1. **Public Private Partnership (PPP)**:
   - collaboration of government and private sector for project construction and management
   - Need for PPP → to meet funding gap; time bound completion; access to high end technology and expertise; boosting infrastructure development industry; reduce burden on government; creating employment in construction sector.

2. **Models of PPP (Public Private Partnerships)**:
   - BOT (Toll) → Build-Operate-Transfer; Private Party → acquires land, gets regulatory clearances; operates & maintains the road during concession period; collects toll & recovers cost during concession period; hands it back to government
   - BOT (Annuity) → improvement over BOT-Toll; here private party doesn't collect toll; government body collects toll & gives annual payment(annuity) to developer; developer that demands minimum annuity will get the contract
   - EPC (Engineering Procurement Construction) → Land Acquisition will be done by government and all clearances will be taken care of by the government; Ex-Road is given to NHAI after construction; 100% up-front funding by Government
   - Hybrid Annuity Model → mix of EPC and BOT(Annuity); private player brings 60% of capital only and government will pay 40% of the cost; land acquisition by the government; tender floated only after acquiring the land and getting all the clearances; NHAI pays annuity over the concession period; private players will take care of Operation & Maintenance of the project; Other Features → life cycle cost will be the bidding parameter, separate provision for Operation & Maintenance costs, provision of inflation adjustment in project cost
   - Toll Operate and Transfer → Public funded projects operational for two years shall be put to bid; right of collection and appropriation of fee shall be assigned for a predetermined concession period (~30 years) to developers against upfront payment of a lump sum amount to NHAI
   - Swiss Challenge Method → used mainly for public projects; interested party initiates a proposal for a contract or the bid for a project; bidder asked by the government to submit proposal; then other proposals invited to beat the original proposal

3. **General challenges in the existing PPP framework in India:**
   - existing contracts focus more on fiscal (government revenues) benefits than on efficient service provision
   - neglecting the principles of allocating risk to the entity best able to manage it.
   - government has started shifting its project development responsibilities such as land acquisition, environmental and forest clearances to the private parties
   - no existing structure for renegotiation of projects in case of a failure
   - certain bidders are involved in reckless bidding
   - flaws in allocating risk and rigidities in contractual arrangements
   - weaknesses in regulation, enforcement and monitoring of terms of Concession Agreement
   - the limited institutional capacity of government ministries

4. **Suggestions:**
   - Kelkar Committee on Revisiting & Revitalizing the PPP model→ create independent sector specific regulators; setup experts panel to fasten clearance of stalled project; no state government should take part in PPP; frame

guidelines for Government audit on corporate account books; move away from MCA (Model Concessionaire Agreement); discourage Swiss challenge method
- Simplification of Agreements to ensure faster implementation
- Plug and play readiness → land acquisition, permits and clearances be resolved ahead of the bidding process.
- There should be distinction between diligent bidders and speculative ones
- Renegotiation of agreement should be allowed in case of project failure

5. **SPV- Special Purpose Vehicle**:
   - SPV is primarily a business association of persons or entities eligible to participate for a single, well defined and narrow lawful purpose
   - scope of operation is limited and focused
   - advantage → helps in separating the risk and freeing up the capital → thus, SPV and the sponsoring company are protected against risks like insolvency

6. **Viability Gap Funding**:
   - VGF is a government's initiative to assist private investors or entities of high economic worth
   - government extends its support to the investors by sharing a fraction of the cost, making the project viable (e.g Airport construction in a remote Northeast town)