

1. DHRUV64 Indigenous Microprocessor

1.1 Why is it in News?

On **15 December 2025**, the **Ministry of Electronics and Information Technology (MeitY)** formally announced the unveiling of **DHRUV64**, a domestically developed microprocessor. The processor has been designed by **C-DAC** under the **Microprocessor Development Programme** and is being projected as a major milestone in creating an **indigenous processor pipeline** while progressively reducing India's dependence on **imported chip architectures and foreign-controlled designs**.

1.2 Relevance

GS III – Science & Technology

- Indigenous semiconductor and processor ecosystem
- Digital sovereignty and strategic technologies
- Electronics manufacturing and chip design capabilities
- Adoption of **RISC-V open-source hardware architecture**

1.3 What is DHRUV64?

- **Type:** General-purpose microprocessor
- **Architecture:** 64-bit, dual-core
- **Clock speed:** Approximately 1 GHz
- **Developer:** Centre for Development of Advanced Computing (C-DAC)
- **Parent Ministry:** MeitY
- **Instruction Set Architecture:** RISC-V (open standard)
- **Functional role:** Acts as the computational “brain” of electronic systems, capable of running operating systems as well as embedded and industrial applications

1.4 Why Microprocessors Matter Strategically

Microprocessors constitute the foundational layer of critical digital infrastructure, including:

- Telecommunications networks
- Industrial control and automation systems
- Automotive electronics
- Defence platforms and space systems

Control over **processor design, toolchains, and update pathways** translates directly into:

- Digital sovereignty

- Enhanced cybersecurity assurance
- Supply-chain resilience, especially during sanctions or export-control regimes

Despite being one of the world's largest consumers of electronic devices, India remains a **marginal designer and manufacturer of processors**, underscoring the strategic importance of indigenous initiatives like DHRUV64.

1.5 What Do DHRUV64's Specifications Indicate?

1.5.1 Capability Assessment

- **64-bit architecture:** Enables compatibility with modern operating systems and contemporary software ecosystems
- **1 GHz dual-core configuration:**
 - Modest by consumer electronics standards
 - Adequate for use in:
 - Telecom base stations
 - Routers and networking equipment
 - Industrial automation
 - Automotive electronic modules

The processor is **not intended for** high-end smartphones or AI-intensive consumer computing, as no GPU or AI accelerator blocks have been disclosed.

1.6 Comparative Perspective

Globally competitive processors typically feature:

- Multiple cores
- Higher clock frequencies
- Integrated GPUs and AI acceleration blocks

In contrast, **DHRUV64 prioritises:**

- Reliability
- Deterministic performance
- Tight hardware–software co-design

This makes it particularly suitable for **mission-critical, non-consumer workloads** rather than mass-market devices.

1.7 India's Indigenous Processor Ecosystem

DHRUV64 is part of a broader, multi-institutional processor development pipeline rather than a standalone effort:

Processor	Institution	Primary Use Case
SHAKTI	IIT Madras	Strategic and commercial systems
AJIT	IIT Bombay	Control systems
VIKRAM	ISRO–SCL	Space applications
THEJAS64 (2025)	C-DAC	Industrial and strategic systems
DHRUV64	C-DAC	Platform-level processor

All these initiatives fall within the **DIR-V (Digital India RISC-V) Programme**.

1.8 What is RISC-V?

RISC-V is an **open instruction set architecture (ISA)** characterised by:

- Zero licensing fees for the ISA itself
- Modular and extensible design
- Flexibility for custom security and performance features

1.9 Why Governments Prefer RISC-V

RISC-V avoids dependence on proprietary ISAs such as ARM or x86, thereby enabling:

- Strategic autonomy
- Indigenous innovation
- Customisable security architectures

The **DIR-V programme** aims to develop a portfolio of RISC-V processors for **industry, defence, and consumer electronics**.

DHRUV64 is the **third DIR-V processor**, following:

- **THEJAS32** (fabricated in Malaysia)
- **THEJAS64** (fabricated at SCL Mohali)

1.10 Key Gaps and Unanswered Questions (Critical Analysis)

1.10.1 Performance Transparency

No performance benchmarks have been disclosed, including:

- Instructions per cycle (IPC)

- SPEC benchmark scores
 - Cache architecture details
 - Memory controller capabilities
 - Performance-per-watt metrics
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1.10.2 Fabrication Ambiguity

The foundry partner and fabrication node remain undisclosed, raising concerns regarding:

- Supply-chain sovereignty
 - Manufacturing yields and reliability
 - Long-term availability, especially for telecom and automotive sectors requiring extended lifecycle support
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1.10.3 What Does “Fully Indigenous” Mean?

The claim of “indigenous” remains ambiguous across the value chain:

- Indigenous ISA? (No—RISC-V is open, not Indian-origin)
 - Indigenous microarchitecture?
 - Indigenous system-on-chip (SoC) integration?
 - Indigenous fabrication?
 - Indigenous toolchain?
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At present, “indigenous” appears to apply primarily to **design ownership**, not end-to-end manufacturing.

1.10.4 Ecosystem Readiness

There is limited clarity regarding:

- Availability of developer boards
 - Operating system support (Linux, RTOS, etc.)
 - Security certifications
 - Government anchor procurement
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Without a mature ecosystem, even technically sound processors struggle to achieve commercial adoption.

1.10.5 Roadmap Uncertainty

Future processors announced include:

- **DHANUSH:** 1.2 GHz, quad-core, ~28 nm
- **DHANUSH+:** 2 GHz, quad-core, ~14/16 nm (reported)

However, timelines and fabrication commitments have not been specified.

1.11 Supporting Policy Ecosystem

1.11.1 Key Government Schemes

- **Chips to Startup Programme:** ₹250 crore over five years for training, prototyping, and startups
- **Design Linked Incentive (DLI) Scheme:** Incentivises domestic chip design firms
- **INUP-i2i:** Provides access to national nanofabrication facilities

1.11.2 Manufacturing Push

- **India Semiconductor Mission (ISM):**
 - 10 approved projects
 - Spread across six States
 - Investment commitment of approximately ₹1.6 lakh crore

1.12 Strategic Significance

1.12.1 Technological Sovereignty

Reduces reliance on foreign-controlled processor architectures, especially critical during geopolitical disruptions.

1.12.2 Defence and Strategic Autonomy

Indigenous processors are indispensable for:

- Secure communications
- Weapon systems
- Space missions

1.12.3 Platform-Centric Approach

DHRUV64 is positioned as:

- A testbed for startups, academia, and industry
- A lower-cost prototyping platform independent of foreign chips

Its success will depend on robust **software stacks**, **reference designs**, and **OEM adoption**.

1.13 Way Forward

- Release detailed and transparent technical documentation
- Ensure anchor procurement by government agencies
- Build a strong software and operating-system ecosystem
- Establish a clear domestic fabrication roadmap
- Transition from one-off processors to scalable SoC families
- Align processor design with:
 - Telecom standards
 - Automotive safety norms
 - Defence certification requirements

2. India Faces Its Greatest Strategic Challenge in Bangladesh Since 1971

2.1 Why is it in News?

In **2025**, the **Parliamentary Standing Committee on External Affairs** (Chair: **Shashi Tharoor**) released a report reviewing India–Bangladesh relations over the preceding two turbulent years.

The assessment was triggered by the **collapse of the Sheikh Hasina–led Awami League government on 5 August 2024**, followed by intense political churn, youth-led movements, and the re-emergence of Islamist forces.

The report flags **expanding Chinese and Pakistani influence** in Bangladesh and warns that India risks losing strategic relevance in Dhaka unless it undertakes timely diplomatic recalibration.

2.2 Relevance

GS II – International Relations

- India–Bangladesh bilateral relations
- Neighbourhood First Policy
- Political transitions in neighbouring States

GS II – Foreign Policy & Diplomacy

- Strategic competition with China and Pakistan
- Diplomatic recalibration and institutional engagement

2.3 Core Assertion of the Report

The Committee characterises the current situation as **India’s most serious strategic challenge in Bangladesh since 1971**.

- **1971:**
 - An existential humanitarian crisis

- Birth of a new nation with India's decisive involvement
 - **Present challenge:**
 - Subtler but potentially more damaging
 - Not military confrontation, but **strategic marginalisation**
 - Risk of India becoming **irrelevant rather than threatened**
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2.4 Background: India–Bangladesh Relations

Historically strong pillars of engagement included:

- Shared legacy of the **1971 Liberation War**
- Close alignment with the **Awami League**
- Cooperation on:
 - Counter-terrorism
 - Border management
 - Connectivity and transit
 - River-water sharing

India's Bangladesh policy remained **leader-centric**, heavily anchored around Sheikh Hasina.

2.5 What Has Changed?

2.5.1 Political Transition

- Collapse of Awami League dominance
 - Rise of:
 - Youth-led nationalism
 - Anti-incumbency narratives
 - Growing perception that India was:
 - Over-aligned with one political party
 - Insensitive to generational aspirations
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2.5.2 Generational Discontinuity

- Younger Bangladeshis:
 - Less emotionally tied to the 1971 legacy
 - More assertive about sovereignty and autonomy

- India's historic goodwill is **no longer automatic**

2.5.3 Resurgence of Islamist Forces

- Islamist groups re-enter mainstream politics
- Raises concerns regarding:
 - Internal security
 - Cross-border extremism
 - Minority rights within Bangladesh

2.5.4 Strategic Inroads by China and Pakistan

- **China:**
 - Infrastructure projects
 - Ports, power, and digital systems
 - Defence supplies and economic leverage
- **Pakistan:**
 - Intelligence and ideological outreach

Bangladesh increasingly adopts a **hedging strategy** between India and its rivals.

2.6 The Sheikh Hasina Asylum Issue

2.6.1 India's Decision

India granted shelter to Sheikh Hasina following her ouster.
The Parliamentary Committee:

- Endorsed the **humanitarian and moral rationale**
- Warned against allowing Indian territory to be used for political mobilisation

2.6.2 Diplomatic Sensitivities

- Bangladeshi authorities allege Hasina and associates:
 - Incited unrest from abroad
- Statements reportedly issued through personal communication devices

India's official position (Foreign Secretary **Vikram Misri**):

- India does not provide a political platform
- No facilitation of political activity from Indian soil

2.7 Strategic Risks for India

1. Loss of Strategic Space

- Marginalisation in:
 - Security cooperation
 - Infrastructure influence
 - Regional norm-setting

2. Border and Internal Security Risks

- Porous border + instability may fuel:
 - Radicalisation
 - Smuggling
 - Insurgent revival

3. Neighbourhood First Policy Under Strain

- Bangladesh is India's most critical eastern neighbour
- Gateway to:
 - Northeast India
 - Act East Policy
- Erosion here damages India's regional credibility

2.8 Committee's Warning

The danger is **not war, but irrelevance**, arising from:

- Strategic complacency
- Over-reliance on past alignments
- Failure to engage emerging political and social forces

2.9 What Recalibration Means for India

1. Move Beyond One-Party Dependence

- Engage opposition parties, civil society, and youth groups
- Shift from leader-centric to institutional diplomacy

2. Narrative Reset

- Move beyond 1971-centric rhetoric
- Address:

- Employment
- Economic aspirations
- Climate vulnerability
- Digital economy cooperation

3. Strategic Competition Management

- Offer credible alternatives to Chinese financing
- Focus on:
 - Quality infrastructure
 - Transparent development projects

4. Clear Security Red Lines

- Zero tolerance for:
 - Anti-India terror activities
 - Radical networks
- Quiet but firm security cooperation

3. Retired Judges Reluctant to Serve as Ad Hoc Judges under Article 224A

3.1 Why is it in News?

In **December 2025**, **Chief Justice of India Surya Kant** stated that many retired High Court judges are unwilling to serve as **ad hoc judges** because of institutional discomfort, particularly the reluctance to sit as junior judges alongside younger serving judges. This follows the **Supreme Court's January 2025 decision** activating **Article 224A** to address massive criminal case pendency in High Courts. Despite judicial endorsement, uptake has remained limited.

3.2 Relevance

GS II – Polity & Constitution

- Judiciary and constitutional provisions
- Article 224A
- Judicial independence and accountability

GS II – Governance

- Pendency of cases
- Access to justice
- Institutional reform

3.3 Scale of the Problem (Data)

- Pending criminal cases in High Courts: **18,98,833**
- Cases pending over one year: **68.27%**
- Sanctioned HC judge strength: **1,122**
- Vacancies: **298 (≈26.6%)**
- Worst-affected HCs: Allahabad, Punjab & Haryana, Patna

3.4 Constitutional Basis: Article 224A

- Allows appointment of retired High Court judges as **ad hoc judges**
- Initiated by the Chief Justice of the High Court
- Requires consent of the retired judge
- Appointed by the President after consultation
- Intended as a **temporary measure**, not a substitute for regular appointments

3.5 Supreme Court's Intervention

- January 2025 judgment (building on April 2021 ruling)
- Encouraged selective use of ad hoc judges for criminal backlogs
- Emphasised:
 - Structured deployment
 - Time-bound mandates

3.6 Why Is Uptake Poor?

3.6.1 Hierarchy and Bench Dynamics

- Criminal appeals usually heard by Division Benches
- Retired judges uncomfortable sitting as junior members
- Serving judges reluctant to sit under retired judges
- Results in bench formation difficulties

3.6.2 Institutional Culture

- Strong seniority norms
- Lack of protocols for ad hoc bench composition

- Perceived dilution of institutional authority

3.6.3 Administrative Inertia

- Several HCs have not forwarded names
- Absence of:
 - Incentives
 - Role clarity
 - Dedicated case allocation mechanisms

3.7 Critical Assessment of Article 224A

Strengths

- Quick augmentation of judicial capacity
- Utilises experienced judicial capital
- Focused relief for criminal appeals

Limitations

- Not scalable without cultural acceptance
- Risks parallel, temporary judiciary
- Does not address root causes:
 - Chronic vacancies
 - Appointment delays
 - Procedural inefficiencies

3.8 Structural Causes of Pendency

- Persistent vacancies
- Collegium–executive friction
- Rising litigation complexity
- Low judge-to-population ratio
- Weak case-management practices

3.9 Way Forward

- Clear guidelines on:
 - Bench composition

- Seniority protocol
- Time-bound regular appointments
- Dedicated criminal benches
- Technology-driven case management
- Strengthening ADR and plea bargaining

4. IDF Diabetes Atlas 2025

4.1 Why is it in News?

In **2025**, the **11th edition of the IDF Diabetes Atlas** was released, with key findings published in *The Lancet Diabetes & Endocrinology*. It projects a sharp global rise in diabetes prevalence by 2050, with middle-income countries bearing the heaviest burden.

4.2 Relevance

GS II – Social Justice & Health

- Non-communicable diseases
- Universal Health Coverage

GS III – Human Capital & Development

- Productivity losses
- Demographic transition

4.3 Key Global Findings

- 2024: ~580 million adults living with diabetes
- Prevalence: **11.11%**
- 2050 projection: **850–900 million**
- Prevalence: **12.96%**

Growth is **structural, not cyclical**.

4.4 Income and Regional Trends

- Middle-income countries show fastest growth
- Urban burden rising sharply
- South and East Asia emerging as global epicentre

4.5 India-Specific Implications

- Shift from communicable to NCDs
 - Diabetes driving cardiovascular disease, kidney failure, blindness
 - Long-term healthcare costs and productivity losses
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4.6 Way Forward

- Population-level prevention
- Fiscal and urban-planning interventions
- Early screening and digital monitoring
- Focused strategies for high-burden regions

5. Securities Market Code Bill, 2025

5.1 Why is it in News?

In 2025, the **Finance Minister Nirmala Sitharaman** introduced the **Securities Market Code Bill, 2025** in the Lok Sabha.

The Bill has been referred to the **Standing Committee on Finance** for detailed examination. It gives legislative effect to a reform proposal first announced in the **Union Budget 2021–22**, aiming to modernise and streamline India's securities market regulation.

5.2 Relevance

GS III – Economy

- Capital markets and financial-sector reforms
- Investor protection and market efficiency
- Ease of doing business and capital mobilisation

GS II – Polity & Governance

- Role and powers of regulatory institutions (SEBI)
 - Parliamentary oversight over delegated legislation
 - Concerns related to separation of powers
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5.3 What is the Securities Market Code Bill, 2025?

The Bill proposes a **comprehensive consolidation and rationalisation** of India's securities market laws.

It seeks to merge three major legislations into a single, unified framework:

- **Securities Contracts (Regulation) Act, 1956**
- **SEBI Act, 1992**

- **Depositories Act, 1996**

The stated objectives include:

- Establishing a coherent and simplified regulatory architecture
- Strengthening investor protection
- Enabling large-scale capital mobilisation
- Reducing legal fragmentation and compliance duplication

5.4 Rationale for the Bill

The existing regulatory framework is characterised by:

- Multiple overlapping statutes
- Procedural complexity and duplication
- Inconsistent enforcement mechanisms

From a global perspective, capital markets increasingly require:

- Agile regulation
- Predictable enforcement
- Alignment with contemporary international best practices

The policy logic underlying the Bill is to combine **ease of doing business** with **effective deterrence against market abuse**.

5.5 Key Provisions of the Bill

5.5.1 Consolidation of Securities Laws

- Replaces three separate Acts with a single Code
- Expected benefits include:
 - Greater legal clarity
 - Reduced compliance burdens
 - Faster adjudication and enforcement processes

5.5.2 Expansion of the SEBI Board

- Board strength increased from **9 to 15 members**
- Composition includes:
 - Chairperson
 - Two Central Government nominees (ex-officio)

- One RBI nominee (ex-officio)
- Eleven other members, of which at least five must be whole-time members

This addresses the current situation where SEBI has only **three whole-time members**, and aims to enhance institutional capacity and sectoral expertise.

5.5.3 Conflict of Interest Disclosure

- Mandatory disclosure of direct and indirect interests by SEBI Board members
 - Intended outcomes:
 - Improved transparency
 - Enhanced institutional integrity
 - Reduced risk of regulatory capture
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5.5.4 Decriminalisation of Minor Violations

- Shifts minor, procedural, and technical violations from criminal prosecution to civil penalties
- Criminal liability retained for serious offences such as:
 - Insider trading
 - Trading on material non-public information

The rationale is to ensure:

- Faster enforcement
 - Reduced fear of criminalisation for genuine compliance lapses
 - A more business-friendly regulatory environment
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5.5.5 Civil Penalties Framework

- Introduces proportionate civil penalties linked to:
 - Unlawful gains
 - Losses caused to investors or markets

This aligns enforcement with the **principle of proportionality** and the actual economic harm caused.

5.5.6 Limitation on Inspections

- Prohibits inspections if **eight years** have elapsed since the alleged contravention
- Intended to provide:

- Legal certainty
- Protection against indefinite regulatory exposure

However, concerns have been raised that this may weaken enforcement in cases involving long-running or complex financial frauds.

5.6 Political and Constitutional Concerns

5.6.1 Opposition's Objections

Opposition members, including **DMK MP Arun Nehru** and **Congress MP Manish Tewari**, have argued that:

- The Bill concentrates excessive powers in SEBI
- It risks undermining the principle of separation of powers
- Over-centralisation may weaken accountability mechanisms

5.6.2 Government's Response

The Finance Minister defended the referral of the Bill to the Standing Committee, signalling openness to:

- Parliamentary scrutiny
- Stakeholder consultation
- Refinement of provisions

5.7 Critical Analysis

Strengths

- Simplifies securities regulation
- Improves enforcement efficiency
- Reduces unnecessary criminalisation
- Strengthens SEBI's institutional capacity

Concerns

- Potential over-centralisation of regulatory authority
- Eight-year inspection bar may impede investigation of sophisticated market manipulation
- Expansion of SEBI's powers without parallel enhancement of accountability structures

5.8 Broader Significance

Economic Dimension

- Supports capital-market deepening
- Facilitates startup and MSME fundraising
- Strengthens long-term infrastructure financing

Governance Dimension

- Reflects a shift from punitive regulation to trust-based compliance
- Tests the balance between regulatory autonomy and parliamentary oversight

6. Bharat Stage–VI (BS-VI) Emission Norms

6.1 Why is it in News?

Amid severe winter air pollution, **Delhi–NCR authorities intensified enforcement** against older, non-BS-VI private vehicles.

Clarifications were issued stating that vehicles **registered on or after 1 April 2020** are BS-VI compliant, while older vehicles are subject to:

- Entry restrictions
- Monetary penalties
- Deregistration or scrappage-linked action

Public confusion regarding identification of BS-VI vehicles has triggered policy, enforcement, and social debates.

6.2 Relevance

GS III – Environment & Ecology / Science & Technology

- Urban air pollution and mitigation strategies
- Vehicular emissions and public health
- Climate co-benefits through black carbon reduction

6.3 What are Bharat Stage (BS) Emission Norms?

Bharat Stage norms are India's emission standards for vehicles with internal combustion engines.

They aim to regulate pollutants emitted from vehicles and are broadly aligned with European (Euro) standards.

Progression of standards:

BS-I → BS-II → BS-III → BS-IV → BS-VI

India **skipped BS-V** to accelerate pollution control.

6.4 What is BS-VI?

- Implemented nationwide from **1 April 2020**
- Applicable to:
 - Petrol and diesel vehicles
 - Two-wheelers, passenger cars, and commercial vehicles

Covers both:

- Vehicle engine emission standards
 - Fuel quality specifications
-

6.5 How to Identify a BS-VI Vehicle?

- **Registration Certificate (RC):** Emission norm mentioned as BS-VI
- **Manufacturer label:** Often indicates compliance
- **VAHAN portal / mParivahan app:** Official verification

Key rule:

- Vehicles registered **on or after 1 April 2020** are BS-VI compliant
 - Vehicles registered earlier remain non-BS-VI even if upgraded later
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6.6 What Changed from BS-IV to BS-VI?

6.6.1 Emission Limits (Diesel Vehicles)

- Nitrogen Oxides (NOx) reduced by approximately **68%**
 - Particulate Matter (PM) reduced by approximately **82%**
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6.6.2 Emission Limits (Petrol Vehicles)

- Significant reduction in:
 - NOx
 - Hydrocarbons
-

6.6.3 Fuel Quality Improvements

- Sulphur content reduced:
 - BS-IV: 50 ppm
 - BS-VI: 10 ppm

This enables advanced emission-control technologies and cleaner exhaust.

6.6.4 Advanced Emission-Control Technologies

- Diesel vehicles:
 - Diesel Particulate Filters (DPF)
 - Selective Catalytic Reduction (SCR)
 - Petrol vehicles:
 - Improved catalytic converters
 - Mandatory On-Board Diagnostics (OBD)
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6.7 Why Are Older Vehicles More Polluting?

- Absence of advanced emission-control systems
- Higher emissions of NO_x and PM_{2.5} / PM₁₀
- Diesel vehicles particularly harmful due to fine particulate penetration

In urban winters, vehicular pollution intensifies due to:

- Temperature inversion
 - Low wind speeds
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6.8 Why Does Delhi–NCR Enforce Stricter Measures?

- Extremely high vehicular density
- Unfavourable meteorological conditions
- Judicial backing through:
 - Supreme Court directions
 - GRAP (Graded Response Action Plan)

Authorities estimate that around **37% of NCR vehicles** are highly polluting, primarily older models.

6.9 Health and Environmental Rationale

Health Impacts

- Vehicular emissions linked to:
 - Asthma
 - Chronic bronchitis
 - Cardiovascular diseases
- PM_{2.5} classified as carcinogenic by WHO

Environmental Impacts

- Urban smog formation
- Ground-level ozone
- Long-term climate benefits through reduced black carbon emissions

6.10 Economic and Social Implications

Positive Outcomes

- Cleaner urban air
- Reduced public health expenditure
- Push towards cleaner fuels and electric vehicles

Challenges

- Higher cost of BS-VI vehicles
- Maintenance issues such as DPF clogging
- Disproportionate impact on lower-income vehicle owners

6.11 Policy Linkages

- National Clean Air Programme (NCAP)
- Vehicle Scrappage Policy
- FAME scheme for electric mobility
- GRAP for Delhi–NCR

6.12 Critical Issues and Concerns

- Enforcement-heavy approach risks social backlash
- Air pollution is multi-source:
 - Construction dust
 - Biomass burning
 - Industrial emissions

BS-VI alone cannot resolve urban air pollution.

6.13 Way Forward

- Combine BS-VI enforcement with:
 - Expansion of public transport
 - EV adoption
 - Urban planning reforms
- Prefer scrappage incentives over punitive bans
- Ensure fuel quality monitoring nationwide
- Address non-vehicular pollution sources systematically

20th December 2025: Daily MCQs:

Q1. With reference to the Securities Market Code Bill, 2025, consider the following statements:

1. It seeks to replace the Securities Contracts (Regulation) Act, SEBI Act, and Depositories Act with a single consolidated legislation.
2. It proposes to completely abolish criminal liability for all securities market violations.
3. It introduces a statutory time limit beyond which market inspections cannot be initiated.

Which of the statements given above is/are correct?

- A. 1 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1, 2 and 3

Correct Answer: B

Explanation:

- **Statement 1 – Correct:** The Bill consolidates **three separate Acts** into one unified Code.
- **Statement 2 – Incorrect:** Criminal liability is **retained for serious offences** such as insider trading and trading on unpublished price-sensitive information.
- **Statement 3 – Correct:** The Bill introduces an **eight-year limitation period** for inspections.

Q2. The proposed expansion of the SEBI Board under the Securities Market Code Bill, 2025 includes which of the following?

1. Increase in total Board strength from 9 to 15 members

2. Mandatory inclusion of representatives from all stock exchanges
3. Requirement that at least five members be whole-time members

Select the correct answer using the code below:

- A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

Correct Answer: B

Explanation:

- **Statement 1 – Correct:** Board strength is expanded from **9 to 15**.
- **Statement 2 – Incorrect:** No provision mandates representation from stock exchanges.
- **Statement 3 – Correct:** At least **five members must be whole-time members**.

Q3. With reference to Bharat Stage–VI (BS-VI) emission norms, consider the following statements:

1. BS-VI norms apply uniformly to petrol, diesel, and two-wheeler vehicles.
2. A vehicle upgraded to BS-VI fuel standards after April 2020 is legally treated as BS-VI compliant.
3. Reduction in sulphur content of fuel under BS-VI norms enables advanced emission-control technologies.

Which of the statements given above is/are correct?

- A. 1 and 2 only
B. 1 and 3 only
C. 2 and 3 only
D. 1, 2 and 3

Correct Answer: B

Explanation:

- **Statement 1 – Correct:** BS-VI norms apply to **petrol, diesel, two-wheelers, and commercial vehicles**.
- **Statement 2 – Incorrect:** **Registration date matters**, not later upgrades. Vehicles registered before 1 April 2020 are **not BS-VI**, even if retrofitted.
- **Statement 3 – Correct:** Sulphur reduction to **10 ppm** enables DPF, SCR, and advanced catalytic systems.

Q4. Which of the following technological changes were introduced specifically to meet BS-VI norms?

1. Diesel Particulate Filters (DPF)
2. Selective Catalytic Reduction (SCR) systems
3. Mandatory On-Board Diagnostics (OBD)
4. Exhaust Gas Recirculation (EGR) systems

Select the correct answer using the code below:

- A. 1, 2 and 3 only
B. 1 and 4 only
C. 2, 3 and 4 only
D. 1, 2, 3 and 4

Correct Answer: A

Explanation:

- **DPF – Yes** (diesel PM control)
- **SCR – Yes** (NOx reduction in diesel vehicles)
- **OBD – Yes** (mandatory under BS-VI)
- **EGR – No:** EGR existed earlier; it is **not specific to BS-VI transition**.

Q5. The eight-year limitation on inspections proposed in the Securities Market Code Bill, 2025 raises concerns primarily because:

- A. It violates the constitutional separation of powers
B. It may prevent investigation of long-duration and concealed market frauds
C. It removes the appellate jurisdiction of courts over SEBI decisions
D. It eliminates parliamentary oversight of securities regulation

☒ **Correct Answer: B**

Explanation:

- Complex financial frauds often **surface years later**.
- An absolute inspection bar may **shield long-running manipulation schemes**.
- The provision does **not** remove court jurisdiction or parliamentary oversight.

Q6. Which of the following best explains why BS-VI enforcement is stricter in Delhi–NCR compared to many other regions?

- A. Delhi has exclusive legislative power over transport emissions
B. Vehicular pollution is the only major source of air pollution in NCR
C. Judicial directives and GRAP provide region-specific enforcement backing
D. BS-VI norms are applicable only to metropolitan regions

Correct Answer: C

Explanation:

- **GRAP (Graded Response Action Plan)** and **Supreme Court oversight** mandate stricter, region-specific measures.
- Transport is **one of several pollution sources**, not the only one.
- BS-VI norms are **nationwide**, not metro-specific.

Q7. Consider the following statements regarding the regulatory philosophy underlying the Securities Market Code Bill, 2025:

1. It reflects a shift from punitive regulation to trust-based compliance.
2. It reduces the role of civil penalties in favour of criminal prosecution.
3. It seeks to balance ease of doing business with market integrity.

Which of the statements given above is/are correct?

- A. 1 and 3 only
- B. 2 only
- C. 1, 2 and 3
- D. 3 only

Correct Answer: A

Explanation:

- **Statement 1 – Correct:** Emphasis on civil penalties and proportionality.
- **Statement 2 – Incorrect:** Exactly the opposite — civil penalties are expanded.
- **Statement 3 – Correct:** Core philosophy of the reform.

Mains: Accountability and transparency are foundational values of ethical governance. Analyze their ethical significance and explain how the absence of these values affects public trust in democratic institutions.(150 words)