Infrastructure

- PPP : post 1991 phenomena (pvt. sector help to fill infra gap)

3 new investment models adopted post 1991: PPP, VFG, CSR

→ Defn: way to execute & maintain infra thru collab. of govt. & pvt. sector where pvt. sector involved in at least op. & maintenance

→ Risk sharing
  → legal & political risks: govt.
  → supply & demand risks: pvt

Division of labour as per resp. strengths

→ Need
  → SPV to execute & maintain project
  → capital intensive ⇒ pvt. sector
  → innovation & efficiency

→ criticisms

limitations rather

  → Long gestation period ⇒ govt. change ⇒ policy change
  → Moral hazard: govt. bails out when project goes south
  → Airports, ports etc. ⇒ revenue sharing model ⇒ aggressive bidding ⇒ strain on finances later ⇒ quality of service↓
  → Hard to renegotiate project if condition changes ⇒ no bureaucrat negotiates
    → no reward
    → graft allegation
  → Reckless bidding (security of govt. bail out)

Hence, many infra projects are today financially stressed, accounting for almost a third of stressed assets (NPAs) in banks. New projects are not able to attract sponsors as in recent PPP bids & banks are unwilling to lend

→ PPP models (12): EPC, Cost+, HAM, BOT, BOOT, BOLT, DBFOT, LDO, Mgt. contract, BOO, Service contract, Swiss challenge

Must write

→ 4 govt. steps to promote PPP
  → Viability Funding Gap: Dept. of Economic Affairs introduced VFG Scheme (2006) => financial support of 40% of total project costs to social infra that is economically justified but commercially unviable
  → FDI in many sectors opened up => foreign contractors + finance + tech transfer + managerial expertise, innovation, competition etc. etc.
  → India Infra Project Dev. Fund (IIPDF) set up: Corpus of 100 Cr. set up in 2008 => grant upto 75% for project dev. expenses (PDA => appeasement => grant)
  → India Infra Finance Company Ltd. (IIFCL): Registered as NBFC-ND-IFC with RBI, provides long term finance to infra projects to eligible sectors.

Vijay Kelkar Comm. (2015) to study & improve PPP models

– Specific infra sectors

- → Roads
  - → Avg. pace of highway construction 3 times from 11.7 km/day in FY 14 to 34 km/day in FY 24 (ES)
  - → Bharatmala Pariyojana (1998, Vajpayee) ⇒ umbrella scheme for highways — NHAI implemented
  - → PMGSY: Rural roads
- → Railways
  - → Bkd. linkages (railway↑ ⇒ iron & steel↑) + Fwd. linkages (railway↑ → tourism↑, logistics cost↓, raw material & finished goods transport to mkts. etc.) — Also transport of coal & petroleum products
    - combined multiplier of 4+ (as per Railway Min.)
  - → 100% FDI in railway infra except train operations & safety
  - → High Speed Railway: cost efficient over air transport for <800 km journey
    - Also energy saving & eco friendly (Net Zero goal by 2030)
  - → India 4th largest rail network
  - → Dedicated freight corridors
  - Railway Platform Modernization thru Swiss challenge

Increase in public infra investment like railway, affects the economy in two ways:

-In the short run, it boosts aggregate demand and crowds in (pulls in) pvt investment due to complementary nature of infra services

-In the long run, a supply side effect also kicks in as the infrastructure-built feeds into the productive capacity of the economy

- → Industrial Corridors
  - → connect economic agents along a geography
    - world class infra
    - Rail, road, port, airport
    - SEZ, logistics park etc.
    - → complementary urban infra
  - → 12 announced in Budget ⇒ support Make in India targets (कहाँ?)
    - Synergy with 14 CEZs & 35 MMLPs for logistics ecosystem
- → Ports
  - → 13 major ports
  - → Vadhavan port → India's first mega port (INSTC + IMEEC node)
    - ↳ aimed to be within Top 10 globally
    - synergy with industrial corridors
  - → Sagarmala initiative ⇒ port-led development
    - Maritime logistics infra
    - कहाँ हैं? ← 14 CEZs of 100 km radius each
  - ↓ PPP in ports (Major Port Auth.) Act 2021

- Airports
  - 74 in FY15 to 149 in FY22 (doubled as per Budget)
  - UDAN RCS
    - making flying affordable
      - Tourism
      - Balanced regional growth
    - capping of fares + VGF
- Multi modal logistic parks
  - Transport of goods via different modes (air, sea, land) through an interconnected chain by single transport operator
  - Hub & spoke model ⇒ logistic cost ↓
  - MORTH has planned 35 across India
    (first one in Assam)
- Coal mining reforms (2015)
  - Electronic auction (except for govt. company)
  - captive mining removed (except in certain cases) → sell to any one
  - proceeds of auction to state govts.

  Coal Mines Act 2015

  Most ambitious reform of the coal sector since its nationalization in 1973. We spend billions of dollars on coal import, despite sitting on the 4th largest coal reserve in the world.
- Mining sector reforms (2015 MMDR Act)
  - electronic auction + competitive bidding
  - Longer leases 50 yrs
  - Powers with centre to intervene to address delays
  - Dist. Mineral Foundation ⇒ local welfare
- Power sector reforms
  - 45.4% from non-fossil (ES)
  - Allow pvt. discoms
  - DBT for subsidies
  - Universal Obligation Fund
  - RPOs & RECs + ₹400 / tonne GST compensation cess on coal

  Major issue: Cross-subsidy of sectors

  RDSS schemes & targets
- Oil & gas sector reforms
  - Open Acerage Licensing Policy'
  - Freedom for pricing & marketing of gas
  - Graded royalty: Based on depth of drilling

— RERA 2016 : transparency & safety in RE sector with regulatory framework

① → Regulator : RERAs + RE Appellate Tribunals in States/UTs

② → Registration with RERA : Mandatory for projects $> 500 m^2$ or 8 apartments/units

③ → Disclosures (Mandatory) : Timeline, promoters etc.

④ → Standardization : defines terms like 'apartment', 'carpet area' to avoid misleading of customers

⑤ → Project sanctity : No altering of plans w/o consent of $2/3^{rd}$ allottees

⑥ → Legal Recourse : Time-bound resolution by RE appellate tribunals

⑦ → Ring-fencing of project receivables : 70% of funds in Acc. used for specified construction activities only

⑧ → Penalties : Both promoters & consumers for non-compliance of RE appellate tribunal orders.

→ Criticism
- → All approvals before commencement of projects ⇒ delay
- → Penalizes promoter for delay ⇒ often due to late clearances by govt. agencies
- → Does not address black money in RE sector

— Urbanisation initiatives

→ smart city Mission (NOT digital city ⇓ No universal defn)

→ 4 pillars
  → Institutional Infra : e-governance, law & order, banking, security etc.
  → Physical infra : public transport, power, water supply, drainage etc.
  → Social infra : edu, healthcare, housing etc.
  → Eco infra : Jobs & livelihood

→ CSS (50% centre, 50% states & ULBs)

→ Done thru SPVs (local-driven)
↓ area-based dev.
- City Improvement (Retrofitting)
- City Renewal (Redevelopment)
- City extension (Greenfield Dev.)

→ Extended until 31st Mar 2025
↓
100 cities (contextual, no fixed template)

→ AMRUT (full form?)

→ Basic infra in urban areas (water supply, sewerage mgt., drainage, pedestrian path, public transport, parks, green spaces etc.)

→ CSS, 500 cities ; 2021-22 to 2025-26 (15th FC)

↓
Project-based approach (unlike area-based approach for smart city Mission)

→ water supply
→ sewerage mgt.
→ Drainage to reduce flooding
→ green spaces
→ Non-motorized and public transport facilities
etc.

} Synergy with Smart Cities Mission

Infra finance mechanisms

- **Value Capture Finance** ⇓ Innovative urban dev. funding & revenue generation tool
  - methods:
    - Premium/charging for relaxation of rules or additional Floor Area Ratio
    - Land Pooling system (ch2?)
    - Transfer of development rights to a different area (zoning technique)
    - Fees for changing land use (agri → non-agri)

- **InvITs & REITs**: democratize investment in RE/infra sector
  - SEBI regulated, other details in finance

- **National Investment & Infra Fund (NIIF)**
  - Registered as trust under SEBI (Cat-2 AIF)
  - Govt. holds 49% (quasi-sovereign wealth fund)
  - Attract domestic & foreign investment for infra projects (greenfield/brownfield)

- **Natl. Infra Pipeline FY 2020-25** (more like infra vision)
  - Public infra spending
  - ₹ 102 Lac crore predicted
    - centre (39%)
    - states (39%)
    - Pvt. sector (22%)
  - Energy > Roads > Urban > Railways

  ↕ co-terminus & synergistic

- **Natl. Monetization Pipeline (2021)**
  - Unlocking value of unutilized or underutilized public assets thru asset monetization
  - 6 lac crore from FY21-22 to 24-25 — 4 years me
  - NITI Aayog managed (along with Ministries)

Lump sum payment to govt. helps in Capex

* Note: Asset monetization ≠ privatization/disinvestment
= structured PPP contracts thru InvITs

- Brownfield asset handed back to govt. after contract period
- De-risking execution risks (Real-time monitoring)
- Tariffs regulated & capped with inflation in Agreement itself → customer exploitation ↓

Examples: -Giving the already constructed NHAI roads to Private Parties on TOT model for a certain period in return for one time money
-Giving the Airports to Private Operators for a certain period in return of some lump sum payment

— Imp Infra masterplans

→ PM Gati Shakti (2021)
- → Natl. masterplan for infra dev. & multi-modal connectivity (road, rail, sea, air)
- → Gati Shakti digital Platform
  ↳ 16 Ministries for integrated planning + coordinated implementation
  $\underbrace{\text{16 Ministries}}_{\text{Inter-ministerial \& Inter-Dept. coordination}}$
- → Integrates with Bharatmala, Sagarmala, Inland waterways, UDAN etc. #multimodal
- → Focus on industrial, defence, textile corridors connectivity
- → Geospatial data analysis (ISRO support) for planning & project monitoring
- → CENTRALISED MONITORING: DPIIT-led grp
  (reduce human intervention, portal-based automatic clearance)
  ↳ duplication of efforts ✗

→ National Logistics Policy (2022)
- → Targets
  - ↓ logistics cost to single digit by 2030 (global benchmark)
  - Top 25 in WB LPI by 2030
- DPIIT-led again
- → Logistics ecosystem → data driven support mech. for efficient implementation
  ⇓
  Comprehensive Logistics Action Plan (CLAP) → 8 action areas
- → Unified Logistics Interface Platform (ULIP) enhance competitiveness

-Creating an Integrated Digital Logistics System to streamline data mgt. & improve coordination among stakeholders.
-Standardization of physical assets and service quality stds. to enhance efficiency & reduce risks => improved competitiveness
-Develop logistics human resources, streamline processes & plug regulatory loopholes thru logistics park (mention data) to centralize supply chains to augment export-import competitiveness thru seamless movement of goods.

Note:

1. Unified Logistics Interface Platform (ULIP) has been developed as an integrated portal in which information about the location of goods can be obtained on a real-time basis with considerable ease and it will help bring all digital services in the transport sector to a single portal.

2. Present logistics cost as % of GDP is varying across sources.
   - According to a survey by the National Council of Applied Economic Research (NCAER), India's logistics cost as a percent of GDP was between 7.8% and 8.9% in 2021-22.
   - Some govt. ministers (Gadkari esp.) place it at 13-14%.
   - Other estimates put it at 16%.

Logistics industry accounts for 13-14% of GDP (as per Economic Survey 2021)

Logistics Costs: Equals to 14-18% of GDP against the global benchmark of 8% (as per Economic Survey 2022-23)

Final figures for us

- SEZ (under SEZ Act 2005)
  - Defn
    - Delineated duty-free enclaves
    - Deemed foreign territory
    - purpose of trade ops., facilitating FDI, exports etc.
  - Benefits
    - Eco opp. & employment
    - Export promotion (goods + services)
    - Domestic & foreign investment
    - world-class infra & facilities
  - Modalities
    - simplified procedures for dev., op. maintenance
    - single window clearance ⇒ state & central govt.
    - simplified compliance & documentation (emphasis on self-certification)
    - Any pvt., foreign, central, state govt. agency can set up
    - Goods & services from Domestic Tariff Area to SEZ ⇒ Treated as export ⇒ zero-rated under GST (so input cost ↓ for production in SEZ)
  - Govt. incentives
    - 100% IT exemption on export income for 1st 5 yrs, 50% for next 5 yrs, 50% of ploughed back export profit for next 5 yrs
    - Single window clearance
    - Duty-free (zero-rated) procurement of goods & services from DTA (for ops. & maintenance)
    - Infra dev. support (eg. GIFT IFSC) (capital subsidy)
  - Additional Content to write: GIFT IFSC, IIBX etc.

- Challenges
  - Unutilized land in SEZ due to lack of flexibility in land utilization
  - Multiple eco zones: SEZ, CEZ, Industrial Corridors, Food Parks, MMLPs, Textile Parks — Not synergistic
  - Domestic sales in SEZ face double-whammy
    - IGST
    - custom duty
  - Lack of consistent govt. support (flip-flops on tax exemptions) MAT introduction
  - Land acquisition issues + poor infra + delays in reg. clearances (env.)
  - Competition from SEZs in China, Vietnam, Indonesia, Philippines, etc. that provide additional incentives like labour law dilution
  - Too much focus on services like IT than manufacturing + treating SEZs as real estate commercial zones than industrial zones
  - Global eco situation since 2008 hasn't been very conducive to SEZs
- Conclusions
  - SEZs have not lived upto the hype in India (don't be too -ve in tone)
  - Mass industrialization everywhere all at once impossible
    - ⇒ SEZs ⇒ Industrial hubs in certain areas
    - ⇓
    - Ancillary industrialization in rest places
  - GIFT IFSC has bright future
  - SEZ (Amendment) Act 2023 ⇒ Improved operational flexibility

Logistics Sector

good defn
↓
Note

As per the *National Logistics Policy, 2022*, *"Logistics means transportation & handling of goods between points of production and consumption, storage, value addition and allied services."*

- **Growth:** logistics industry accounts for 13-14% of GDP (as per Economic Survey 2021)
- **Logistics Costs:** Equals to 14-18% of GDP against the global benchmark of 8% (as per Economic Survey 2022-23)

Challenges of Logistics Sector in India

High transportation costs	Inadequate infrastructure	Complex regulatory frameworks
Inefficient warehousing	Fragmented supply chains	Skill shortages

Government Initiatives

1 → 2 → 3 → 4

1. POLICY REFORMS

- National Logistics Policy
- Increased allocation in budget
- Gati Shakti

2. PROCESS REFORMS

- GST
- e-Sanchit
- Single Window Interface for Trade (SWIFT)
- Indian Customs Electronic Data Interchange Gateway (ICEGATE)
- Turant Customs

3. INFRASTRUCTURE REFORMS

- UDAN
- Bharatmala
- Sagarmala
- Parvatamala
- National Rail Plan
- Kisan rails

4. PERFORMANCE MONITORING

- Logistics Ease Across Different States (LEADS)
- World Bank Logistics Performance Index