass coral bleaching event ran from 2014 to 2017, during which time the Great Barrier Reef lost nearly a third of its corals. Preliminary results suggest that about 15% of the world's reefs saw large coral die-offs in this event.

Following the Northern Hemisphere summer last year, the Caribbean registered its worst coral bleaching on record.

Previous global bleaching events occurred in 2010 and 1998.

Coral bleaching is often tied to the naturally occurring El Nino climate phenomenon which leads to warmer ocean waters.

Coral reefs are an important part of marine life as they house more than a quarter of all sea life on Earth, provide protection for coastal communities, and are natural carbon sinks.

Climate change is the <u>biggest threat</u> to their survival because of their <u>sensitivity to heat</u>.

Corals can survive a bleaching event although it can <u>stunt their growth</u> and affect reproduction. Prolonged, or intense heat could cause coral deaths.

The Great barrier reef (which has been hit by a major coral bleaching event) is a living organism, stretches some 2,300km (1,429 miles) off the northeastern coast of Australia and is considered one of the most species-rich habitats on earth. It is home to hundreds of corals, 1,500 fish species and 4,000 different molluscs.

EU adopts AI rules
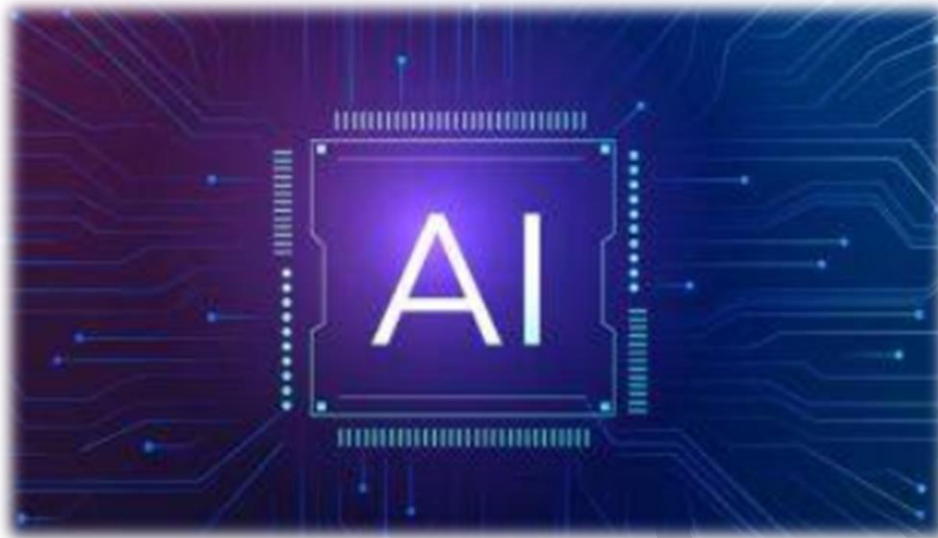
The European Parliament has adopted the Artificial Intelligence Act (AI Act). It is the world's first comprehensive horizontal legal framework for AI. It provides for EU-wide rules on data quality, transparency, human oversight, and accountability. With challenging requirements, significant extraterritorial effects, and fines of up to 35 million euros or 7% of global annual revenue (whichever is higher), the AI Act will have a profound impact on a significant number of companies conducting business in the European Union.

At its core, the AI Act aims to strike a delicate balance between fostering innovation in the field while simultaneously safeguarding fundamental rights, democracy, and environmental sustainability. The approach it has taken to achieve this is a risk-based framework that imposes varying levels of obligations based on the potential impact and risks posed by different AI applications.

Under the Act, general-purpose AI systems and the models they're built on must meet specific transparency requirements, including compliance with EU copyright law and publishing detailed summaries of the training data used. And for the most powerful models

with potential "systemic risks," there are additional safeguards like mandatory model evaluations and incident reporting.

The Act also aims to tackle the issue of deepfakes by making it mandatory to label when content has been artificially generated or altered.

The AI Act applies to providers of AI systems, i.e., companies that develop AI systems with a view to placing them on the market or putting them into service under their own name or trademark, whether for payment or free of charge. The AI Act also applies to importers and distributors of AI systems in the European Union.

Importantly, the AI Act also applies to "deployers", which are defined as natural or legal persons using AI under their authority in the course of their professional activities.

The AI Act has a significant extraterritorial effect, as it applies to providers who place or put into service AI systems on the EU market, irrespective of where they are established or located. The AI Act also applies to providers or deployers established or located outside the European Union where the output of the system is used in the European Union.

The AI Act does not apply to AI specifically developed and put into service for the sole purpose of scientific research and development. The AI Act does not apply to any research, testing and development activity regarding AI before being placed on the market or put into service — but this exemption does not apply to real-world testing. In addition, the AI Act does not apply to systems released under free and open-source licenses, unless such systems qualify as high-risk, prohibited or generative AI.

Samudrayaan

Announced by the government in October 2021, Samudrayaan is a manned submersible mission that will allow scientists to observe unexplored deep-sea areas directly. The Deep Ocean Mission aims to unlock mysteries in the heart of the deeps, and if successful, will put India in an elite club of nations, including the US, Russia, Japan, France and China in developing technology and vehicles to carry out undersea activities.

The cornerstone of Samudrayaan is a specially designed submersible, capable of withstanding immense pressure. It will journey to depths of 6,000 meters, allowing scientists to directly access and investigate the mysteries that lie in this uncharted territory.

Manned submersible facilitates the direct observation by the human in deep ocean in exploring mineral resources rich in nickel, cobalt, rare earths, manganese etc. and collection of samples, which can be used for analysis.

The Samudrayaan mission finds its place as a pivotal part of the Ministry of Earth Sciences' (MoES) Deep Ocean Mission (DOM). This visionary program has multiple goals:

- **Unraveling Deep-Sea Secrets:** Samudrayaan will deploy a team of three scientists to the profound depth of 6,000 meters. This direct observation will shed light on the unique ecosystems thriving in the uncharted recesses of the ocean and uncover hidden resources.

- **Driving the Blue Economy:** Insights gathered during the mission have the potential to propel India's Blue Economy. This endeavor will support the identification and exploration of deep-sea mineral deposits and other potential resources of economic value.

- **Fostering Technological Prowess:** Developing the sophisticated submersible, MATSYA 6000, and its associated technologies stands as a testament to India's growing expertise in deep-sea exploration. The experience and knowledge gained pave the path for future advances in ocean-related research and responsible resource use.

India has a unique maritime position with a 7,517 km coastline along nine mainland states and 1,382 islands. The mission aims to boost the central government's vision of a new India that highlights the blue economy as one of the 10 core dimensions of growth.

President's rule in states

Article 356, also known as President's Rule, is designed to be invoked when a state cannot function constitutionally. It grants the Union Cabinet power to dismiss democratically elected state governments and dissolve legislative assemblies. While the constitutional framers intended Article 356 to be used sparingly, its misuse by various Union governments to topple Opposition-led state governments has been rampant. On March 11, 1994, nine Supreme Court judges, hailing from eight states, took a stand against this abuse of power. Without augmenting their authority, they put crucial limits on the Union government's discretionary power, strengthening democracy and federalism.

In Bengaluru, then chief minister SR Bommai was fighting political upheaval; Prime Minister Rajiv Gandhi had dismissed Bommai's Janata Party-led government and dissolved the legislature after 19 MLAs withdrew support. By the time President R Venkataraman issued the order for President's Rule, seven lawmakers had rejoined Bommai, who again claimed a majority. Governor P Venkatasubbaiah never gave Bommai the chance to prove his majority, and the Karnataka high court rejected Bommai's petition challenging President's Rule.

His government's fate reflected a broader pattern of Union governments misusing Article 356. In 1988 the Sarkaria Commission found that at least a third of all Article 356 impositions were politically motivated.

As Bommai approached the Supreme Court, there were other cases of President's Rule with varying circumstances. In 1987, Congress won and formed the government in Nagaland, but a 1988 split in the party and the wrongful confinement of 13 MLAs prompted the Union government to impose President's Rule. In 1991, in Meghalaya, the speaker challenged the government and disqualified five MLAs for defection, and then called the confidence motion a tie, triggering President's Rule. The Babri Masjid demolition in 1992 sparked violence, followed by the government's resignation and President's Rule in Uttar Pradesh, which was never challenged. However, soon after, BJP governments in Madhya Pradesh, Rajasthan, and Himachal Pradesh also faced President's Rule for alleged support of communal groups and a breakdown in law and order. All three states challenged President's Rule as politically biased. Petitions challenging the imposition of President's Rule in all five states (except Uttar Pradesh) were reviewed along with SR Bommai's petition

Writing during the Partition, the Constitution framers feared secession, violent ethnic conflict, and communist revolutions in certain states. They decided that the power to intervene during a breakdown of law and order, or constitutional governance, would lie with the Union government rather than the state CM. However, they were also aware of its potential for abuse. BR Ambedkar explained, "I do not altogether deny that there is a possibility of these articles being abused or employed for political purposes… and I share the sentiments that such articles will never be called into operation and that they would remain a dead letter."

The formal procedure to invoke Article 356 begins when the governor sends a report to the Union Cabinet explaining why the state government cannot function according to the Constitution. If the Cabinet concurs with the governor's report and recommends that the President invoke Article 356, then the President has discretionary power. However, the Constitution is silent on what constitutes a failure of constitutional machinery or a constitutional emergency, making the provision vulnerable to misuse.

Article 356 can be invoked in three broad ways - one, in line with the goal spelled out in the Constitution to deal with a genuine constitutional emergency, two, using an emergency as a pretext to increase the power of the Union government, and three, to increase the power of the Union government and reduce the power of the state government without any emergency occurring.

The frequent misuse of Article 356 started with Indira Gandhi, who imposed it 48 times, including four times during the 22-month national Emergency. In 1977, when Morarji Desai formed a coalition government, he imposed President's Rule 13 times, including in nine Congress-governed states. The Janata government would impose President's Rule four more times in 1979 under Charan Singh. When Indira Gandhi returned as PM in 1980, her government retaliated and imposed President's Rule in nine states with Opposition party governments.

In Bommai, the Supreme Court faced three primary questions: One, whether proclamations of President's Rule were justiciable; two, the scope and limits of the President's powers under Article 356; and three, the effects of holding such a proclamation invalid after Parliament's approval.

The majority of the nine-judge bench , across six opinions, overruled the 1977 decision in State of Rajasthan v Union of India, and held that proclamations under Article 356 were

subject to judicial review. The courts could strike down an Article 356 proclamation if found to be malafide or based on wholly irrelevant grounds. When reviewing the proclamation, the court would examine if it was issued based on any material, if such material was relevant, even if partially, to impose President's Rule.

Furthermore, it said that the President must have relevant material, such as a governor's report, before imposing President's Rule. Despite Article 74(2) prohibiting review of ministerial advice, courts can verify the existence and relevance of the underlying material for such advice without reviewing the quality of the advice. And if the proclamation is held unconstitutional, the court can restore the dissolved government, even if Parliament had previously approved such a proclamation. The review would have no meaning without granting relief upon finding President's Rule unconstitutional.

The significance of Bommai lies in its success in curbing the Union government's arbitrary actions. The judges made Article 356 proclamations justiciable without undermining the President's discretionary powers, thus strengthening India's federalism without diminishing its separation of powers.

Semicon ecosystem in India

The Indian semiconductor market was valued at approximately $23.2 Bn and is projected to reach $80.3 Bn by 2028, growing at a compound annual growth rate (CAGR) of 17.10% during the forecast period.

Considering the continuous rise in demand for semiconductors, India, with its population of over 1.4 billion and robust education system, has the potential to become a talent powerhouse in the semiconductor industry and help alleviate the acute shortage of skilled professionals.

Further, to support semiconductor research and development (R&D) in India, the Ministry of Electronics and IT (MeitY) has announced a $10 Bn investment in the India Semiconductor Mission (ISM), demonstrating the government's intention to establish a foothold in the semiconductor market. The investment includes capital, incentives for manufacturing, and the Design Linked Incentive (DLI) scheme, which aims to assist Fabless startups in developing products for both domestic and global markets.

Recognizing the significance of the semiconductor industry, the Indian government has implemented various measures and policies. The 'Make in India' initiative, initiated in 2014, aims to boost manufacturing in India and establish the country as a global manufacturing hub.

Several initiatives have been launched to promote semiconductor production, including the Production Linked Incentive (PLI) scheme for the electronics sector. This scheme offers a $1.7 Bn incentive package for companies establishing semiconductor manufacturing facilities in India, making it a groundbreaking initiative. This new policy will not only benefit semiconductor companies but also generate indirect and specialized job opportunities.

Additionally, the government has introduced the Design Linked Incentive (DLI) and other schemes such as Chips to Startup (C2S) and Scheme for Promotion of Electronic Components and Semiconductors (SPECS) to support the industry.

Furthermore, the government has launched the "Semicon India program" to address the global chip shortage by encouraging manufacturers to establish their semiconductor industry setups.

Leading American semiconductor companies have made significant investments to support ISM, marking the beginning of a new era of collaborative innovation. The partnership between India and the United States aims to strengthen semiconductor supply chains and establishes a collaborative mechanism between the two governments to enhance the resilience and diversification of semiconductor supply chains.

Lam Research Corporation, based in Fremont, has also announced its commitment to train the next generation of semiconductor engineers in India. The program aims to educate up to 60,000 Indian engineers in nanotechnologies over a 10-year period, supporting India's goals in semiconductor education and workforce development.

Furthermore, the US Semiconductor Industry Association and India Electronics Semiconductor Association (IESA) have jointly released an interim readiness assessment to identify immediate industry opportunities and facilitate long-term strategic development in complementary semiconductor ecosystems.

AGNI 5

The Agni 5 missile is capable of firing three warheads simultaneously with different velocities to evade the ballistic missile defense of the adversary.

The Agni 5 missile is actually part of the nuclear triad and it is a step towards building a minimum credible deterrent for India. Today, the country has submarine launched ballistic missiles through its submarines, air launch capability and hence the basic foundations of a nuclear triad are complete. It puts India among a relatively small club of countries including the US, Russia, China, France and the UK that are known to have Mirv-equipped missiles. Mirv technology was first developed in the 1970s by the US, and provides strategic advantages because of its capability to overcome ballistic missile defences by inundating the adversary's defence systems.

Its 5,000km range still covers the whole of Pakistan, China and much of the wider Asia neighbourhood.

The MIRV-equipped missiles are part of a natural progression of a nuclear weapon state, which India declared itself through the Shakti Pokhran test in 1999. More test firings, more

operationalisation of Agni 5 and then its induction into the land forces will ensure that nobody has expansionist plans for India and nobody casts an evil eye on India.

Technology

As the missile exits the Earth's atmosphere and reaches the designated altitude, it releases the Mirv payload. Each warhead separates from the missile body, typically using small rockets or a release mechanism, and has its own propulsion and guidance system, allowing it to manoeuvre independently towards its designated target. This enables a single missile to strike multiple targets simultaneously or within a short timeframe.

Agni took its maiden flight test in April 2012 and since has been tested multiple times, every time with added technological advancements.

INSAT 3DS mission
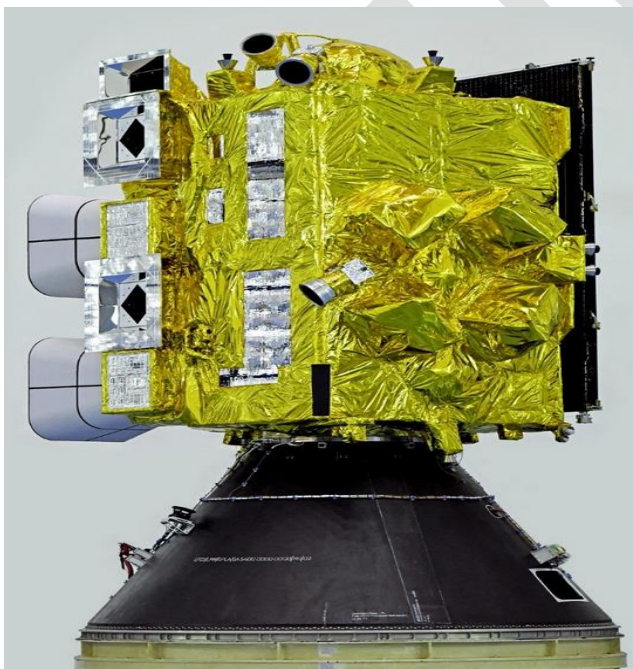
INSAT-3DS Satellite is a follow-on mission of Third Generation Meteorological Satellite from Geostationary Orbit. GSLV-F14/INSAT-3DS mission is fully funded by the Ministry of Earth Sciences (MoES). It is designed for enhanced meteorological observations and

monitoring of land and ocean surfaces for weather forecasting and disaster warning. The satellite will augment the Meteorological services along with the presently operational INSAT-3D and INSAT-3DR satellites. Indian Industries have significantly contributed to the making of the Satellite.

Various departments of the Ministry of Earth Sciences (MoES) such as the India Meteorology Department (IMD), National Centre for Medium-Range Weather Forecasting (NCMRWF), Indian Institute of Tropical Meteorology (IITM), National Institute of Ocean Technology (NIOT), Indian National Center for Ocean Information Services (INCOIS) and various other agencies and institutes will be using the INSAT-3DS Satellite data to provide improved weather forecasts and meteorological services.

The primary objectives of the mission are:

- To monitor Earth's surface, carry out Oceanic observations and its environment in various spectral channels of meteorological importance.
- To provide the vertical profile of various meteorological parameters of the Atmosphere.
- To provide the Data Collection and Data Dissemination capabilities from the Data Collection Platforms (DCPs).
- To provide Satellite Aided Search and Rescue services.

Satellite salient features

Mission	Meteorological services Data relay and Satellite Aided Search & Rescue services
Payloads	6 channel Imager 19 channel Sounder Data Relay Transponder (DRT) Satellite Aided Search & Rescue transponder (SAS&R)
Orbit	Geostationary orbit
Structure	I-2k platform
Thermal	6 channel Imager Passive and active thermal control system Bi-annual yaw flip to reduce the thermal load on the passive coolers
Power generation	42 V Sunlit regulated single bus Power generation 1505W (Equinox) I-2k Solar panels and Li-Ion 100Ah Battery for eclipse support
Launch vehicle	GSLV with 4 m diameter. Ogive Payload Fairing Standard 937mm diameter. interface

Haiti crisis

In the power vacuum that followed the assassination of democratically elected President

Jovenel Moïse in 2021, Henry, who was prime minister under Moïse, assumed power, with

the support of several nations, including the U.S.

When Haiti failed to hold elections multiple times — Henry said it was due to logistical problems or violence — protests rang out against him. By the time Henry announced last year that elections would be postponed again to 2025, armed groups that were already active in Port-au-Prince, the capital, dialed up the violence.

Even before Moïse's assassination, these militias and armed groups existed alongside politicians who used them to do their bidding, including everything from intimidating the opposition to collecting votes. With the dwindling of the country's elected officials, though, many of these rebel forces have engaged in excessively violent acts, and have taken control of at least 80% of the capital, according to a United Nations estimate.

Many armed groups have formed in recent years claiming to be community groups carrying out essential work in underprivileged neighborhoods, but they have instead been accused of violence, even murder. One of the two main groups, G-9, is led by a former elite police officer, Jimmy Chérizier — also known as "Barbecue" — who has become the public face of the unrest and claimed credit for various attacks on public institutions.

Deep poverty and famine are also a serious danger. Gangs have cut off access to the country's largest port, Autorité Portuaire Nationale, and food could soon become scarce.

In 2021, both Haitian and non-Haitian church leaders, women's rights groups, lawyers, humanitarian workers, the Voodoo Sector and more created the Commission to Search for a Haitian Solution to the Crisis. The commission has proposed the "Montana Accord," outlining a two-year interim government with oversight committees tasked with restoring order, eradicating corruption and establishing fair elections.

Haiti still has not fully recovered from the devastating earthquake in 2010 that killed about 220,000 people and left 1.5 million homeless, many of them living in poorly built and

exposed housing. More earthquakes, hurricanes and floods have followed, exacerbating efforts to rebuild infrastructure and a sense of national unity.

One nation one poll

The idea of conducting simultaneous elections is not new to India. The first general election of the Lok Sabha and various state assembly elections were held simultaneously in 1951-52. This continued in three subsequent elections held in 1957, 1962, and 1967.

In 2015, the Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice, in its 79th report, analysed the feasibility of holding simultaneous elections to the Lok Sabha and state assemblies.

The committee that examine the issue recommended simultaneous elections to the Lok Sabha (House of the People) and the State Legislative Assemblies be held in the first phase. And in the second phase, the elections to Municipalities and Panchayats could be held within 100 days of the elections to the House of the People and the State Legislative Assemblies.

- The cost of conducting the 2009 Lok Sabha elections was about Rs 1,115 crore. For 2014, this cost more than tripled to about Rs 3,870 crore. Data for the 2019 elections is still awaited.

- Due to asynchronous Lok Sabha and legislative assembly elections including by-poll results, there is prolonged enforcement of the Model Code of Conduct (MCC). This creates roadblocks in the public service and developmental activities, at least twice or thrice every year in one part or another of the country.

- Elections also involve a huge investment of human resources. CRPF and police personnel are deployed so that the electoral process can be conducted safely. Various people employed by government departments and schools are taken off their normal duties and assigned to work for the ECI or state election commissions

- Frequent elections lead to disruption of normal public life and impact the functioning of essential services. Precious time and money is spent on the formulation of the voter list from the draft list prepared by the Election Commission.

In 2017, the Niti Aayog published a discussion paper authored by Bibek Debroy and Kishore Desai, analysing the "what", "why" and "how" of simultaneous elections. It offers an in-depth analysis which shall be read by all and charts out the plan to synchronise the assembly elections with general elections in two-phases, as was in the Standing Committee report. It also explains how to avoid the disruptions of simultaneous elections once they are synchronised.

Flex fuel and green push

In a bid to reduce reliance on imported fossil fuels, India has outlined its intention to promote the use of ethanol, an important biofuel derived mainly from rice, corn and sugar. In 2003, the Centre launched the Ethanol Blended Petrol (EBP) Programme, which aimed to mix ethanol with petrol, reducing the demand and consequently the consumption of fossil fuels.

Initially, the EBP programme directed oil marketing companies to sell 5 per cent EBP (ethanol 5 per cent, petrol 95 per cent). Today, ethanol accounts for about 10 per cent of the fuel blend. However, this percentage is set to increase as the National Policy on Biofuels-2018 envisaged an indicative target of achieving 20 per cent blending of ethanol in petrol by 2030 under the EBP Programme.

Subsequently, in 2022, the Union Cabinet amended the National Policy on Biofuels, advancing the deadline for fuel companies to increase the ethanol content in petrol to 20 per cent from 2030 to 2025. With its emphasis on ethanol as a fuel, the Centre aims to enhance India's energy security, curtail dependence on imported fuel, conserve foreign exchange

reserves, address environmental concerns and boost the domestic agricultural industry. However, the push for ethanol as a fuel in India is not without its challenges.

- India would need to enhance its feedstock production to achieve its goal of blending 20 per cent ethanol in petrol by 2025 — which would require additional land. If domestic production does not rise, meeting the ethanol blending targets will require an increase in imports, which goes against the goal of energy security that the push for ethanol as a fuel aims to achieve.

- While the roadmap asserts that the surplus food grain production will be adequate to meet the ethanol blending target, reliance on excess stocks is a short-term solution, especially during droughts or when agricultural production is affected by climate change.

- Ethanol-based biofuels are often considered a preferable alternative to fossil fuels due to their lower emissions. Studies indicate that burning ethanol results in lesser carbon dioxide emissions than conventional fuels. However, these calculations typically overlook the greenhouse gas emissions associated with ethanol production. A recent study found that ethanol's carbon intensity could be around 20 per cent higher than that of petrol due to emissions resulting from land-use changes, increased fertiliser use and harm to ecosystems.

- According to a report by the government, producing a kilogram of sugar requires 1,500-2,000 litres of water — making it an unsustainable option. Therefore, the current programmes promoting ethanol-blended biofuels seem to contradict India's efforts to transition towards more environmentally sustainable fuel options.

Missing middle in health coverage

- In June 2021 NITI Aayog launched a report on 'Health Insurance for India's Missing Middle' claims that ~30% of the population are devoid of any financial protection for health. According to the report, The Ayushman Bharat scheme covers ~50% of the population. Around 20% of the population is covered under social health insurance and private voluntary health insurance. The remaining 30% of the population lacks any financial backing for healthcare treatment – this segment is termed the 'missing middle' because they are not poor enough to be covered by government-subsidized schemes but not rich enough to afford private health insurance. However, the actual number of uncovered individuals is much higher due to the existing coverage gap in the Ayushman Bharat scheme.

- Over 75% of the healthcare infrastructure is concentrated in metro cities, where only 27% of the total population resides—the rest 73% of the Indian population lack even basic medical facilities. The primary medical centers are lacking over 3,000 doctors and in the last decade, the shortage has increased by ~200%. Quality healthcare treatment can be found in the urban areas but often the person from a rural part of the country cannot afford to come to the metro cities for the treatment.

- One of the most critical concerns is the gap in the doctor-patient ratio. According to the Indian Journal of Public Health India needs 2070000 doctors by 2030. However, a doctor in the government hospital attends to ~11000 patients, which is more than the WHO recommendation of 1:1000.

- Indians pay ~63% of their medical expenses out-of-pocket, which is considered to be the highest in the world. A report from Brookings India based on NSSO surveys claims that ~7% of India's population is pushed into poverty every year due to healthcare expenses.

- The government's spending on healthcare, the gap in demand and supply, and chronic shortages are some of the concerns that need urgent attention. Data suggests that India has 1.4 beds per 1,000 people, 1 doctor per 1,445 people, and 1.7 nurses per 1,000 people.

- The Ayushman Bharat scheme offers subsidized healthcare packages with annual coverage of Rs.5 lakhs per family on a floater basis. As the scheme is limited to covering ~50% of India's population at the bottom of the pyramid, an average Indian middle class continues to struggle to access healthcare treatment.