Tackling Air Pollution

Source: HT

Why in News?

The **Indo-Gangetic Plain**, encompassing Delhi, Bihar, Chandigarh, Haryana, Punjab, Uttar Pradesh, and West Bengal, has recently been severely affected by **intense air pollution.**

- For instance, in Delhi, the **Air Quality Index (AQI)** dropped to **approximately 500**, highlighting the **severe air pollution** challenge in the IGP, which is home to **9% of the global population and 40% of India's population.**

What is the Status of Air Pollution in India?

- **Leads in Worst-Polluted Cities:** India has the highest number of cities in the **top 100** most polluted cities globally, with **39 cities** ranked among them, surpassing **China**, which has **30 cities** in the list.
- **Regional Comparison:** Other South Asian countries contribute significantly to global pollution, with **Pakistan having 7 cities, Bangladesh 5, and Nepal 2** cities in the top 100.
    - **53** of the top 100 polluted cities are in the **Indian subcontinent.**
- **Life Expectancy Reduction:** According to a **2019 study** by the **Energy Policy Institute at the University of Chicago (EPIC)**, residents of IGP have an average **life expectancy shorter by seven years** compared to other parts of the country due to severe air pollution.

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THE UNWANTED CROWN

Country	Number of cities in top 100 most polluted
India	39
China	30
Pakistan	7
Bangladesh	5
Iran	3
South Africa	3
Nepal	2
Indonesia	2

The list includes top 6 countries, hence the total is not 100
Source: S&P Global Mobility

Top ten most polluted countries (2023)

Rank	Country	Average PM 2.5 ug/m3
1	Bangladesh	79.9
2	Pakistan	73.7
3	India	54.4
4	Tajikistan	49.0
5	Burkina Faso	46.6
6	Iraq	43.8
7	UAE	43.0
8	Nepal	42.4
8	Egypt	42.4
9	Congo	40.8

Source: iQAir

What is AQI?

- **About:** AQI is a **numerical scale** used to measure and communicate the quality of air based on the concentration of **major pollutants.**
    - It was established by the **Environmental Protection Agency (EPA).**
- **Categories:** There are six AQI categories:
    - Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe.
- **Pollutants Covered:** AQI considers **eight** pollutants namely **PM 10, PM 2.5, Nitrogen Dioxide (NO_2), Sulphur Dioxide (SO_2), Carbon Monoxide (CO), Ozone (O_3), Ammonia (NH_3), and Lead (Pb)**.
- **Scale of AQI:** The AQI ranges from **0 to 500**, with higher values indicating **worse air quality** and greater health risks.

AQI Category	AQI	Concentration Range*							
		PM_{10}	$PM_{2.5}$	NO_2	O_3	CO	SO_2	NH_3	Pb
Good	0-50	0-50	0-30	0–40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory	51 - 100	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5-1.0
Moderately Polluted	101-200	101-250	61-90	81-180	101-168	2.1-10	81-380	401-800	1.1-2.0
Poor	201-300	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very Poor	301–400	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe	401-500	430+	250+	400+	748+*	34+	1600+	1800+	3.5+

* CO in mg/m^3 and other pollutants in µg/m^3; 24-hourly average values for PM_{10}, $PM_{2.5}$, NO_2, SO_2, NH_3, and Pb, and 8-hourly values for CO and O_3.

- **Effects of Bad Air Quality:**
  - **Short-Term Effects:** Symptoms such as **headaches, nasal congestion, and skin irritation** are common when exposed to poor air quality.
    - Conditions like **asthma, allergic rhinitis, and pneumonia** may be triggered or worsened by high levels of pollutants.
  - **Long-Term Health Risks:**
    - **Chronic Respiratory Diseases:** Asthma, chronic obstructive pulmonary disease (COPD), and even lung cancer.
    - **Cardiovascular Health:** Like heart attacks, strokes, heart failure, and hypertension.
    - **Cognitive Decline:** Cognitive decline, dementia, and strokes, particularly in older adults.
    - **Skin:** Eczema and dermatitis.
    - **Internal Organ Damage:** Damage to internal organs, including the kidneys and liver.
  - **Impact on Vulnerable Groups:**
    - **Pregnant Women:** Disrupt placental development, harm foetal growth, and cause long-term health issues in children.
    - **Children:** Hinder neurological development, affecting cognitive and physical growth.

Air Pollutants

Sulphur Dioxide (SO₂)

It comes from the consumption of fossil fuels (oil, coal and natural gas). Reacts with water to form acid rain.

Impact: Causes respiratory problems.

Ozone (O₃)

Secondary pollutant formed from other pollutants (NOx and VOC) under the action of the sun.

Impact: Irritation of the eye and respiratory mucous membranes, asthma attacks.

Nitrogen Dioxide (NO₂)

Emissions from road transport, industry and energy production sectors. Contributes to Ozone and PM formation.

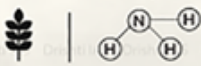**Impact:** Chronic lung disease.

Carbon Monoxide (CO)

It is a product of the incomplete combustion of carbon-containing compounds.

Impact: Fatigue, confusion, and dizziness due to inadequate oxygen delivery to the brain.

Ammonia (NH₃)

Produced by the metabolism of amino acids and other compounds which contain nitrogen.

Impact: Immediate burning of the eyes, nose, throat and respiratory tract and can result in blindness, lung damage.

Lead (Pb)

Released as a waste product from extraction of metals such as silver, platinum, and iron from their respective ores.

Impact: Anemia, weakness, and kidney and brain damage.

Particulate Matter (PM)

PM10: Inhalable particles, with diameters that are generally 10 micrometers and smaller.

PM2.5: Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

Source: Emitted from construction sites, unpaved roads, fields, fires.

Impact: Irregular heartbeat, aggravated asthma, decreased lung function.

Note: These major air pollutants are included in the Air quality index for which short-term National Ambient Air Quality Standards are prescribed.

Drishti IAS

What are the Causes of Air Pollution?

- **Temperature Inversions:** It occurs in **November and December** when cold air mixes with **pollutants, trapping** them near the ground. This exacerbates air pollution by preventing the dispersion of harmful particles.
- **Traffic Congestion:** Traffic congestion is a key contributor to air pollution, with Mumbai having the highest vehicle density per kilometre, followed by Kolkata, Pune, and Delhi.
    - In densely populated urban areas, **heavy traffic not only exacerbates air pollution** but also hinders efforts to improve air quality through cleaner technologies and more efficient urban planning.
    - **For example, in cities like Delhi**, despite the introduction of electric buses and stricter emission norms, traffic congestion continues to undermine air quality improvements.
- **Stubble Burning** and **Desert Dust:** The widespread burning of **crop residues** releases smoke, carbon dioxide, and particulate matter, significantly worsening air quality.
    - Additionally, winds from the **Thar Desert** **bring fine dust particles** into the region, further intensifying air pollution.
- **Fireworks:** The burning of fireworks releases **toxic chemicals, heavy metals**, and fine particulate matter into the air, which contribute to **short-term surges** in air pollution and deteriorating air quality.
- **Biomass Burning:** In rural areas, the reliance on traditional methods of cooking and heating, such as using **firewood, biomass fuels, or coal,** contributes to both indoor and outdoor air pollution.

What are the Initiatives Related to Controlling Air Pollution in India?

- **National Clean Air Programme**
- **System of Air Quality and Weather Forecasting and Research (SAFAR) Portal**
- **New Commission for Air Quality Management**
- **Graded Response Action Plan (for Delhi)**
- **For Reducing Vehicular Pollution:**
    - **BS-VI Vehicles**
    - **National Electric Mobility Mission Plan**

WHO's 4 Pillar Strategy

- WHO adopted a resolution in **2015** to address the **adverse health effects** of air pollution adopting a **4 Pillar Strategy.**
- **Those four pillars are:**
    - Expanding the knowledge base
    - Monitoring and reporting
    - Global leadership and coordination
    - Institutional capacity strengthening

Way Forward

- **Waste-to-Energy Technologies:** Invest in **waste-to-energy plants** that convert non-recyclable waste into energy through processes like **incineration or anaerobic digestion.**
    - **Incineration** is a thermal process that **burns waste at high temperatures** to reduce its volume, while **anaerobic digestion** is a biological process where microorganisms **break down organic waste** without oxygen.
- **Covering Construction Sites:** Measures like vertically covering the construction area, covering raw materials, use of **water spray and windbreaker** to prevent sand and dust from dispersing

and covering construction materials can significantly improve air quality.

- **De-SOx-ing and De-NOx-ing Systems:** To limit pollutants like **sulphur dioxide (SO2) and nitrogen oxides (NOx),** plants and refineries need to install De-SOx-ing and De-NOx-ing systems that remove SO2 and NOx respectively.
- **Alternative Biomass Uses:** Instead of burning, the residue can be used for energy production, **biogas generation** and feeding cattle.
- **Shift Toward Electrification**: Promoting **electric, hybrid, and BS-VI vehicles,** along with improving public transport, can reduce vehicular emissions significantly.
- **Vapour Recovery Systems:** Petrol vapours, containing **volatile organic compounds (VOCs) ,** contribute to smog and pose health risks during storage unloading and refuelling.
    - **Vapour recovery systems** capture VOCs to reduce emissions.

Drishti Mains Question:

 Critically analyse the factors contributing to severe air pollution in the Indo-Gangetic Plain. Suggest measures to address the issue effectively.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Which of the following are the reasons/factors for exposure to benzene pollution? (2020)

1. Automobile exhaust
2. Tobacco smoke
3. Wood burning
4. Using varnished wooden furniture
5. Using products made of polyurethane

Select the correct answer using the code given below:

(a) 1, 2 and 3 only

(b) 2 and 4 only

(c) 1, 3 and 4 only

(d) 1, 2, 3, 4 and 5

Ans: (a)

Q. In the context of solving pollution problems, what is/are the advantage/advantages of bioremediation techniques? (2017)

1. It is a technique for cleaning up pollution by enhancing the same biodegradation process that occurs in nature.
2. Any contaminant with heavy metals such as cadmium and lead can be readily and completely treated by bioremediation using microorganisms.
3. Genetic engineering can be used to create microorganisms specifically designed for bioremediation.

Select the correct answer using the code given below:

(a) 1 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (c)

Mains

Q. Describe the key points of the revised Global Air Quality Guidelines (AQGs) recently released by the World Health Organisation (WHO). How are these different from its last update in 2005? What changes in India's National Clean Air Programme are required to achieve revised standards? **(2021)**

Q. What are the key features of the National Clean Air Programme (NCAP) initiated by the government of India? **(2020)**

Allotropes of Carbon

[Source: TH](#)

Why in News?

**Carbon and its allotropes** remain in news due to its varied **physical and chemical properties.**

- Allotrope refers to one or more forms of a **chemical element** that occur in the **same physical state.**
- **Carbon has four main allotropes** namely Diamond, Graphite, Fullerenes, and Graphene.
  - Additionally, **carbon nanotubes** and **amorphous carbon** (like charcoal) are also considered forms of carbon, but they are less commonly classified as primary allotropes.

What are the Allotropes of Carbon?

- **Graphite:** In graphite, each carbon atom forms bonds with **three other carbon atoms**, creating **two-dimensional sheets**. It is made up of layers of Carbon atoms arranged in **hexagonal arrays.**
  - **Electricity Conduction:** Graphite is a **good conductor of electricity** due to the existence of **delocalised electrons** within its layers.
  - **Lubricant:** Its layers can **easily slide** over each other, making it suitable as a **solid lubricant.**
  - **Hardness:** Graphite is the **softest** carbon allotrope.
  - **Graphene:** Graphene is a single, **one atom thick** layer of graphite. It has vast potential in **electronics, energy storage, sensors, coatings, composites**, and biomedical devices.
    - Its **high surface area** and biocompatibility make it ideal for **drug delivery and [tissue engineering](#).**
- **Diamond:** It is made up of a **three-dimensional** network of Carbon atoms arranged in a **tetrahedral structure**, where each carbon atom is bonded to other **four carbon atoms.**
  - **Hardness:** It is recognized as the **hardest naturally** occurring material due to its strong covalent bonds, making it suitable fo**r industrial cutting, drilling, and grinding applications.**
  - **Transparency:** Some diamonds exhibit **high transparency** in the visible spectrum, making them valuable in **jewellery.**
  - **Thermal Conductivity:** Diamonds possess excellent **thermal conductivity,** making

them useful in heat sinks.
- **Electricity Conduction:** It **lacks electrical conductivity** in its pure form as it has **no free electrons or "charge carriers"** available to conduct electricity.
- **Lab-grown Diamonds (LGDs):** **LGDs** are **identical to natural diamonds** in terms of physical properties such as **hardness, sparkle, and durability** but are created artificially in laboratories using **Graphite as a diamond seed**.
- **Fullerene: Buckminsterfullerene** is a type of **fullerene** with the formula **C60** and is characterised by its distinctive **cage-like structure** resembling a football.
  - **Applications:** Fullerenes and their compounds have potential applications as **semiconductors, superconductors, lubricants, catalysts**, electric wires, and plastic reinforcing fibres.
- **Carbon Nanotubes:** They are **cylindrical structures** made of rolled-up **graphene sheets.**
  - They are used in electronics, **materials science, energy storage,** medical applications, sensors, **water purification**, **drug delivery**, aerospace, and **nanotechnology**.
  - They can be used as **carriers of drugs and antigens** in the human body and **biochemical sensors.**
  - They are **biodegradable in nature.**
- **Amorphous Carbon:** It refers to various forms of carbon **lacking a crystalline structure**, such as **charcoal, soot, and activated carbon.**

Diamond   Graphite   Fullerene
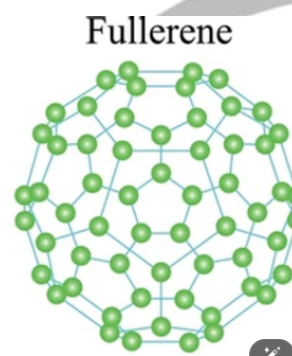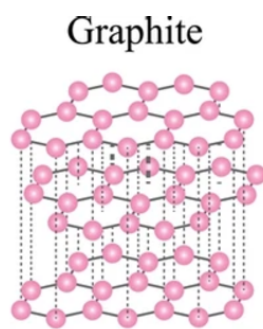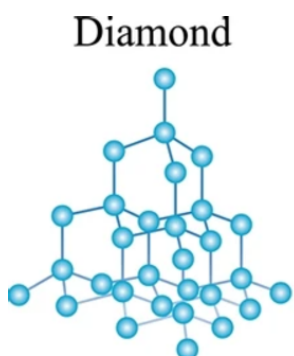
UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q.With reference to carbon nanotubes, consider the following statements: (2020)

1. They can be used as carriers of drugs and antigens in the human body.
2. They can be made into artificial blood capillaries for an injured part of human body.
3. They can be used in biochemical sensors.
4. Carbon nanotubes are biodegradable.

Which of the statements given above are correct?

(a) 1 and 2 only

(b) 2, 3 and 4 only

(c) 1, 3 and 4 only

(d) 1, 2, 3 and 4

Ans: (c)

Q. Graphene is frequently in news recently. What is its importance? (2012)

1. It is a two-dimensional material and has good electrical conductivity.
2. It is one of the thinnest but strongest materials tested so far.

3. It is entirely made of silicon and has high optical transparency
4. It can be used as 'conducting electrodes' required for touch screens, LCDs and organic LEDs.

Which of the statements given above are correct?

(a) 1 and 2 only

(b) 3 and 4 only

(c) 1, 2 and 4 only

(d) 1, 2, 3 and 4

Ans: (c)

One Day One Genome Initiative

Source: PIB

Why in News?

Recently, the **'One Day One Genome'** initiative was launched by the **Department of Biotechnology (DBT) and Biotechnology Research and Innovation Council (BRIC)**.

- It was launched on the **1st foundation day** of **BRIC** at the **National Institute of Immunology (NII), New Delhi.**

What is One Day One Genome Initiative?

- **About:** It is an **initiative designed to highlight** India's unique **microbial diversity** and its role in the environment, agriculture, and human health, leveraging data from **genome sequencing.**
- **Objective:** It aims to publicly release a fully annotated **bacterial genome** from India, along with a detailed **summary, infographics, and genome data.**
- **Coordination:** It will be coordinated by **Biotechnology Research and Innovation Council-National Institute of Biomedical Genomics (BRIC-NIBMG)**, an institute of the Department of Biotechnology.
- **Potential Benefits:**
    - Understanding microbial functions can lead to **better waste management** and pollution control strategies.
    - Insights into beneficial microbes can enhance **crop yields and promote sustainable farming** practices.
    - Identifying microbes with antimicrobial properties may lead to **new treatments and drugs.**

Genome Sequencing

- **About:** The genome of an organism consists of a unique sequence of **DNA or RNA** made up of **nucleotide bases**. Determining the order of these bases is called **genomic sequencing**.
    - **Genome sequencing** helps identify genome-encoded traits such as important **enzymes, antimicrobial resistance, and bioactive compounds.**
- **Genome Sequencing Process:**

- **Extraction:** DNA or RNA is extracted from cells of **bacteria, viruses, or pathogens.**
- **Library Preparation:** RNA or single-stranded DNA is converted into double-stranded DNA, chopped into shorter pieces, and ends of the fragments are modified.
  - The sample, now called a **"library,"** is ready for sequencing.
- **Sequencing:** The library is loaded into a sequencer that identifies **nucleotide bases** using **fluorescence** or electrical current changes.
- **Applications:** It is critical for understanding microbial dynamics, improving **public health, managing environments, advancing agriculture**, and developing medical solutions.

How Do Microorganisms Contribute to Environment, Agriculture and Human Health?

- **Role in Environment:** They play crucial roles in **biogeochemical cycles, soil formation, mineral purification,** and the breakdown of **organic wastes** and **toxic pollutants**.
  - E.g., Anaerobic bacteria like *Clostridium* and *Methanogens* break down organic matter into **methane** and **carbon dioxide.**
- **Role in Agriculture:** Microorganisms are vital for **nutrient cycling**, **nitrogen fixation**, **soil fertility,** pest and weed control, and responding to environmental stress.
  - E.g., **Rhizobium bacteria** make a **symbiotic relationship** with **leguminous plants (e.g., beans, peas, lentils)** to convert atmospheric **nitrogen into ammonia** that the plant can use.
- **Role in Human Health:** They play essential roles in **digestion**, immunity, and even mental health.
  - E.g., **Lactobacillus** bacteria break down **lactose (milk sugar)** and other **carbohydrates into lactic acid**.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. With reference to agriculture in India, how can the technique of 'genome sequencing', often seen in the news, be used in the immediate future? (2017)

1. Genome sequencing can be used to identify genetic markers for disease resistance and drought tolerance in various crop plants.
2. This technique helps in reducing the time required to develop new varieties of crop plants.
3. It can be used to decipher the host-pathogen relationships in crops.

Select the correct answer using the code given below:

(a) 1 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (d)

Rising Inflation in India

Source: PIB

Why in News?

The **Ministry of Statistics & Programme Implementation (MoSPI)** recently reported that the **Consumer Price Index (CPI)** or the **retail inflation** surged to 6.2% in October 2024 and the Food inflation, as per the **Consumer Food Price Index (CFPI),** rose to 10.87%.

- This marks the **highest inflation rate since August 2023**, surpassing the **Reserve Bank of India's (RBI)** upper tolerance limit of **6%.**
- Despite global inflation easing, India faces persistent price pressures, leading experts to reassess forecasts and interest rate impacts.

What Factors have Contributed to High Retail Inflation in India?

- **High Food Inflation**: A significant contributor to the surge was **food inflation,** which hit a 15-month high at 10.8%.
    - Vegetable prices shot up by 42%, marking a 57-month high. Fruit prices rose by 8.4%, and pulses saw a 7.4% increase.
- **Core Inflation Uptrend: Core inflation,** which excludes food and fuel prices, has also edged upwards, signaling persistent inflationary pressure beyond just food.
    - Inflation in household services is climbing, reflecting higher living costs.
- **Global Price Volatility:** A sharp **rise in global edible oil prices,** driven by supply disruptions and other international market factors, has directly impacted India's inflation.
    - Since **India is a major importer of edible oils,** any increase in global prices results in higher costs for domestic consumers, **contributing to food inflation**.
- **Extreme Weather Events: Heatwaves** have negatively impacted crop yields, leading to **supply shortages and higher prices**

What are the Implications of High Retail Inflation on RBI's Monetary Policy?

- **Delay in Interest Rate Cuts:** The RBI **inflation target is 4%, with a tolerance band of 2% to 6%.** With inflation exceeding this threshold, immediate interest rate cuts are unlikely.
    - Experts predict that the RBI might only consider **reducing rates in 2025 if inflation shows a sustained decline.**
- **Focus on Inflation Control:** The RBI will continue to **prioritize controlling inflation to maintain price stability,** as unchecked inflation undermines economic growth and purchasing power.
    - The RBI had projected inflation to moderate to **4.8% in Q3 and 4.2% in Q4 of FY 2024-25,** but this now seems less likely, affecting the future trajectory of interest rates.
- **RBI's Policy Dilemma:** The RBI faces a difficult decision, while it must curb inflation, it must also **avoid stifling economic growth**. Rising food prices and supply disruptions are major contributors to inflation, complicating policy decisions.
    - Given the persistent inflationary pressures, the **RBI may adopt a cautious approach,** waiting for inflation to decline before adjusting interest rates. Alternatively, it could implement a **tight monetary policy,** which, while controlling inflation, may also **impact economic growth.**
- **Potential Risks of Unchecked Inflation:** The RBI stated that continued inflation could

undermine the **real economy, particularly industry and exports.**
  - If rising input costs are passed on to consumers, it could reduce consumer demand and negatively **impact corporate earnings.**
  - This may especially affect sectors like manufacturing, which **rely on stable input costs and margins.**

Note:

The **Monetary Policy Framework Agreement (MPFA)** between the Government of India and the RBI aims to **maintain price stability while considering growth.**

- According to this agreement, if **inflation stays outside the 2% to 6% range for three consecutive quarters,** the RBI must report to the central government, explaining the reasons, proposing corrective actions, and estimating when inflation will return to the target range.

What is the Consumer Price Index?

- **About:** The CPI measures the change in retail prices of goods and services commonly purchased by households for daily consumption.
  - It is used to track inflation, with the base year for the CPI being 2012.
- **Purpose:** CPI is a widely used **macroeconomic indicator of inflation,** used by governments and **central banks for inflation targeting** and price stability monitoring, and as **deflators** in national accounts.
  - CPI is also used to **index dearness allowance to employees for increases in prices.**
  - CPI helps understand the cost of living, **purchasing power,** and the expensiveness of goods and services.

What is the Consumer Food Price Index?

- CFPI measures inflation that focuses exclusively on the price changes of food items in a consumer's basket.
- CFPI tracks price changes of a basket of commonly consumed food items like cereals, vegetables, fruits, dairy, meat, and other staples.
  - Like the CPI, the CFPI is **calculated monthly with the base year presently used as 2012.**
- The **Central Statistical Office (CSO),** MOSPI releases CFPI for three categories (rural, urban, and combined) separately on an all-India basis.

INFLATION AND RELATED TERMS

INFLATION

- Rise in goods/services prices; corresponding decline in purchasing power
  - Creeping Inflation: Mild/moderate inflation where price level persistently rises over a period of time at a mild rate (single digit inflation rate)
  - Galloping Inflation: Occurs when mild inflation is not checked/controlled (inflation in double/triple digits - 20/100/ 200% annually)
  - Hyperinflation: Prices rise a million or even a trillion percent annually (witnessed by Germany in 1920s)

CORE INFLATION

- Change in costs of goods/services but excluding those from food/energy sectors (due to price volatility)

HEADLINE INFLATION

- Headline Inflation - Change in value of all goods in the basket (including food and energy)

Core = Headline – Food & fuel items

STAGFLATION

- When Inflation, unemployment and economic stagnation /recession occur simultaneously; most difficult type of inflation to manage
  - Witnessed by developed countries in the 1970s (US, UK) when world oil prices rose dramatically

DEFLATION

- Reverse of inflation - a sustained decline in price of goods/services
  - Here, annual inflation rate falls below 0% resulting in an increase in the real value of money (Japan suffered for almost a decade in 1990s)
  - Can worsen into recession/depression; hence, more dangerous than inflation

DISINFLATION

- When inflation rate decelerates
  - Implies that prices are rising (inflation is happening) but at a slower rate each passing month

Deflation is decline in prices, whereas disinflation is a decline in inflation rate

Inflation V/s Disinflation V/s Deflation

REFLATION

- Typically follows deflation
  - Policymakers try to stimulate economic activity by producing inflation (more govt spending, reduced interest rates etc.)

SKEWFLATION

- Skewness of inflation among different sectors of the economy - some sectors facing huge inflation while some none and some even deflation

GREEDFLATION

- Where (corporate) greed is fuelling inflation; companies increasing their prices beyond just covering costs to maximise profits

SHRINKFLATION

- Hidden form of inflation; often leads to customer frustration/dissatisfaction
  - Practice of reducing the size of a product while maintaining its sticker price

2 liters → Shrinkflation → 1.75 liters
$5 $5

Drishti IAS
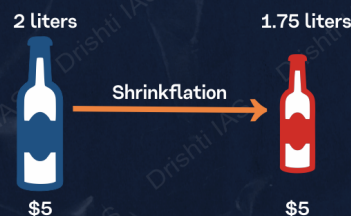
Drishti Mains Question:

Examine the implications of high retail inflation on the Reserve Bank of India's monetary policy.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q 1. The lowering of Bank Rate by the Reserve Bank of India leads to (2011)

(A) More liquidity in the market
(B) Less liquidity in the market
(C) No change in the liquidity in the market
(D) Mobilization of more deposits by commercial banks

Ans: A

Q.2 Consider the following statements: (2020)

1. The weightage of food in Consumer Price Index (CPI) is higher than that in Wholesale Price Index (WPI).
2. The WPI does not capture changes in the prices of services, which CPI does.
3. Reserve Bank of India has now adopted WPI as its key measure of inflation and to decide on changing the key policy rates.

Which of the statements given above is/are correct?

(a) 1 and 2 only
(b) 2 only
(c) 3 only
(d) 1, 2 and 3

Ans: (a)

Q 3. If the RBI decides to adopt an expansionist monetary policy, which of the following would it not do? (2020)

1. Cut and optimize the Statutory Liquidity Ratio
2. Increase the Marginal Standing Facility Rate
3. Cut the Bank Rate and Repo Rate

Select the correct answer using the code given below:

(A) 1 and 2 only
(B) 2 only
(C) 1 and 3 only
(D) 1, 2 and 3

Ans: B