

Micronotes (GS 1,2,3)

Micronotes (GS 1 - Society)

Overall Broad Points + Salient Features (Misc to use in any ques)

- Economic conditions (eg. Poverty, inequality, low growth)
- Structure of society (eg. Patriarchy, Stratification, mobility etc)
- Interrelated relations (eg. Professions, industries interlinked)
- Functional unit (Family, city etc)
- Culture (Spirituality, superstition etc)
- Historic Factors
- Accommodative society (Pluralism)
 - Integration, Assimilation, Mainstreaming
- Tolerance + Unity in Diversity
- Patriarchal + patrilocal + Patrilineal
- Agrarian and rural
- Class and Caste divide
- Traditional / orthodox / superstitious
- Importance to religion
- Social institutions - Family, education, religion, Marriage
- Role of Media (eg. Promoting harmony or polarization)
- Education Curriculum (eg. Teach about drugs, family planning, women etc)
- Scholarships (eg. For tribals, women; Eklavya Residential)
- Social Stratification
- Ascribed status (Given by birth)
- Impact of pandemic
- Impact of digitization
- Impact of Disasters / Security
- Health crisis etc
- Disruption in amenities
- Mental Health (eg. Manodarpan, NIMHANS)
- Elitism
- Initiatives are focused more on the rich and powerful
- Psychological fear in taking action / standing against ..
- Non-homogeneity

- Graded inequality (eg. Lower caste poor women)
- Create a fund / fund exists
- Better utilization of Funds (eg. Nirbhaya Fund - CAG report)
- Controversies can hamper (eg. debate wrt UCC, age of marriage)
- Media
- Demographic Dividend (2045 as per Eco Survey)
- Individual autonomy / Freedom (Puttaswamy case)
- Privacy (eg. Puttaswamy case)
- Trauma / Psychological impact / situation
- Destabilization of society / affects fabric of society
- IPC
- Vicious cycle / Perpetuates ..
- Low LFPR (22%) / of other weaker sections
- Discrimination
- Dignity (Art 21)
- In-group / outsider feeling
- Women-lens (or other) in policymaking
- Increase the rights of women / other (eg. Ujjwala scheme - LPG on women's name)
- Health -> productivity
- Employment opportunities (eg. Stand up India)

Diversity

- Identity (Caste/Religion) = Parallel Loyalties?
- (Patri)archal, lineal, local
- Stratification of society
- Social Mobility
- Geographic Factors (Climate, Soil, Contiguity, Agriculture)
 - Topography (eg. Mountains, Plains, Forests)
- Fragmentation (Balkan) v/s Administrative convenience
- Language (8th Sched + 1000 dialects)
- Regional identities + Community behavior
- Religions (6 major) + Communism
- Caste (**Ascribed status**) + Casteism
- Class (Wealth based)
- Traditionalism / Orthodox + Modernity mix
- Racial (Negrito, Proto-Austroloid), Mongoloid)
- Festivals and Traditions (Thang ta etc)
- Tribes (eg. Nomadic tribes; eg. SEED initiative, eg. Xaxa committee)

- Economic Diversity (eg. BPL; Oxfam report / Palma ratio)
- Political Diversity
- Gender
- Sexual orientation (LGBTQ (Navtej Singh Johar, Sec 377))
- Causes
 - Historic Factors
 - Vedic society + norms
 - Trade and relations (eg. Mesopotamia)
 - Travellers + Reformers
 - British + Mughal rule etc
 - Foreign invasions (eg. Mahmud Ghazni, Delhi Sultanate)
 - Spread of Islam, Sufi movmt etc
 - Inspiration by others - Russian revoln etc
 - Breakaway from caste system / religion
 - Points from above; eg. new Political ideologies; economic divide; geog reasons
- Regional interests
- Unity (threat / way forward)
- Conflict / tolerance / synergy
- Unity
 - Overcoming differences rather than homogeneity
 - Organic Solidarity
 - Preamble + 42nd CAA
 - Pluralism, no single group
 - Geopolitical integration (subcontinent)
 - Cutting-across differences
 - Constitutional (affirmative action, A15/16)
 - Social Mobility (eg. Sanskritization - emulation by lower castes)
 - Westernization (Ideas, eg. Suit and tie for all)
 - Industrialization / tech era
 - Capitalism -> Financial mobility (Shift of focus)
 - Interlinked professions in society
 - Rationalism (over orthodoxy)
 - Free exchange of ideas, communication (eg. Social Media)
 - Common Value System (eg. Touching elders' feet)
 - Accomodation and Assimilation
 - Protection to culture and heritage (A29, 30)
 - Sense of Harmony

Casteism, Communalism etc (Common Points)

- Examples
 - **GS Ghurye** (Sociologist) described India caste system as segmental division of society
 - Minority Commission
 - Hong Kong Model on Relations Unit
- **Ancient** - Varnas (Rig Veda) : Profession based
- Hierarchy
- Segregation, segmental division
- Social Mobility (low/high) (eg. Sanskritization)
- Endogamy / marriage restrictions
- Conflicting ideals / principles
- Sense of Identity
- In-group / Out-group feeling wrt other castes
- Civil and religious disabilities (eg. Manual scavenging)
- Discrimination
- Lower opportunities
- Assimilation / Integration
- Feeling of negligence
- Cultural protection (eg. A29,30)
- Majority power, tyranny
- Science / Rationalism > Orthodoxy (eg. Modernization)
- Occupational changes / limitations
- Interdependent society
- Wealth over Caste, religion as status
- Attitudinal changes
- Tolerance
- Secularism (Preamble)
- Fraternity (eg. Fundamental Duty)
- National identity, Unity
- Westernization, Industrialization
- Urbanization
- Democratic decentralization
- Political, Economic empowerment
- Caste and politics
- **Theory of relative deprivation**
- Enmity promote (eg. IPC Sec 153A)
- Dedication to own caste

- Indoctrination (eg. Family, kin) wrt importance
- Lack of education in this matter
- Obscurantism
- Conservatism / Status-quoist attitude of society
- Sometimes leaders exploit entire caste/community for vested interests
- Media sensationalism + mass media and social media / Ban communal press
- Cross-cutting differences
- Value-based education
- Polarization of societies
- Psychological factors / integration
- Law and Order : Curative than preventive / Proactive needed

Secularism

- A25, 28, Preamble
- A29,30 - Culture
- Principled Distance (intervene for reform) = Positive secularism
 - Western = -ve = Strict separation
- Religion and Law relation encouraged (eg. Many laws derived from customs)
- Minority rights protected
- Affirmative action
- Tolerance, fraternity (Preamble + FD A51A)
- Regressive traditions present / review
- Ashoka's Dhamma
- Communalism / Polarization prevent
 - eg. Hong Kong Model

Regionalism

- Specific-region consciousness
- Loyalty region & Nation
- Unity and integrity
- Indestructible union, destructible states
- Psychological
- Group identity
- Separatism (eg. Bodoland, Gorkhaland)
- Secessionism
- Geographical boundaries / demarcation (eg. Topography)
- Linguistic (eg. Andhra demand in 1950s)
- Historical (eg. Nagas claim Nagalim)

- Economic (eg. Poor state want extra attention)
- Ethnic factors
- Cultural (eg. South India and NE India distinct culture)
- Religious factors
- Security challenges
- Relations b/w states (eg. Sons of soil agitations)
- Impact on IR (eg. LTTE, Teesta water deal)
- Impede governance and welfare measures / overall devlpt
- Participative democracy / diversity
- Regional cultures preserved
- Pressure on govt

Women (Points of vulnerable sections also)

- A14, 39, A42 (Maternity leave)
- Examples
 - Mahila Samridhi Yojana
 - **Rwanda - reserved seats for women in govt**
- Historic factors
- Contemporary Issues
 - Domestic Violence (eg. NCW launched Whatsapp Number for this; 'Red Dot' initiative)
 - Equal treatment / Son metapreference
 - Dowry
 - Sexual harassment + Crimes
 - Vishakha Guidelines (SC) for women safety at workplace
 - Nirbhaya Fund + Sakhi Centres (MWCD)
 - Emergency Response Support System (ERSS) + Women Helpline (181)
 - Patriarchy + expected roles (eg. Family care, parenting burden)
 - Economic dependence
 - Cyber Crimes
 - Prostitution + Trafficking
 - Female Foeticide
 - Menstrual Hygiene
 - Pregnancy and Career
 - Contraceptives (eg. Antara, Chhaya)
 - Institutional Delivery (eg. Janani Suraksha Yojana)
 - Ante-natal Care (ANC)
 - Reproductive child Health (eg. RCH Portal)
 - Creche schemes for working women

- Anganwadi + Balvatikas
- Care Economy / Unpaid work
- Low property rights
- Political participation
- Income gap
- Religious issues
- Adultery (eg. Sec 497 IPC)
- Anemia = 1 in 3 women (eg. Iron-fortified rice)
- Low female LFPR (eg. as per PLFS, esp low in Urban India)
- Women's Organizations
 - History
 - Brahma Samaj
 - Prarthana Samaj
 - Jyotiba Phule + Savitribai Phule (Satyashodak Samaj)
 - Ramabai Ranade
 - Sarojini Naidu (First Indian president of INC)
 - Kamaladevi Chattopadhyaya (first to address)
 - Aruna Asaf Ali (MIH, radio)
 - Vijaylakshmi Pandit (UN)
 - Annie Besant
 - Jhansi ki Rani
 - Mitanin Initiative of Chhattisgarh = Women volunteers for health
 - ASHA workers = WHO global award
 - Auxiliary Midwives
 - Anganwadi Workers

Poverty

- SDG1 (No poverty), SDG2 (No hunger)
- Y K Alagh, Lakadawala, Suresh Tendulkar, C Rangarajan committee
- Types
 - Absolute poverty (Monetary) = Basic Needs
 - Relative Poverty (Standard of Living)
 - Multi-dimensional (Educ, health, skill, opportunities) (eg. Multi-dim Poverty index by **NITI** Aayog; OPHI)
 - **Capability Theory Amartya Sen**
- Causes and Way Forward
 - Colonial Exploitation
 - Huge population / Burden on resources

- **Disaster Vulnerability (eg. Bhuj Earthquake 2004, poor worst hit)**
- Unorganized sector
- Lack of labour intensive growth (eg. IT sector = skilled, capital-intensive)
- Income inequality (eg. Palma, OXFAM, Gini)
- Failing agric sector (eg. ARYA, MAYA scheme)
- Lack of opportunities
- Vicious cycle productivity (health, educ)
- Govt instability at post-indep era
- Flaws in planning (eg. underdeveloped Manufac sector)
- Poverty schemes lacunae (eg. Leakages, overlaps)
- Lack of multi-pronged approach (silos)
- Digital divide
- Culture of Poverty
- Insufficient resources
- Local level institutions limitations
- Rural-Urban disparity (eg. PURA, Rurban)
- Rural poverty / upliftment (eg. Mission Antyodaya)
- Health, Educ (lack, focus)
- Employment (eg. MGNREGS)
- Skilling
- Credit availability (eg. Startup India, Standup India; MUDRA)
- Food Security (eg. PDS, Antyodaya Anna Yojana)
- Economic growth / devlt
- Distribution of resources (eg. Progressive taxation)
- Inequity (eg. Palma Ratio, Oxfam, Gini)
- UBI

Vulnerable Sections (Dimensions)

- Examples / Best Practices
 - Adarsh Gram Yojana for basic needs of all
 - Manual Scavengers
 - Self-employment scheme for Rehab of Manual Scavengers Scheme
 - National Safai Karamchari Organization
 - Women
 - Mahila Samriddhi Yojana
 - Elderly
 - Rashtriya Vayoshari Yojana for elderly
 - Senior citizen welfare fund in 2016

- Backward Castes (incl Tribals)
 - Stand-Up India for SC/ST and women entrepreneurs
 - Sabka Saath and Sabka Vikas
 - **Burkapal** Case - Rights of tribals in LWE areas
- Issues / Way Forward
 - Identity (Socio-cultural) + Loss of culture / protect
 - Acceptance + Adjustment with majority community (eg. Elderly - technology)
 - Insecurity / Fears of mainstreaming
 - Inequity
 - Lack of documents / proof
 - Lack of opportunities
 - Expensive education / give aid
 - Low Social Mobility / increase opportunities
 - Waste of demographic dividend / harness
 - Pressure on govt fiscal resources
 - Underemployment / give jobs
 - Frustration among ppl, youth -> Social unrest / peaceful
 - Hamper overall development growth
 - Illiteracy (eg. Eklavya Model Residential Schools for Tribals -> Similar for women)
 - Poor health and nutrition (eg. A47)
 - Standard of Living (eg. A46)
 - Dignity (eg. Art 21)
 - Unfulfilled life (eg. Feeling less needed)
 - Crimes
 - Social tensions, polzarization
 - Social issues like Child Labour, Dowry, Domestic Abuse
 - Social Perception
 - Alienation / Feel included
 - Respect and celebrate diverse cultures
 - Lack of / Recognize rights eg. Right to Forest Produce
 - Education Curriculum (eg. Teach about drugs, family planning, women etc)
 - Scholarships (lack) (eg. For tribals, women; Eklavya Residential)
 - Skill lack / training (eg. USTAAD scheme for tribals, STEP for women)
 - National Commission for Minorities; can have similar for Elderly ppl / ineffective
 - Political representation low / increase
 - Rehabilitation policies clearly defined / not
 - Credit availability (eg. RRBs - last mile)
 - SHGs promote

- Poor saving habits / inculcate
- Psycho-socio relevance and participation
- Intergenerational equity
- Property rights
- Income gap
- Schemes - limited beneficiaries / increase
- Entrepreneurship limited / increase (eg. NITI Aayog - Women entrepreneurship platform WEFP)
- Facilitative / not ecosystem
- Bargaining power (low / as a group)
- Success stories / Role Models
- Pressure groups to voice issues / lack of articulation
- Confidence as an individual
- Health (eg. Ayushman Bharat)

Population

- Demographic Dividend
- Total Fertility Rate; Replacement rate (2.1)
- Causes / Way Forward Dimensions
 - Contraceptives (eg. Antara, Chhaya)
 - Poverty
 - Mother Literacy (eg. Kerala - high literacy, low TFR)
 - Son metapreference (eg. Beti Bachao Beti Padhao)
 - Population Education
 - Family Planning
 - Ante-natal and Pro-natal care
 - Age of marriage of women (low/raise)
 - Education / awareness wrt Family planning
- Issues
 - Pressure on resources
 - Slums (Urban sprawl)
 - Census towns + Spillover cities
 - Govt burden
 - Regional disparities (popln density variation)
 - Lack of adequate employment, educ opportunities
 - Joblessness
 - Amenities limited (eg. Shortage of hospital beds during pandemic)
 - Fundamental rights realization (eg. A15, affirmative action)

- Low human capital devlpt
- Social issues due to frustration; Law and order problems, drugs (eg. UN Convention on Narcotic Drugs)
- Disparity b/w states
- Skewed sex ratio in many states
- Migration
- Demographic Dividend
 - Skill training
 - Employment
 - Education
 - Industry-academia mismatch
 - Health
 - Productivity
 - Women-friendly work envmt
 - Human Capital

Urbanization

- 30% popln in Urban
- Characteristics
 - High popln density
 - Class divide > Caste etc
 - Rationality, Scientific temper, intellectualism
 - Labour division
 - Interdependence
 - Social Mobility high
 - Number of opportunities
 - Individualistic / Apathetic society
 - Anonymity
 - Social Heterogeneity
 - Nuclear Family
 - Housing issues (eg. PM Awaas Yojana)
 - High land prices
 - Amenities (eg. Health, education)
 - Regulatory hurdles (eg. Envmt)
 - High crime rate
 - Infrastructure (good + limitations)
 - Smart Cities (eg. AMRUT, Smart City Mission) - Disaster resilience etc
- Causes / Reasons

- Migration
 - PULL - Jobs, profits, better life, education, Marriage
 - PUSH - Discrimination, displacement, disasters
- Industrialization
- Demand for better quality of life
- Availability of resources
- Technology devlpt + S&T
- Learnings from West + Ideas
- Economic motive (eg. Cities as industrial units)
- River bank settlements
- Labour availability
- Issues
 - Waste of water and resources
 - Environmentally unsustainable
 - Social crimes
 - Cultural alienation / risk
 - Joblessness
 - Urban sprawl / Slums
 - Overcrowding
 - Decline in per capita income of city
 - Housing issues
 - Traffic
 - Quality of life downgrade
 - Pollution
 - Lesser aesthetic value
 - Tourism affected
 - Psychological problems like alienation, insecurities
 - Affects social institutions like family, marriage
 - Westernization / affects Indian culture
 - Emergence of Census towns
 - Lack of focus / budgetary allocation for Rural
 - Inequalities rise (eg. Gini coeff, Palma ratio)
 - City outgrowths, encroachments (eg. Census towns)
 - Lack of resources
 - Housing concerns (eg. Solved by PM Awaas Yojana)
 - City culture - Less human interactions
 - Sewerage issues / drainage system
 - Disaster prone (eg. Urban flooding)

- Improper city planning / Haphazard devlpt
- Land prices
- Inflation
- Pressure on Infra
- Spread of diseases (eg. Dengue)
- Weak Local level institutions (compared to Rural)
- Way Forward / Opportunities
 - Centre of services for rural areas surrounding
 - Remittances to rural due to migration
 - Demographic dividend harness
 - Agric reduce disguised unemployment
 - Cheap Labour
 - Women empowerment (more opportunities)
 - Social Mobility
 - Skill devlpt and training (eg. Kaushal Vikas Yojana)
 - Cultural diversification
 - Synergy
 - Inflow of ideas
 - Technology shift to rural
 - Rural growth also
 - Economic devlpt
 - Connectivity incr
 - Alt sources of income
 - Access to amenities and basic work conditions
 - Forward and backward linkages
 - Transport (eg. Mass Rapid Transport, HyperLoop)
 - Smart cities
 - Disaster-resilient (eg. Retrofitting)
 - Water use (eg. Jal Shakti Abhiyan)
 - Renewable energy (eg. Solar)
 - Waste to energy
 - Inclusive growth
 - People-centric policies
 - Economic (eg. Municipal Bonds)
- PURA, Rurban Mission
- Spillover effects
- Census towns emergence
- **Mission Antyodaya for Rural Transformation**

- Engine of growth
- Social inclusivity
- Infrastructure
- Mobility services (eg. MRT, BRT)
- Urban safe spaces (eg. For women safety)
- Urban sprawl
- Capacity building of service providers
- Cost of living / affordability
- Productivity
- Emergency response services

Globalization

- Political dimensions
 - Spread of ideologies eg. Democracy
 - Political risks, unstable govts
 - Global terrorism
 - Multilateral institutions conflict with sovereign authority
 - Global Democracy
 - Synergy
 - Collective solutions, concerted efforts
 - Interdependence
 - Complicated diplomatic relations
 - Autonomy reduce
 - Govts less arbitrary due to global scrutiny
 - Neo-colonization (eg. Debt trap diplomacy)
 - Collaborations in projects (eg. Ind-Afg parliament, Shahtoot Dam)
 - Demand for global peace help solve Bilateral issues (eg. Israel-Palestine : intervention from many others)
- Economic
 - Trade
 - Interdependence (eg. Global supply chains)
 - Increased job opportunities
 - Increased employment, growth, devlpt
 - Reduced poverty
 - Global supply chains
 - Specialization (eg. Button Town in China)
 - Multinational corporations dominate
 - Standardization of products and services (eg. McDonaldization)

- Exploiting tax systems (eg. Tax havens)
- Base Erosion and Profit Shifting
- Tax Information sharing
- Inflation (eg. Imported fuel inflation)
- Spillover effects of economic crises
- Socio-Cultural
 - Livelihood opportunities / settling abroad
 - Consumerist culture + Waste Culture
 - Cultural homogenization (eg. Food - McDonaldization; Purchasing - Walmartization)
 - Thought / ideologies (eg. West)
 - Language : English
 - Scientific ideas share
 - Best practices exchanged (eg. Yoga, Ayurveda)
 - Indigenous knowledge emphasized / famous (eg. Yoga, Ayurveda)
 - Entertainment sources expand (eg. Netflix, Bollywood)
 - Migration, reverse migration
 - New values, ideas
 - Technology
 - Brought family together (eg. Communication)
 - Health facilities improve
 - Unclear roles of family etc
 - Cultural shocks
 - Psychological problems (eg. Alienation)

Effect of Pandemic

- Lower demand
- Non-availability of labour due to Migration
- Shutting down of small firms
- Layoffs
- Debt traps
- Diversion of resources
- Global Supply chains disruption -> Less raw materials
- Reduced exports
- Atmanirbhar Bharat + PLI
- Credit Interest Subvention Schemes

Society Examples

- World Inequality Report 2022
- Women
 - Mission Vatsalya (Non-institutional care of Children)
 - Beti Bachao, Beti Padhao
 - PM Matru Vandana Yojana (Maternity benefit)
 - Mission Shakti (Women empowerment - lifecycle support)
 - Saksham Anganwadi
 - Poshan 2.0
 - POSH Act (Sexual Harrasment) + Vishakha
 - Guidelines on Abortion Care + Row v/s Wade
 - RCH centres + Sakhi centres
 - Anaemia Mukht Bharat + Nasha Mukht Bharat
 - ART Act
 - Rwanda - reserved seats for women in govt
 - First woman CJI (2027) = Justice B V Nagarathna
 - Istanbul Convention = Gender-based Violence
 - Global Gender Gap Index (WEF)
 - UNICEF Gender and Innovation Brief
 - NITI Aayog's Women Entrepreneurship Platform
 - Google's Internet Saathi to bridge gender digital gap
 - Raising age of marriage for women
- Population
 - Popln Control Law demand
 - Life expectancy +2 => 69.7 (NFHS 5)
 - TFR 2.0 (NFHS-5) + Decadal growth rate decr
 - SECC
 - Civil Registration System (CRS) (Popln)
- Vulnerable Sections / Social Empowerment
 - Rashtriya Vayoshree Yojana (Elderly)
 - SEED (Denotified, nomadic communities)
 - SMILE (Marginalized) + Garima Greh
 - PM DAKSH (Skilling)
 - Sankalp Se Siddhi (TRIFED)
- Rural
 - BharatNet = Rural Internet Connectivity Project (ALL 6 lakh villages)
 - Antyodaya Mission
 - PURA + Mission Rurban
- Urbanization

- Smart Cities + AMRUT
- Swachh Bharat
- HRIDAY
- PM Awas Yojana
- World Bank - 70% popln urban by 2050
- Census Town, Statutory Towns
- Floor Space Index (FSI) is Low
- Mass Rapid Transit systems (MRTS)
- Right to Housing, Shelter (Olga Tellis)
- Right to the City
- UN HABITAT
- Anaemia Mukh Bharat + Nasha Mukh Bharat
- PM Suraksha Bima + PM Jeevan Jyoti Yojana
- Ujjwala (LPG) = Women empowerment / rural
- PM Awas Yojana (housing, urban)
- Urban Infra Devlpt Fund (UIDF)
- Senior Citizen Savings Schemes : max deposit increased
- PM Garib Kalyan Anna Yojana
- Sickle Cell Anaemia Elimination Program (Health, tribals)
- Vibrant Villages Program (Border + rural)
- Unity Mall (Tribals, handicrafts, local, employment etc)
- Mahila Samman Savings Certificate
- PM PVTG Devlpt Mission
- Aspirational Blocks programme (Rural, local level, schemes)
- LGBTQIA+ adoption rights (amend Juvenile Justice Act)
- Feminization of Agriculture
- Migration
- STEM education
- Training youth + Vocational skills
- Keywords
 - Melting Pot
 - Homogenization
 - Ghettoization
 - Majoritarianism
 - Social Mobility
 - Westernization, Sanskritization
 - Cultural Programming = Passive influence of society
 - Cosmopolitanism = Values culture for their diversity

- Ethnocentrism = Assessing others from own values' lens
- Normative Culture, Material Culture
- Durkheim - No society can survive w/o a common base
- Functionalism - Society as harmonious + interdependent
- Marx - Society essentially conflict-ridden due to class / differences

Micronotes (GS 2 - Governance)

Governance General Dimensions (Use as Challenges/Need etc, whether on e-governance/charter etc)

- Good Governance
 - Consensus-Oriented (eg. EIA involves public feedback)
 - Accountable (eg. Reward-punishment framework)
 - Participatory (eg. Jan Bhaagidaari, eg. Crowdsourcing of ideas, eg. eKranti)
 - Transparent (eg. RTI, Proactive disclosure)
 - Rule of Law (No arbitrariness, no discrimination etc) (A V Dicey)
 - Efficient, Effective (eg. Timely completion of projects)
 - Equitable (A39(b), 39(c); Oxfam)
 - Inclusive (eg. Sab ka Saath, Sab ka Vikas)
 - Minimum Government, Max Governance (eg. Facilitative rather than regulatory govt)
 - Citizen Empowerment (eg. For the Last, the lost and the least)
 - Vision and Mission Statements (eg. New India 2047)
 - Multistakeholder meetings (eg. NITI Aayog platform)
 - **Service Delivery**
 - **Informative** = Clearly defined services/schemes/policies, spreading awareness etc (eg. PIB and MyGov)
 - **Reliability** = Quality, Timeliness, Standards (eg. Citizens Charter, Sevottam Model)
 - **Assurance** = Trust, Match expectations / promises
 - **Tangibles** = Physical facilities, Equipments (eg. Infrastructure)
 - **Empathy** = Care, Individual Attention, Focus on Weaker Sections (eg. Govt with a human face)
 - **Responsiveness** = Feedback, Grassroots, Local Languages (eg. Grievance redressal CPGRAMS)
 - ESG Compliance = Environmental, Social, Governance (eg. SDG performance)
- Transparency
 - Right to Information of Citizens (eg. A19(1)(a))

- Public funds, public welfare so ppl should know
- Leads to accountability
- Checks corruption (eg. Digitized records open to public)
- Officials do their work properly in fear of scrutiny (eg. Whistleblowers)
- People empowerment (due to knowledge about govt work)
- Ppl trust in govt increase
- Pvt sector / Public can make decisions acc to this
- Participative governance
- Culture of hiding; many officials try to hide/confuse public (eg. RTI Sec 8, Official Secrets Act)
- Culture of openness will inspire genuine persons to join govt
- Official Secrets Act; Whistleblowers protection Act
- Cash economy
- Privacy, Security, Dignity
- Accountability
 - Transparency
 - Fix accountability rather than collective work allocation
 - Clearly defined roles / promises
 - Citizens Charter (eg. Sevottam model - 2nd ARC)
 - Reward-Punishment framework (eg. Employee of the Month recognition)
 - Hierarchical structure promotes accountability (eg. Annual review by superiors)
 - Social Audit for public scrutiny (eg. MGNREGA mandatory)
 - Independent regulators
 - Online disclosure about details of projects and service delivery
 - Disturbance/Disruption
 - Fear of taking risks
- e-Governance
 - Digitize processes = faster, more efficient (eg. Land records - Bhoomi portal)
 - Save time for ppl -> Empowered
 - Digital records easier to access (eg. RTI, Jan Sookhna Portal of Rajasthan = e-RTI)
 - Solve problem of understaffing
 - Reduce human error (eg. Automated processes)
 - Reduce scope of corruption (eg. Cashless economy)
 - Faceless contact = no partiality etc (eg. Faceless taxation system)
 - Easier coordination (eg. Virtual / Zoom e-meetings)
 - Accountability tools (eg. MIS)
 - Online awareness for ppl (eg. MyGov)
 - Grievance redressal portals (eg. CPGRAMS)

- Suggestions / Feedback portals online (eg. eKranti) = enhanced public participn
- Interoperable Systems (eg. Standard Data maintaining protocols)
- Info dissemination (eg. PIB, MyGov)
- Transparent
- No redundancy/duplicacy
- Digital Divide
- Digital Literacy (eg. Common Services Centre)
- Internet penetration (eg. BharatNet, SWAN can solve)
 - Wi-fi hotspots (eg. PM WANI)
- Officials / Public servants not adept at ICT (eg. Karmyogi Mission)
- Cyber Crime (eg. CII)
- Lack of infra (eg. Gati Shakti, NIP)
- Most ICT = English language only (eg. Farmer Kiosks in vernacular)
- Examples - SWIFT (Single window clearance); PAHAL (e-Litigation), AEPS (Aadhar enabled), MyGov, CCTNS (Criminal Records)
- Mobile internet / services (eg. Jio; Sandes - Indian communication app)
- **Data (Any question regarding Data)**
 - Quantifiable
 - Cost of Collection
 - Updation of data
 - Privacy Concerns, Social Stigma / Threat (eg. Data Protection Bill, BN Srikrishna Committee)
 - Data Security (Cyber crimes)
 - Data Server Mgmt
 - High costs of localized data storage (eg. Cloud)
 - Standardized, Uniform Data
 - Ethics
 - Opaque collection
 - Misuse/Monitoring use (eg. Geospatial data concerns)
 - Leakages / Corruption / Breach (eg. Facebook allegations of selling data)
 - Edge Computing
- **Universal / Misc Points**
 - Wastage of Resources / optimization
 - Inefficiencies
 - Lack of planning (eg. Overlaps in schemes or Short term v/s Long term)
 - **Time and cost overruns**
 - Administrative Leakages (eg. Poor targeting of beneficiaries, Corruption)
 - Weak/Vague Criteria (eg. Different arguments for choosing BPL)

- Lack of awareness among public (eg. As per survey, most rural ppl did not know about Jan Dhan Yojana in initial phase)
- Lack of / bring Statutory Framework / Legal backing / Clear Guidelines / Policy
- Isolationist / Single-Pronged Approach (eg. Poverty + Hunger both target)
- Low Convergence between measures
- Lacunae in coordination
- Lack of Political Will
- Vote-bank politics / Populism
- **Accountability fixing**
- Trained professionals
- Poor / rushed planning
- Issues in Procurement
- Bureaucratic Delays and Red Tapism (formalities).
- Hierarchical Structure
- Quantum of support (eg. Financial assistance too low).
- Complex procedures (eg. Application forms, Identity proofs)
- Use of Big Data technology when large amounts of Data
- Quantifiable and Verified Data
- Awareness campaigns (eg. DASTAK)
- Active participation (eg. eKranti (feedback) and consultation / Involve stakeholders (eg. Pre-legislative Scrutiny)
- Social Audit like MNREGA and Rajasthan Model
- Dedicated Cell / Platform for Coordination
- Bottom-Up Approach (eg. Adarsh Gram Yojana)
- Monitoring eg. PRAGATI
- Grievance Redressal eg. CPGRAMS (and one step ahead = Time limit, vague terms etc)
- **Integrated Approach = Consolidate overlapping schemes (eg. Samagra Shiksha Abhiyan = SSA, RMSA, TE)**
- Time-bound completion of targets (NITI Aayog can play role)
- Along with NITI Aayog set Short term and Long term goals
- **Better Definitions (No confusion etc = eg. Bail - due to lack of clear definition, controversy)**
- **Tribunals, Fast track, Specialized courts (Case-specific)**
- **Digitization (eg. BHOOMI - digitizing Land records in Karnataka)**
- **ICT = e-governance = National e-Governance Programme (NeGP)**
- Empower people / Capacity Building Measures (eg. Karmayogi)
- PPP
- Consensus Building

- Quality of Life / EoL and EoDB
- Leverage Technology like AI, Big Data Analytics
- **Common Services Centre (CSCs)**
- Sensitize employees/workers
- **Rights-based Approach (eg. RTI, RTE, Right to Health etc)**
- **Rules-based to Rights-based**
- **Involve LOCAL Govt more = Grassroots level**
- **India as a Welfare State**
- Continuity of Policy
- Balance autonomy with Regulation
- **Public Perception / Trust**
- Utilize market mechanism
- Technology
- Promote social entrepreneurship (eg. Gili MItti initiative)
- Values prioritize
- Constitutional values and ethos
- Capacity building
- Welfare orientation
- Ambiguities
- Exemptions
- Loopholes
- Misuse
- Delays

Civil Services

- Steel Frame
- Permanent (good = continuity, bad = low incentive to work)
- Frequent Transfers (bad/good)
- ICT use / technology
- Solution-oriented v/s Formality-wise "getting it done"
- Public-welfare v/s self-career priorities
- Inefficient
- Generalists vs Expertise
- Knowledge of state/region/district
- Elitism / Arrogance (Colonial legacy) -> Polite
- Unaware / Ground reality
- Unreachable / reachable to public
- Lateral Entry

- Administrative Control
 - Centre-State coordination
 - Inter-ministerial convergence
 - Outdated hierarchy structure and protocols
- Corruption / Vested interests / Nepotism
- Political Interference ; Civil Services Board
- Mid-career training and review
- Proactive (eg. Pame Armstrong IAS took own initiative)
- Enthusiasm + Energetic (Identify problems, work with dedication)
- Progressive outlook / missing (eg. No orthodoxy etc should be there)
- Transparency (eg. Proactive disclosures)
- Innovative
- **Behavioral Competence (Public management)**
- **Domain Competencies (recomm by ARC)**
- Incentives - **System of Rewards and Punishments** (use for any agency etc eg. RTI/CIC)
- Code of Ethics
- **Public Perception / Trust**

Micronotes (GS 2 - Health, Education, Skill)

Universal Dimensions

- **Budgetary Allocation increase** (As a percentage of GDP we are still low compared to BRICS countries)
- Investment (including Foreign investment -> Automatic route, more options)
- Employment (eg. Make the jobs more attractive)
- Measuring/Monitoring Outcomes (eg. Health Outcomes - POSHAN Abhiyan)
- Demographic Dividend (eg. Lancet study - till 2061)
- Educ / Skill / health ECOSYSTEM
- Integrated multi-pronged approach
- Foundation (Primary educ / primary health care etc)
- Inequity / Social Inclusion
- Quality of service
- Empowerment of people
- Regulation / Accountability (eg. Fees => equity)
- Uniform rules / quality standards / Non-compatibility
- Excessive commercialization

- More Involvement of Private Sector (eg. PPP or Outsourcing)
- Monopolies
- International Collaboration (eg. Set up institutions with UK)
- Use Best Practices from around the world
- Technology / ICT
- Accessibility, Equity, Quality
- Affordable (Schools, Hospitals, Medicines etc)
- (For any organization / process) = **Make it more democratic** and transparent functioning
- **Improve the Ecosystem / Lifecycle approach / Supply Chain** (eg. Educ ecosystem = From primary schools to higher educ; Health - Infant, Childcare, Adult, Old Age etc)
- Involve Stakeholders (eg. Parents for schools)
- Role of NGOs etc in filling lacunae (eg. Aarohan - education)
- **Accreditation of Institutions**
- **Teacher training / Capacity Building of the personnel (eg. NISTHA scheme)**
- Shortage of institutions (eg. Hospitals in remote areas)
- **CSR funds utilize**
- **Standard Guidelines / Frameworks (eg. FRESH Framework for health of school children)**
- Surveys for Assessment (eg. of educ outcomes, health etc)

Education Dimensions

- Funding for institutes / Investment
- Cost for poor
- **Pedagogical** Interventions (eg. Visual method of teaching using Slides, Animations)
- **Diversify curriculum = More practical Aspects (eg. Vocational training)**
 - Crucial aspects like Disaster Mgmt training, Climate Change mitigation
 - NEP emphasizes on traditional learning like Yoga
- **Moral Education (Values, Ethics)** = Lacking presently / need in future
- **Traditional learning (eg. Yoga, Ayurveda)**
- **Mismatch b/w academia and industry / demand-supply gap**
- **Infra (Number of schools / HIGHER-EDUC, as well as FACILITIES in colleges etc; Quality of primary schools)**
- Quality Teachers (eg. NISTHA scheme)
- **Increase/Infuse Competition amongst institutions** schools etc (eg. PISA test with OECD)
- **Incentives (eg. Recognition / awards to best performing schools)**
- Brain Drain (eg. CEOs of Twitter, Microsoft etc)
- Collab with international universities (**eg. GYAN portal**)

- **UGC** reforms + autonomy + more powers more funding etc (eg. Eminent Institutions)
- Digital Divide
- Non-uniform teaching standards across the country = Incompatible curriculums etc (eg. CBSE, ICSE, State boards)
- **Parents** to be part of school major decisions (esp in Primary school)
- Education for Adults who discontinued due to reasons (eg. National Adult Literacy Mission)
- Distribute study material, Laptops etc (eg. eGyan Kosh = online repository; DIKSHA portal)
- Empowerment (Women, weaker sections) (eg. Beti Bachao, Beti Padhao scheme)
- R&D will create skilled jobs, even attract foreign students (reverse migration)
- Innovation necessary in general for society (eg. Flipped classrooms)
- Role of NGOs (eg. Aarohan, Project Buniyaad - aided by Govt of Delhi)
- **Multidisciplinary** streams as recomm by NEP (eg. IIT Bombay)
- Flexible education system (eg. USA Education Model)
- Social skills / Character building / Personality building
- Mental Health
- Languages (cover multiple + vernacular)
- Personalized Mentorship
- Experiential Learning (by doing)
- **Standard Guidelines / Frameworks (eg. FRESH Framework for health of school children)**
- **Implement National Achievement Survey (NAS) properly to assess competencies**
- Inclusive textbooks (eg. NCERT examples are diverse and inclusive)
- **Student-to-teacher Ratio (eg. AICTE recomm 7.5-20 for higher education)**

Skill Dimensions

- **Demographic Dividend** for 30-35 years (Lancet study); Demographic Disaster
- **Demand-Supply / Academia-Industry mismatch**
- Internships / **Learn while you Earn, Recognition of Prior Learning**
- **Gender Gap**
- Vocational Skills
- Personalized Mentorship
- Experiential Learning (by doing)
- **Diversify skills (eg. Soft skills, Public Mgmt, technical etc)**
- **Mid-career training**
- **Entrepreneurship (eg. StartUp India, MUDRA); Incubators**
- **Job Providers not Job Seekers**
- **National Policy for Skill Devlpt and Entrepreneurship, 2015**

Health Dimensions

- Immunization, Vaccination (eg. NTAGI guidelines)
- **Productivity of person (health) so ultimately GDP also**
- **Generic medicines / pharmaceuticals (eg. PM Jan Aushadhi Kendras)**
- Telemedicine / e-tech (eg. eSanjeevani)
- Focus on PREVENTION not only treatment (eg. Marathons by govt for health)
- Medicine / equipment (eg. PPE) delivery; **Door-to-door**
- Digital Monitoring Apps (eg. **Aarogya Setu, eVIN**)
- Cultural Factors (against vaccine) (eg. Anti-vax movement in USA; superstitions in India)
- International targets (eg. E-2025 for Malaria; 90-90-90 for HIV); Have more such
- Neglected Tropical Diseases (eg. Malaria)
- **National Nutrition Mission 2017**
- **Micronutrients, Stunting, Wasting etc = Triple Burden**
- **Anaemia in Women (eg. Iron Fortified Rice, Golden Rice)**
- Health workers CBM
- NGOs role (eg. can help in training) (eg. **Mitanin** Initiative of Chhattisgarh)
- Food supply NGOs help (eg. Akshya Patra foundation)
- **Insurance (Make Cheaper)**
- **National health Mission**
- **Primary Health Care (Ayushman Bharat)**
- Life Expectancy
- **Cartelization** (eg. Unnecessary Medical tests)
- **NCDs focus more (eg. Diabetes, Hypertension)**
- **India = Diabetic Capital of World (Intro)**
- **Lifestyle, Eating Habits (eg. Fat Tax in Kerala on Junk food)**
- **Out of Pocket Expenditure (OOP)**
- **Global Collab (eg. World Health Congress - WHO)**
- **ASHA Workers + Auxiliary Nurse Midwives (eg. WHO Global Health Leaders Award 2022)**
- **Anganwadis and Balvatikas for kids**
- **Outpatient Care / Ambulatory Care**
- **Integrated care (in patient, out patient, Prevention)**
- More focus on **Palliative** care, **Geriatric**, Rehabilitative care
- Ambulances, Hospital Beds etc
- Global Concerted Efforts and Stance (eg. Alma Ata Declaration on Primary health)
- Emergency response (before even reach hospital)
- Psychological care
- Mental Health (eg. Manodarpan for students; **NIMHANS**)

- R&D, Funding (Diversify -> Pvt sector / FDI / donations etc)
 - Research on new methods etc (eg. Brain research Project **SWADES**)
- **INSACOG** - genetic diseases / Biotech
- **Standard Guidelines / Frameworks (eg. FRESH Framework for health of school children)**
- Real time data use (eg. Project Saubhagya for MMR and IMR)
- **Community initiatives (eg. 'On the lines of Project Sampoorna in Assam for malnutrition)**
- Psychological support via Community (eg. Buddy Mothers during COVID)
- Community-based COVID Mgmt (eg. Project Mili Juli)
- Learning from past and preparing for future outbreaks (eg. Japanese Encephalitis)
- Focusing on Vaccine Preventable Diseases (VPDs)
- Clear Health Policy (eg. National Vaccine Policy 2011)
- **Patient-Doctor ratio**
- Nutrition
- Micronutrients (eg. B-12, Zinc)
- Long-term measures
- Climate-resilient

Health Examples

- Life expectancy +2 => 69.7 (NFHS 5)
- TFR 2.0 (NFHS-5) + Decadal growth rate decr
- PM Jan Arogya Yojana
- Anaemia Mukta Bharat + Nasha Mukta Bharat
- Jan Aushadhi Diwas (AYUSH)
- "No should should sleep hungry" during Corona resolution in Rajasthan
- Oral antiviral therapy in addn to vaccination
- "ICMR/NCDC recommendations should be followed"
- Alma Ata Health conference - Primary healthcare
- ASHA workers : WHO's Global Health Leaders Award 2022
- Midwives, Angangwadi Workers
- Ayushman Bharat Digital Mission -> Health IDs for everyone
- Arogya Setu App (Health, ICT, e-governance, GIS)
- PM Atma Nirbhar Swastha Bharat Yojana
- Nutrition - POSHAN Abhiyan
- NHFS-5 data
- Ayushman Bharat PM-JAY (Health coverage)

- Mission Indradhanush 4.0
- e-Sanjeevani
- Health & Wellness centres
- Tele-MANAS (Mental Health) + Manodarpan, NIMHANS
- PEN Plus strategy of Africa (NCDs)
- Sickle Cell Anaemia Elimination Program (Health, tribals)
- Mobile Health Units
- 'Global Burden of Disease' data
- Central Govt Health Scheme (CGHS)
- Disease specific mission mode (eg. NLEP = National Leprosy Eradication Programme)
- Antimicrobial resistance (AMR)
- Air Suvidha form for self-declaration of COVID
- Global "**Immunization Agenda 2030**"
- National Vaccine Policy of India 2011 = First and only
- National Technical Advisory Group on Immunisation (NTAGI)
- Vaccine Preventable Diseases (VPDs)
- **WHO's Emergency Use Listing (EUL)**

Education Examples

- NIPUN (foundational)
- NEP = Multidisciplinarity = DU 4-year UG course
- Academic Bank of Credit (ABC) by NEP
- Single University Entrance Exam by NTA
- Digital Universities / online courses eg. SWAYAM, eGyanKosh, DIKSHA etc
- UGC : universities
- Learning Loss (World Bank)
- Vidyanjali 2.0
- STEM
- National Education Alliance for Technology (NEAT 3.0)
- NIPUN Bharat (Foundational)
- Ek Bharat Shreshtha Bharat (unity b/w diff states)
- Samagra Shiksha Abhiyan
- WEST : Women in Engg, Science, Tech
- eGyanKosh, DAISY Portal
- PISA (OECD)
- District Institutes of Education and Training (DIET) = educ at local
- Digital Library for Children and Adolescents
- NEP 2020
- Digital India Mission

- DigiSaksham Initiative
- Society for Nutrition, Education and Health Action (SNEHA) (NGO)

Skilling Examples

- Recog of Prior learning
- DigiSaksham Initiative
- Digital India Mission
- PM DAKSH
- Budget - PM Kaushal Vikas Yojana 4.0
- SCALE App (Certification for employees)
- SANKALP programme with World Bank
- Unified Skill India Digital Platform
- Skill India International Centres
- National Apprenticeship Promotion Scheme
- Unity Mall (Tribals, handicrafts, local, employment etc)
- Vocational training

Micronotes (GS 2 - IR)

Bilateral/Regional Relations with Any country DIMENSIONS (Way Forward / Challenges)

- Collaboration
 - Projects (eg. Chabahar; Japan - NE Infra; e-learning etc)
 - Cooperation in other countries (eg. Projects in Africa along any country)
 - Central Asia / Afghan etc (Cooperate (eg. Salma Dam) / Area of contention / Regional instability (eg. Taliban))
- Political
 - Higher engagement - regular meetings of leaders (eg. Summits)
 - Embassy
 - Resolve pending issues like border issues
 - 2+2 dialogue and other comprehensive dialogues
 - Supporting each other's visions (eg. Indo-Pacific) in multilateral fora (eg. UNSC Reforms, India Bid)
 - Convergence/Divergence in policies against threats (eg. Expansionist China)
 - Strategic Partnership
- Economic
 - Trade and Investment (FDI and FII) / FTAs and PTAs
 - New Trade Routes and opportunities

- Improve Business Ecosystem to attract
- Forex reserves
- Sharing of info - eg. Tax, International Payments (eg. Tax Info Agreements)
- Investments in other regions (eg. Garland Highway, Salma Dam - Afg)
- Remittances
- Cultural
 - History (eg. Colonies)
 - More people-to-people (P2P) ties and interaction (eg. Exchange programmes for students)
 - Civil Society engagement (Track 2 and Track 1.5 dialogues)
 - Diaspora = Culture + Political
 - Sister City Pact (like we have with Germany)
 - Regional programmes on lines of Project Mausam
 - Soft Power Diplomacy
 - Cricket Diplomacy
 - Bollywood
 - Religion / Heritage / Value System (India as Vishwaguru)
 - Health (eg. ASHA workers - WHO Global Health Leaders Award 2022)
- Security
 - Defence Exercises (Bilateral + Multi)
 - Defence Equipment Import / Modernization - Collaboration
 - Cooperation against Terrorism etc - Info sharing etc
 - Logistics Agreements (eg. with USA - LEMOA, BECA etc)
 - Operational Readiness
 - Procedural Propriety (eg. Better bargains)
- Energy
 - Oil / Nuclear etc - Diversify
 - Collaboration in Energy plants and RENEWABLE energy
- Logistics Agreements (eg. RELOS, LEMOA)
 - Connectivity
 - Shipping Clearances automated
- Environment
 - Cooperation in Clean Climate Projects (eg. "On lines of" Ind-US Clean Energy Agenda 2030)
 - Clean Devlpt Mechanism (CDM) = Exchange of Carbon Credits
- Education
- Technology
 - Joint Space Projects (eg. LUPEX); Sharing of Space Technology

- Best practices in ICT, Nanotech etc
- Health
 - Health Diplomacy - Sending doctors cross-nation
 - Medical supplies, Vaccines etc
- Misc
 - Share Best Practices
 - Follow the model of ... in ... (eg. Model of Singapore in Bureaucracy; Australia in GST)
 - Use of Law-experts for dialogue ("Lawfare")
 - Honour their leaders
 - Collaboration for Humanitarian purposes
 - Negotiations
 - Corporate investments
 - Mobility
 - Migration
 - Strategic Convergence
 - Common threats (eg. China)
 - Technology transfer
 - Connectivity
 - Help promote relns with someone else
 - Against western hegemony
 - Ideological cooperation / consistency
 - Multilateral cooperation
 - Hydrological cooperation : Water security

India neighbourhood (BIMSTEC SAARC etc)

- Terrorism, Drugs (eg. Golden Crescent, triangle)
- China expansionist (String of pearls; Counter = Double Fish Hook policy)
- India viewed as major power so small countries fear (eg. Bandwagoning with China)
- Indian mega-narrative allegations (eg. Nepal)
- Extremism / Fundamentalism (eg. ISIL)
- Maritime Security (eg. SAGAR)
- Combined/United Stance (eg. Kathmandu Declaration of BIMSTEC = Security of BoB)
- **Act East Policy**
- Cultural issues (eg. Madhesis in Nepal; Tamils in Sri Lanka)
- Building Goodwill / preventing negative sentiments (eg. **IndiaOut Campain in Maldives**)
- **Border issues**
- Trade low
- Connectivity (eg. BBIN motor agreement; IMT)

- Migration + Infiltration (eg. Bangladeshis in Assam)
- Refugee Crisis (eg. Rohingya + Bhashan Char)
- Smuggling / trafficking (eg. Opium)
- Fastest growing
- Most populated
- Central Asia / Afghan etc ("Cooperate over.." / "Area of contention" / Regional instability)
- Stability in region - Synergy - Stakeholders in each others' success. Win-win situation
- Neighbourhood - Gujral Doctrine - magnanimity
- For any, can write "Alternative of..." (eg. BIMSTEC <--> SAARC)
- Joint "Indo-Pacific Vision"
- Joint surveillance systems (eg. IOR - Coastal Radar Surveillance)
- Security collab projects on the lines of **International Fusion Centre (IFC-IOR)**
- Conferences / exchange of ideas for specific topics (eg. Goa Maritime Conclave (GMC))
- Fishermen issues (eg. Katchatheevu, Indo-Pak)
- Anti-terrorism efforts (eg. SCO regional discussion)

Institutions / Groupings

- Global Governance
- New rules, new laws etc
- Non/Democratic Functioning (eg. P5 veto)
- Mandate enlarge (eg. More focus on **EMERGING issues** like Climate Change, Cryptocurrency)
- More representative
- Informal summits also
- Consensus development / Veto
- Conventions on Diverse/New matters (eg. Vienna for PoW, Marpol for Pollution, Singapore for Mediation)
- Voting Rights issues
- Synergy (all should benefit)
- Developed v/s Developing (eg. UNFCCC Paris)
- Donation / Contribution inequalities
- Funding (eg. UN Financial Crisis)
- Consistency in meetings
- No fixed agendas / priorities (eg. 'Overloading' of Singapore round of WTO)
- Charter make / update
- Coordination among members limited
- Overloading (eg. Doha round overloading)
- Not enough influence / authority (eg. China disobeyed UNCLOS)

- Not proactive (eg. WHO limitations during pandemic)
- Obsolete (eg. UN)
- Opposition from some countries (eg. UNSC Veto = P5; Coffee Club)
- Distribution according to present geopolitics
- Definite goals (eg. Anti-terrorism)
- Emergence of many Alternative institutions (eg. BRICS NDB over WB)
- Chairmen/Leaders from West
- Pluralistic Tendencies (eg. AUKUS)
- Growing Regionalism (eg. MERCOSUR)
- Dispute Resolution Issues (eg. WTO)
- Global regulation / standardization (eg. WHO's Emergency Use Listing (EUL) of Vaccines)
- Highly specialized groups coming up
- Inefficiency
- Lack of specificity (eg. Maritime conferences : prefer localized, eg. GMC)
- Alternatives for specific issues (eg. 3rd RSA for Taliban)
- Come up with declarations / global statements for issues like Cryptocurrency, Terrorism
- Joint ThinkTank / Centres for Policy research

Global Aspects

- **Developing / Small nations should come together to put pressure**
- **A global ... commission to monitor commitments etc (eg. in Climate Change)**
- Protectionism (eg. America First), Mercantilism (eg. China)
- Central Asia / Afghan etc ("Cooperate over.." / "Area of contention" / Regional instability)
- Stability in region - Synergy - Stakeholders in each others' success.
- Neighbourhood - Gujral Doctrine - magnanimity
- Unilateral tendencies (eg. USA in context of Iran / JCPOA)
- Intellectual Property aspects (eg. Compulsory Licensing; Patent Pool etc)
- Global Concerted Action against Terrorism (eg. Delhi Declaration)
 - Global Declaration against / on ...
- **Migrant Crisis (eg. Belarus-Poland border)**
- **Freedom of activists**
- Russia-China axis
- Decline in multilateralism
- Vaccine Diplomacy / Nationalism
- Global Divide
- Structural challenges in UN etc
- Stakeholders
- South-South

Indian Foreign Policy

- Strategic Autonomy
- **Multipolarity and Strategic Alignment**
- Emerge as Global Leader
- **Net Security Provider**
- Amicable Solutions
- Neighbourhood - **Gujral Doctrine** - magnanimity
- Be active participant in major global discussions (eg. Taliban)
- China / Pakistan dimension
- Regional Security and Growth
- **India should hold more summits (eg. Internet Governance Forum recently held)**
- Investments in other regions (eg. Garland Highway, Salma Dam - Afg)
- Support the legitimate govts (eg. Myanmar, Afghan)
- Investments + Collab + cooperation
- Central Asia / Afghan etc ("Cooperate over.." / "Area of contention" / Regional instability)
- UNPKO + **HADR**
- Utilize Soft Power Diplomacy
- **Pragmatic Stance (Not solely based on morals but also consequences)** (eg. Myanmar Oil so not fully against when coup; eg. Initially refused Taliban engagement but later did)
- Security, Energy, Economic Interests
- Balance Expansionist tendencies of China etc and Protectionism of USA
- Delicate balance (eg. USA - Russia CAATSA, Israel-Palestine)
- Indian Ideals and Culture (Vishwaguru)
- **International Image (Pluralistic Democracy)**
- Act East
- Capacity building of Diplomats esp wrt Sensitive relations / issues
- India should become Permanent Observer / Member of (eg, Arctic Council / ..)
- Follow a consistent STAND/STANCE/Policy
 - Have a VISION STATEMENT for... (eg. For Taliban/Afg)
- Use of Law-experts for dialogue ("Lawfare")
- **Joint / Collab / Synergy (eg. IFC-IOR for Maritime)**
- Host important dialogues for contemporary issues (eg. 3rd Regional Security Dialogue on Afg held in New Delhi)
- Strictly against terrorism (eg. Delhi Declaration in 3rd RSA)
- Defence Procurement - Own interests + Propriety first (eg. Rafale Jet)
- Centre for Policy Research
- Soft Power

- Vaccine Diplomacy
- Domestic capabilities develop
- Strategic importance
- World Leader
- Focus on IT
- Demography
- Diaspora
- Rising status
- Resilient economy
- Large market
- Cooperate with similar countries (eg. Japan)
- Diversify relations (eg. Germany, Israel)
- Rules-based order
- Protect multilateralism

Diaspora

- **Pravasi Bharatiya Divas**
- **Global Migration Report (India largest)**
- Know India Program (KIP)
- Why
 - Education
 - Job opportunities
 - Family / Relatives
 - Socio-political Envmt
 - American Dream
 - Push factor (eg. Discrimination / displacement)
- Economic
 - Remittances (eg. UAE) = 3.2% of GDP
 - High investments into India
 - Open branches of MNCs in India = Boost jobs also
- Political
 - Many Indian origin persons in high posts (eg. Mrs Kamala Harris in US)
 - Multilateral Institutions (eg. Mrs Gita Gopinath in IMF)
 - Role in Diplomacy (eg. India-US Civil Nuclear deal)
- Socio-Cultural
 - National representation across globe
 - Build India's image and reputation
 - Lot of them are successful CEOs (eg. Parag Agarwal)

- Spread of Indian Culture (eg. Yoga) and Values
- Other
 - Knowledge and technical know-how flow in
- Issues
 - Discrimination eg. Personal attacks by foreigners
 - Discriminatory Policies (eg. H1B Visa)
 - Viewed with suspicion
 - Anti-immigration feelings for taking away jobs
 - They feel like strangers
 - Cultural values are new
 - Often families are still in India
 - Bad diaspora can spoil image globally
 - Identity proof rules
 - Indians in same foreign country are often NOT well connected

Misc / Universal

- Multi-faceted interactions
- Diversify (eg. Role, engagement, diplomacy tracks etc)
- Active development partner
- Constructive engagement
- Geopolitical tension / realities
- Nuclear power
- Conflict flashpoints
- Maritime resurgence (focus on IOR)
- De-hyphening
- Free and open Indo-Pacific
- Institutional fault lines
- Soft Power - ABCDEFGHIJKLM
 - A = AYUSH (Ayurveda, Yoga) etc
 - B = Buddhism (Religion in general) = South East Asia
 - C = Cricket + Cultural Diplomacy
 - D = Democracy + Diaspora
 - E = Entertainment (eg. Bollywood)
 - F = Food + Festivals
 - G = Gandhiji (His ideals etc)
 - H = History (Shared, eg. Mughals, British Colony)
 - I = IT
 - J = Joint (Collab) Exercises or Projects like in Africa

- K = Knowledge
- L = Labour
- M = Medical

IR Examples

- CEPA : Ind-UAE
- India-US Digital Tax Pact
- India-Aus ECTA
- 12th Ministerial WTO
- Colombo Security Conclave, GMC
- Regional Security Dialogue
- Goa Maritime Conclave
- 'Partners in the Blue Pacific' (PBP) + IPEF
- Nord Stream = pipeline Europe
- Fishermen India-SL or Ind-Pak
- **New and Emerging Strategic Technologies (NEST) division inside MEA**
- iCET (Initiative for Critical and Emerging Technologies) with USA
- Green Strategic Partnership with Denmark
- Blue Dot Network
- Operation Ganga - Ukraine Indian students
- COVID Diplomacy / Vaccine Diplomacy; 'Vaccine Maitri' supply
- IPEF
- Climate Diplomacy (ISA, OSOWOG)
- Connectivity (eg. IMT, Kaladan)
- Cultural Links (eg. Project Mausam)
- China diversification (eg. China + 1 strategy)
- Security (eg. Golden Triangle, crescent)
- Cornwall Consensus (Capitalism / Economic system)
- SAGAR
- Clydebank declaration = Green shipping corridors
- UAE huge investment in India in 2021
- Israel political instability
- G7 sanctions on Russia from oil sales
- Ukraine shipments through Black sea were affected
- Montreux Convention of Straits (Black Sea)
- Sri Lanka Economic Crisis
- G7 Partnership for Global Infra and Investment (PGII) = alt of BRI

- India-France Joint Vision for Space Cooperation
- India-France world's largest Nuclear park in Jaitpur Maharashtra
- I2U2 (West Asian Quad)
- Black Sea Grain Initiative (Food security agreement)
- Indo-Pacific Economic Framework
- iCET (Initiative on Critical and Emerging Tech) = USA
- BIMSTEC / SAARC / ASEAN
- Just Energy Transition Partnership
- UN - to shift climate change talks to UNSC; India voted AGAINST it
- India-Myanmar : 16 km FREE MOVEMENT ZONE
- European Free Trade Agreement -> Trade and Economic Partnership Agreement (TEPA) with India
- India's projects in Afghan (eg. Salma Dam, Shahtoot Dam, New Parliament building)
- Islamic State Khorasan (IS-K) in Afghanistan
- India as a 'First Responder' (eg. Afghan earthquake 24 hours)
- Sweden and Finland NATO
- India as a 'First Responder'
- G7 'Climate Club'
- G7 'Just Energy Transition'
- HADR
- String of Pearls
- Pivot to Asia (USA)
- SAARC minus one
- Salami Slicing Tactic (china)

Micronotes (GS3 - Envmt)

Envmt

- Examples
 - PARIVESH = Envmtal proposals online window
 - PANCHAMRIT
 - National REDD+ Strategy
 - ENVIS (Envmt INfor System)
 - LIFE = Life for Envmt
 - Indore as first Water+ city of India
- Misc

- Article 51A = Duty to protect and improve natural envmt
- Article 21 = Right to Clean Envmt
- MoEFCC, NGT
- Weak implementation of legislations or ineffective laws
- Weak accountability systems (eg. Water Cess Act 1977); Monitoring poor
- Sustainability issues
- Blame game
- Bureaucratic Inertia (pointed out by Supreme Court)
- Neglecting own responsibility; calling them "Act of God"
- **Dismal = Envmt Performance Index (EPI)**
- Open data
- **Democratize Environmental Governance** by involving local communities
- Develop a Climate Risk Atlas / Envmt Risk Atlas
- Emissions (CO₂, NO₂ etc)
- Eutrophication
- Soil remediation (eg. Phytoremediation)
- Sensors (eg. Moisture level, CO₂ levels)
- Toxicity (eg. Herbicides)
- Industrial chemical waste (eg. Factories - sewage, effluent gases)
- Mass extinction (6th)
- Human errors
- Overexploitation
- Ecosystem stability
- Necessary activities like agric can also harm envmt
- Slow poisoning - gradual damage
- Water stress
- Food security
- Community involvement
- Commitments (eg. Paris, Panchamrit)
- Monitoring
- Climate Change, Global Warming etc
 - **IPCC 6th AR observations / recommendations**
 - Global Climate Risk Index = India highly vulnerable
 - NAPCC
 - **Carbon Budget, Methane Budget (Global Carbon Project)**
 - **Climate Finance inadequate**
 - Climate Finance = Clean Devlpt Mechanism (Article 6, COP 25); GCF
 - International Cooperation = Santiago Network

- Lack of consensus, transparency
- Climate Justice / Equity : Common but Differentiated Responsibilities
 - Inter-generational + Intra-generational
- Climate-smart / Climate **resilient** ... (eg. Agric)
- Global Warming = Green house gases
- Air Pollution and Water Pollution
- **Microclimate variations**
- Precipitation
- Ozone Layer Depletion
- Release of **Aerosols** (eg. IPCC Report = Aerosols biggest factor for Arabian Sea)
- Solar radiations; Albedo etc
- Vegetation = Terrestrial Sequestration
- Fossil Fuels = Electricity
- Volcanic Activity
- Natural glacial cycles
- Rotation of Earth and different solar insolation
- Loss and Damage (Warsaw COP); SUVA Expert Dialogue
- Mitigation + Adaptation
- INDCs (35% GHG reduction by 2030; 40% non fossil fuel energy; 2.5-3 bil tonnes sink)
- Ethical dilemma (eg. 'Right to Burn' v/s Sustainable devlpt)
- Coal Lobbying issue
- Supreme Court said to balance Defence and Envmtal concerns
- Impacts (Also "reduce .." etc)
 - Global Warming; Heat stress (already high temp) (eg. Urban Heat Island effect)
 - Ocean Circulation upheaval + Ocean Acidific - marine life affected
 - (eg. AMOC Weakening -> Cold Europe)
 - Salinity of water bodies increase
 - Desertification (eg. Sahel region)
 - Degradation of grasslands
 - Damage to imp ecosystems like Mangroves, Corals
 - Food Security impact (crop failure etc)
 - Water scarcity etc
 - Sea Level rise + Sea surface temp (SST)
 - Extreme weather events (Heat waves) + Slow-onset events;
 - Change in rainfall patterns
 - Melting of glaciers + Cryosphere shrinking
 - Diseases rise + new pests
 - Envmtal Refugees

- Altered shorelines = relocation for many
- Energy demand rise (eg. More use of AC/Fan in extreme summer)
- Transport via Ports etc can become difficult
- Economic Impact - coral reefs generate lot of revenue
 - Cost of damage etc will increase over time
- Measures to Take
 - Vulnerability assessment + observation networks (IPCC recomm)
 - **CCS (Carbon Capture and Storage) + BECCS (Bioenergy with CCS)**
 - **Biofuels (4th gen etc) + Biochar, Biomass; Sequestration**
 - Community ownership; Integrated Coastal Mgmt
 - Targets should have strict timelines and be followed (eg. Net zero by 2070)
 - Preparedness eg. CDRI
 - Capitalizing on Solar Energy (eg. PM KUSUM, Domestic Content Requirement)
 - Shut down less efficient, polluting thermal coal power plants
 - **Green Hydrogen fuel**
 - **Biofuels**
 - Encouraging Private investment
 - Monitoring of emissions and identifying key geographical regions
 - Energy Efficiency
 - Railways electrification
 - Infrastructure = Green buildings (eg. CII) and Urban Forestry (eg. Miyawaki method)
 - Waste management and waste to energy
 - Higher, automatic FDI in renewable energy projects
 - Technological innovations (eg. Happy seeder in agric = stubble burning)
 - Trading Mechanism = GTAM, Carbon Trading Mechanism, Santiago Network.
 - Portion of CSR Funds for Envmt-friendliness
 - International Collab
 - Carbon Sinks
 - Shifting to less GHG intensive crops
 - Tax / disincentives
- Biodiversity
 - **Aichi Targets and 6th mass extinction**
 - Evil Quartet - Habitat Loss, Overexploitn, Alien species, Secondary extinction
 - **Medicinal value (eg. Neelikurinji)**
 - **Aesthetic Value (eg. Orchids)**
 - Balance of ecosystem
 - Raw materials like wool

- Invasive Species (eg. Orange coral)
- Increasing livestock populations, exclusion of wild herbivores
- Food - meat etc = Poaching
- Man-animal conflict (eg. elephants) = Human encroachment
- Natural resources like Tendu leaves
- Co-extinction (one species dependent on another)
- Habitat loss / fragmentation
- Food chain maintain (eg. Control of herbivores)
- Conservation projects like Project Tiger, Himal Sanrakshak (Snow Leopard)
 - Innovative / Tech based - Project BEE (Elephants)
- Ex-situ + In-situ
- More diversity = More productive
- Envmt / Ecosystem Related including Pollution
 - **Council on Energy, Envmt and Water (CEEW)**
 - Green India Mission
 - **Tourism + Recreation (eg. Lakes)**
 - Pollution (DIMENSIONS)
 - Health issues (eg. Air pollution causing respiratory)
 - eg. Plastic (Single Layer , MLP); Particulate Matter; Construction work
 - **Biomagnification and Bioaccumulation**
 - **Oxygen Depletion; BOD/COD**
 - Treatment = Septic Tanks, Denitrification etc
 - Environmental degradation
 - Leaching of toxic chemicals
 - Soil pollution = Agric productivity
 - Burning / combustion = GHGs
 - Landfills = Methane
 - Vulnerability
 - Overpopulation + urbanization
 - Overexploitation
 - Land use patterns and degradation (eg. Diversion of lands to construction)
 - Carrying Capacity of Ecosystem; Earth Overshoot Day
 - Earth Hour / Conservation practices
 - Energy Efficiency
 - Tourism dimension
 - Food security
 - Disaster prone
 - Lack of regulation of mining etc

- Nutrient depletion / recycling / balance
- Industries = Pollution + wastes + toxic etc
- Liability regime (Polluter pays etc); Carbon Tax
- Cost-effective solutions (eg. Smog towers, Happy seeder)
- Productivity of ecosystems (eg. Mangroves)
- Short-term + Long-term measures / risks etc
- Standard of living (eg. Air pollution in Delhi; Fluoride in drinking water)
- Health issues (eg. Breathing - air polln)
- Loss of individual productivity due to poor envmt = Economic
- Poor awareness and responsibility among public
- Green Buildings (eg. CII Building); GRIHA Index
- Smart Cities
- Recreation
- Cultural (eg. Sacred Groves)
- Deforestation; Carbon Sinks etc
- Desertification, Global Warming, Arctic Melting
- Tribals - Land rights etc
- **Keeling Curve** / Carbon dioxide accumulation
- Solid waste mgmt, limitations
- Extended Producer Responsibility extend
- Ecological Balance, Hydrological cycle maintained etc
- **Ecosystem services (eg. Provisioning, Cultural, Supporting)**
 - eg. Use in "Significance of mangroves" etc
 - Support other kinds of plants/animals; economic produce; filtering etc
- Recycling; Reusing etc
- Renewable Energy (Solar etc, all its points)
- Innovative measures like Green Bonds
- CSR - Envmt
- Invasive species (eg. Orange coral, African catfish in Kerala)
- Emergence of new pests (Due to Global warming etc can use all points)
 - Vector-borne diseases (Zika, Malaria etc)
 - **Genetic resistance in new pathogens**
- Natural hazards
 - Rising sea level (eg. Maldives Sea Wall to prevent flood)
 - Rising Sea Surface Temp (eg. Arabian Sea more)
 - **Medicanes, Locust attacks and other new threats**
 - Forest fires (eg. Simlipal, Amazon), desertification, melting of glaciers
 - La nina , El nino modoki etc

- Food and Nutrition Security
- **Water Crisis / Water related question**
 - Groundwater; Damns inefficient; Water table
 - Rivers drying up
 - Pollution, non-potable; Cholera etc
 - Jal Shakti; Nirmal Ganga; Linking rivers
 - Role in industries, domestic, agric etc
 - Foreign policy (eg. IWT; Teesta sharing); Interstate (eg. Mullaperiyar)
 - ICT - Smart water mgmt (SWM)
 - UNCCD etc
 - Jal Shakti Abhiyan, "Catch the rain" campaign
 - Agric - efficient techniques like DSR, SRI
- Economic (eg. Fisheries, **Mollusc Industry**)
- **Social Cost (Climate refugees, climate led displacement)**
- National Security (eg. Transborder water mgmt)
- **Use of Biomass for cooking**
- **Low annual energy consumption per capita**
- Water Mgmt = Rainwater harvesting + storage, desalination
- Agric = Microirrig, Crop relocn, **agro-forestry**, Multi-cropping, vertical farming, Urban forestry (Miyawaki)
- Infra = Sea walls, Buffer zones; Coastal zones
- Speed = Need to act fast; collect finances quick etc
- Scope = Adaptation + Mitigation both
- Scale = Reluctance of developed nations; Involve pvt sector
- **Insurance**
- EIA and related topics / themes of conservation
 - Study potential impacts; improve design of project
 - Use of available scientific knowledge
 - Corruption; Lack of expertise
 - At times EIA reports are copied rather than prepared thoughtfully
 - Expert Appraisal Committees = Bureaucrats not experts
 - Accreditation system
 - Socio-economic issue often neglected; Negative externalities (eg. Aesthetic)
 - EIA by industries - just for clearance; no intention to take the recommendations
 - Citizens - brunt
 - Risk assessment / Screening + Scoping
 - Data collection / Baseline
 - Impact prediction (extrapolation studies)

- Cost-benefit analysis
- Mitigation; Monitoring + Course correction
- To ensure sustainable devlpt
- Exemptions remove / rationalize
- Composition of committees
- Public participn increase
- Conflict of interest : Devlpt v/s Envmt sustainability
- Time consuming v/s Comprehensiveness
- Policy changes / fluctuations
- **Democratize Environmental Governance (Role of local authorities, ppl)**
- **Ensure Vulnerable Sections extra focus**
- **NGOs, Civil Society extra role**
- **Rio Declaration = EIA as national instrument**

Energy

- Energy Security (eg. Agric - irrigation requires water - PM KUSUM)
- Nuclear Programme (Homi Bhabha)
 - Pressurized Heavy Water + Fast Breeder Reactor + Thorium Reactor
- 25% thorium of world; Monazite sands
- 3-stage nuclear program
- High / Reduce cost of installation
- Maintenance cost
- International energy distribution / collabs (eg. Kazakhstan Oil supply)
- Incentives (eg. SATAT initiative for CBG)
- Disincentives (eg. Carbon tax)
- Hydrogen economy
- Health related risks (eg. Air pollution -> Breathing issues)
- Social Transformation
- International Image / Soft power
- Environmental concerns (deforestation; biodiversity impact)
- Economic development
- International obligations (Paris Climate Agreement, SDGs)
- Technological limitations (eg. Green Hydrogen)
- Innovation (eg. Green hydrogen from Ammonia)
- Distribution / Remote areas / Rural devlpt / Last mile
- Transmission infrastructure (poor/improve)
- Generation Capacity limited / increase
- Tarrif regulation (SERC) = revise, overcome the challenges in.

- Cross-subsidy
- Ethanol Blended Petrol
- Disparity among states
- Decentralized production and consumption
- Stalled projects
- Lack of skilled manpower
- Slow production / adoption of new tech (eg. Electric vehicles, Solar panels)
- Power Load Factor (peak)
- Power Purchase Agreements (better use)
- Utilities for Generation / Distribution - Better mgmt / Losses etc
- Strategic Reserves (eg. Coal shortage crisis during Oct 2021)
- Private sector role (eg. DISCOMS - most are govt)
- High cost of power -> Consumer chooses alt sources
- **Renewable Energy (Use these in Envmt also)**
 - Raw Materials (eg. PLI)
 - Solar = ISA, Huge potential; OSOWOG; Solar Park Pavagada - largest in world; rooftop
 - Coastline - potential wind; Gujarat, TN max
 - High carbon dependency / Reduce dependency on fossil fuels
 - Import reliance / Atmanirbharta
 - Jobs (Losses in conventional, increase in these)
 - **Plant Load Factor / Peak Energy demand**
 - **Power purchase agreements; Grid Parity**
 - Hydropower (eg. Subhanshree in Assam); Bhutan; Bathymetric data
 - Time of Day Pricing (ToD) = consumers charged as per when energy consumed
 - National Institute of Wind Energy / MNRE recommendations etc
 - Reliable / Unreliable supply of energy ('Variable Renewable Energy')
 - Sustainability
 - Biofuels
 - Regional distribution (eg. Solar, Wind = Coasts)
 - Gas-based economy
 - **Integration with Grid**
- DISCOMs
 - Loss / indebted
 - AT&C losses
 - Cross subsidy
 - Tarriff revision (not done / do)
 - Populism (subsidies)
 - Corruption

- Poor mgmt / administration / efficiency -> Privatization
- Regulatory hurdles (eg. bidders must be companies)
- Pvt sector difficult entry
- Infra deficit (Distribution network)
- Ensure reductions in PPAs

Envmt Examples

- State of India's Envmt Report 2022
- Riverbed Sand Mining
- Net Zero C by 2070
- Global Methane Pledge
- Extender Producer Responsibility
- Coal gasification
- Biomass co-firing
- OSOWOG
- Green Strategic Partnership with Denmark
- Koronivia Joint Work on Agriculture (UNFCCC)
- Doomsday glacier (Thwaites)
- New Ramsar Wetlands (Yashwant Sagar)
- Deep Ecology v/s Shallow
- Global Methane Pledge (India NOT)
- Keeling curve (CO₂)
- NOAA's Ozone Gas Index
- UNEP's Breathelife Campaign - air pollution
- Green Hydrogen, Green Ammonia, Green Methanol
- Fit for 55 (Emissions)
- Carbon Border Adjustment Mechanism
- Special Climate Change Fund
- Climate tipping points
- Carbon Capture, Utilization, and storage
- Biological Diversity Act 2002
- Indian Antarctic Act 2022
- Arth Ganga
- Ban on single use plastics
- Blue flag certification
- Torrefaction
- Seoul Declaration (Forests)

- Lisbon Declaration (Oceans)
- Abijdan Declaration (Gender equality in land restoration)
- Green Hydrogen Mission
- GOBARdhan (Waste to wealth)
- MISHTI (Mangroves, Coastal; ecosystem conservation on lines of)
- Green Credit Program (Eco friendly overall)
- Amrit Dharohar = Wetlands, biodiversity, carbon / CC etc
- LIFE = Lifestyle for Environment
- CAG - neglect of elephant corridors caused their deaths
- Waste treatment - Dry waste collection, Micro-composting
- TEEB (The Economics of Ecosystem and Biodiversity)
- 'Green Jobs' like in Waste Mgmt, Waste2Energy
- Polluter Pays principle
- Mokedatu project TN/Kerala envmt clearance debate
- Western Ghats Ecology Expert Panel (WGEEP) = Gadgill, Kasturirangan

Micronotes (GS3 - Agriculture)

Agriculture

- Farm Dimensions
 - Farmer
 - Income / Alt sources; Capital investment
 - Land Holding (avg = 1.08 Ha)
 - Health and wellbeing
 - Incentive to grow food grains (eg. MSP)
 - Following good practices
 - Soil
 - Moisture = Water table etc
 - Nutrients = Availability, Imbalance
 - Pollution by chemical fertilizers
 - Presence of Microorganisms
 - Inputs
 - **Seed quality / Seed Replacement Ratio / Certified Seeds**
 - Fertilizers, Manure, Insecticides, Pesticides
 - Irrigation = Pumps, Tubewells
 - Machines (Tractors, Tillers etc)

- Electricity, Fuels
- Sunlight (Climate)
- Processes
 - e-Technology (e-support, television channels etc)
 - Subsidies, Waiver of Loans
 - Labour for tilling etc
- Output (Grain)
 - Post-harvest Management
 - Storage = Cold Supply Chain Infra; Warehouses, Pith and Cover
 - Transport = at Farmer Gate; Refrigerated
 - Processing = Primary (Cleaning, Grading), Secondary etc
 - Value Addition (Fortification etc)
 - Marketing (Branding, IPR etc)
 - Export
- Market intelligence
- Farmer-centric approach
- Digital Public Infra
- Aid in Decision-making
- Increase geographical reach of farmers
- Resilience to price volatility
- Global markets
- Timely interventions
- Address issues of exclusion
- Productivity
- Agric research (eg. ICAR, IARI)
- Climate change + resilience
- Crop diseases
- Non-remunerative
- New farming techniques (eg. Hydroponics, Permaculture)
- Sustainable long-term (eg. Crop diversific)
- Micro-region specific interventions
- Harness agro-climatic differences
- Structural reforms
- Envmtal / Geog / Climatic
 - Vagaries of weather
- Economic + Political Factors
 - Crop insurance (eg. PM Fasal Bima Yojana)
 - DBT (eg. PM KISAN)

- Institutional Credit - Cheap interest rates; Collateral NO
- Price volatility + risks (climate etc)
- Transport, Storage etc = **Encourage farmer to Invest more**
- Farm Subsidies
 - PM-AASHA = plug holes in procurement
 - Direct = MSP, Loan waivers, Crop insurance (Fasal Bima), DBT (PM Kisan)
 - Indirect = Fertilizer, power, water, seeds, credit subsidy
 - Incentive for production + Food security v/s overproduction, wastage
 - Lack of procurement/storage + supply > demand
 - Exploitation by commission agents + middlemen
 - **Calculation issues (eg. A2 + FL v/s C2 debate)**
 - Revise criteria based on present situations
 - Farmer income support
 - Govt can bring focus to specific areas (eg. Solar power) - WayF
 - Incr envmt friendly ways (eg. Paramparagat Krishi Vikas)
 - Careless use / overexploitation (eg. Water, solar elec)
 - Fiscal burden, deficit
 - Less funds for other social issues
 - **Crowding out of pvt investment (Bring pvt in)**
 - Inflation / price stability affected
 - Prevent distortion of market (Rather than demand-based, subsidy-based)
 - Envmt unsustainable items (eg. Paddy; Petrol, diesel)
 - Unbalanced use (eg. Urea)
 - Skewed cropping patterns (Rice, wheat MSP)
 - **WTO = Trade distorting subsidies (Amber Box, AMS)**
 - Timely info - MSP - Krisi Vigyan Kendras (NITI Aayog)
 - Focus on agric porductivity boost + farmers alt livelihood
 - Decentralizn (State-specific subsidies) v/s one size fits all
- Irrigation
 - **Micro-irrigation and precision-irrigation**
- Technology
 - Mechanization - efficiency, save labour etc
 - **Agriculture 4.0 = use of minimum quantities at specific areas**
 - Govt Examples
 - **Soil Health Card**
 - Agric research = **ICAR + KVKs (expert assistance etc)**
 - **Kisan Suvidha Mobile App** - info dissem; weather, market prices
 - **mKisan** Portal = advisories via SMS

- e-NAM = online trading; distress sale, prices etc
 - Kisan Choupal / e-Choupal
- Precision agriculture - drones
- Space tech : Agro-meteorology, Land-based Observations
- AI, ML etc - Plan better - Crop area estimation, classificn
- Price discovery - communnic facilities
- Fertilizer + Soil quality (eg. Soil Health Card)
- Pest and disease eradication
- Climate-resilience
- Crushing season artificial enhance
- Seeds improvement (eg. GM Seeds, HYVs)
- Weather forecast - timely decisions
- Envmt-friendly machines (eg. Happy Seeder)
- Sustainable, cheaper irrigation (Solar pumps)
- Affordability + Accessibility
- Overexploitation of groundwater + fertilizer misuse
- Electricity too much - Fossil fuels
- Harvesting technologies damage soil microbes
- User-friendly tech / interfaces (eg. Kiosks in rural areas)
 - Languages = regional also
- Cropping Patterns
 - Crop types
 - Foodgrains - Rice, wheat etc
 - Plantation - Coffee, Rubber, Tea
 - Horticulture
 - Cash Crops (Cotton, Sugarcane etc)
 - Farming Types
 - Subsistence = For own consumption
 - Rainfed
 - Integrated Farming = Animals + Farming
 - Agro-forestry
 - Monocropping
 - Mixed
 - Multicropping
 - Generic points / dimensions for any particular type
 - Cheap / expensive
 - Nutritious = Cost-effective
 - Can grow in poor soils / not

- Can grow in low rainfall / strict requirements
 - Easy and cheap to grow
 - Small and Marginal Farmers can grow it
 - Can be used in PDS / Food distribution schemes = End hunger and poverty
 - Non-perishable so transport and storage very easy
 - Low post-harvest losses
 - Can be grown in many states
 - Not require fertilizers = Promote Organic and ZBNF
 - Suitable growing season for most farmers
 - Labour-intensive / resource-intensive
 - Ensure Food Security
 - Export surplus = earn Forex
 - Can also be used as Fodder Crop for Animals
 - Food Processing can be done easily on these
 - Resilient to Climate Change
- Exports
 - Seasonal variation
 - Climate Vulnerability
 - Productivity
 - Soil quality
 - **Using Nano-silver to deal with microbial contamination**
 - Nutrient availability
 - Agricultural Labourers
 - Engaging women
 - Farmer income
 - Making agric more profitable
 - Subsidies, Transport, marketing, Storage (Cover and Plinth) etc dimensions
 - Fragmented Land holding / Economy of scale
 - Institutional / Formal credit (lack)
 - Agric practices like multi-cropping / monocropping / **Ratooning, Integrated Farming**
 - **Advanced practices like Direct Seeding of Rice, Trench Cultivation of Sugercane**
 - SFAC, FPOs
 - Food processing / value addition (eg. Biofortification)
 - Genetically Modified Crops (GM), FSSAI, GEAC
 - Technology Missions + Revolutions (Use as examples!)
 - National Horticulture Mission
 - National Mission on Oilseeds and Palm Oil
 - National Livestock Mission

- Pink Revolution – Meat and Poultry
- Round Revolution – Potato
- Silver Fiber Revolution – Cotton
- Silver Revolution – Egg/Poultry.
- White Revolution – Milk/Dairy (Operation Flood).
- Yellow Revolution – Oil Seeds
- **Evergreen Revolution – Overall development of Agriculture**
- Blue Revolution – Fish.
- Brown Revolution – Leather /Cocoa
- Golden Fibre Revolution – Jute
- GHG - Methane emissions from paddy and animal rearing
- Water-intensive crops like Sugarcane = Water vapour released
- Fertilizers and Pesticides etc = Soil and Water Pollution; Nitrogenous compounds = NO_x
- Burning of harvest residues etc = Air Pollution = CO₂ released
- Microclimatic variations
- Agric machinery = heavy electric use = fossil fuels
- **Shorter harvesting and crushing seasons / durations**
- Invasion by drought-tolerant species (new kinds of pests)
- Lowered water table
- Cotton Corporation of India powers increase (and others "on the lines of..")
- Promote more sustainable crops (eg. Govt mandated 100% packaging in Jute, to promote Jute and curb pollution)
- IARI Recommendations

Allied Sector (Animal Husbandry, Dairy etc)

- One of the largest in world
- More output / GDP contribution than foodgrains
- Potential not yet realized due to constraints (feeding etc)
- Livelihood of 2/3rd rural
- Low capital infusion / investment
- Alt source of income for many farmers + Insurance against crop failure
- Food Security (Nutrient-rich meat, eggs etc)
- Byproducts - Dung as manure; Hides and Skin; Fuel
- Animal labour - draught power; transport (bullcarts)
- Natural Capital + offsprings too
- Structural change : Non-food functions declining (eg. Labour/draught power -> mechanizn);
 - Importance incr for quality food

- Increase in consumption of animal-based food products due to economic growth; affordability more
 - But also veganism
 - Cultural value
- Per capita consumption milk, meat much lower than world
- **Export potential** = Global market for animal products expanding
- **Growth in livestock = 1.5 times food crops**
- Highly labour intensive = Jobs
- Distribution of livestock more equitable than land
 - Crucial for small farmers, poverty alleviation
 - Small farmers more opportunity for livestock
- **Envt - overgrazing; methane released by livestock**
- **Adjustment pressures due to global norms (eg. WTO AMS)**
- Productivity (incr / challenge) - Indian cattle < 1/2 global avg prod.
- Feeding, Breeding, Health & Mgmt Dimensions
 - **Feed and fodder scarcity - major issue**
 - **Reproductive health issues**
 - **Veterinary and Animal health services = public sector**
 - Diseased like FMD, Influenza = Monitoring + vaccines
 - Poor hygiene
 - **Animal Insurance** + mechanisms to protect against risk
- Livestock extension services
- Conserve genetic resources
- Cooperatives are very effective (eg. Fisheries)
- Impact on envmt (eg. Methane emissions due to livestock)
- Seasonal nature (eg. Fisheries)
- Clear roadmap for each type of animal
- Integrated Farming
- (Lack) ICT - Health + other services connect
- Access to markets; underdeveloped + inadequate; informal
- Slaughtering facilities / infra
- Private sector participation (eg. Health, mgmt)
- Policy and financial attention (lack/need) - even in agric credit
- **Rashtriya Gokul Mission**
- **National Livestock Mission**
- **National Prog for Bovine Breeding and Dairy Devlpt**
- Crossbreeding - indigenous + exotic = genetic potential
 - Done very limited scale

- **Artificial Insemination** - limited; **Germ Plasm quality + infra**
 - **Poor conception rate following AI**
- Livestock use agric residue and byproducts; negligible extra
 - Fodder only 5% cropped area
- Use Maize as fodder; increase its production
- **e-PashuHaat portal = breeders -farmers = bovine germplasm**
- **Gender equity = 3/4th labour in livestock = women**
- **Demand-driven, inclusive and pro-poor**

PDS, Farm Subsidies, Agric Transport, Storage, Marketing, Food Processing

- Objectives / Examples
 - **Basic Needs**
 - **Food Security**
 - **Accessibility**
 - **Affordability**
 - Self-sufficiency - for each village too; Augmenting production
 - NFSA 2013 = TPDS; 5 kg foodgrain; 3/2/1 Rice/wheat/coarse
 - Nutritional support to pregnant women 6 months
 - Antyodaya Anna Yojana (35kg)+ Annapurna Scheme (MoRD)
 - Shanta Kumar Committee / Abhijeet Sen Comm
 - Wadhwa Committee (Tech-based reforms)
 - Benefits of nutrition-related prog = Legal entitlements
- Foodgrains perspective
 - Utilization (Nutrition, **Balanced Diet**; SOFI/NFHS-5)
 - Foodgrains consumption (Declining = substitution by non-cereal like fruits)
 - Biofortification (eg. Iron-fortified rice, MuktoShri)
 - Diversifying to include non-cereal
- Exports (already Net exporter) = Forex; presently low exports
- **Price stability** via Open Market Procurement Operations
- Prevent exploitation / distress sale by farmers (Fall in price immediately after harvest)
- **Insulate the poor from inflation / price rise of essential commodities**
- Farmer Income Support
- Procurement by Govt
- Equitable food distribn
- Contract Farming
- Social Audits
- Registration of produce and branding
- Targeting/Identifying beneficiaries (By Gram Sabhas) = Reduce but target (Shanta Kumar Comm)

- Initially meant for all; TPDS 1997 = BPL, APL separate
- Inclusion-exclusion errors; can use **Aadhaar linkage (eg. AePDS)**
- Fake cards / misuse
- Poor should get benefits
- Corruption
 - Fair Price Shop owners often sell in open market
 - Fake Ration Cards
 - Administrative leakages food grains
 - Bribery/Nepotism in license of Fair Price Shop
 - Ppl often not given right amount at the shop
 - Good quality food replaced by cheaper
- **Food for work schemes = Use excess stock also**
- Universal PDS (eg. Tamil Nadu)
- Decentralize PDS
 - Greater role of Gram Panchayats + ground level
 - Involving NGOs, SHGs etc (And lack of consultn etc)
 - Storage decentralize
 - More role of states (But constraint - poor economic states)
- Coverage of poor popln (still low; need to increase)
- Grievance redressal (NFSA mentioned this)
- Food Security allowance to those who didn't receive on time
- Timely delivery + Efficiency
- Transparency and Accountability (Service)
- Use of ICT (eg. Arunachal e-PDS, Aadhar enabled PDS - Karnataka)
 - Wadhwa Committee recomm too
- Involve Pvt sector (eg. Procure + Storage) / lack of pvt sector role
- DBT to reduce middlemen/corruption (Eco Survey 2016-17)
- Capacity building + Training of implementing authorities
- Uniform MSP = Stop states' extra bonuses = distort system
- Fertilizer sector deregulate (presently regulated)
- Levy Rice practice can be abolished / it is a disincentive presently
- Integrated Mgmt of PDS (IMPDS) = Expand to all states
- Revamped PDS (RVPDS)
- Administrative / Functioning of PDS
 - FCI - More autonomy + flexibility
 - **Clear and Transparent liquidation policy for buffer stock**
 - Surplus stock = open market / export
 - States + Centre joint - Centre procures, stores etc; States distribute

- Fair price shops network
- Flow of info b/w FCI and States = warehouse, Mandi coordination etc
- One Nation One Ration Card = Portable PDS
- **Aadhaar linkage (eg. AePDS)** = inclusion-exclusion errors solve
- Transport
 - Post-harvest loss / minimization
 - Quick + timely + farmgate to market
 - Cheap = farmers get margin + affordable to consumers (& vice versa)
 - Aid / allow "Value realization"
 - Export competitiveness
 - Interaction among geographic and economic regions
 - Adequate + Quality + Capacity + Frequency of trucks
 - Cold refrigerators in trucks
 - Rail + Road networks (needed/constraint)
 - Seasonal route blocks / all weather
 - North East and Himalayas (broaden etc)
 - Use more rail (railway vision) + cheaper; Inland shipping
 - Investments - Dalwai Committee
 - Dedicated freight corridor for agro-products
 - Farmers get best returns / don't if poor transport
 - Agriculture supply / value chain = transport crucial
 - Kisan rail = multi-commodity train
 - Krishi Udan = air transport
 - Transport and Marketing Assistance (TMA) = for overseas
 - Kisan Rath mobile app = during lockdown
- Storage
 - FCI - depend on Central Warehouse Corp (CWC) and SWC
 - Types
 - Covered Storage = Jute
 - **Cover and Plinth (CAP) = damp-proof**
 - Silos - tall towers; Silo-bag technique
 - Warehouse capacity (insufficient)
 - Land allotment (by state govt) for warehouses
 - Unsuitable for long-term storage
 - Distribution of warehouses + coordination (States - FCI)
 - Often some warehouses empty while some overloaded
 - Quality - Cold Storage chain = Modernization
 - Bulk grain handling infrastructure

- Losses / Damage = Pests + Moisture = **Mycotoxins**
- **Negotiable Warehouse Receipt System (NWR)**
 - **Pvt sector role (there + enhance) = reduced costs**
- Essential Commodities Act = **stocking limits**
- Costs of storage very high; pest mgmt also expensive
- Huge stock - false abundance (quality, spoiled)
- Mismatch in procurement, requirement - CAG report 2000
- Lack of scientific storage practices (CAG 2013)
- Seepage of water from ground
- Early / non disposal of damaged stock
- **Proper estimation**
- Reduces consumers' free access to grains in open market
 - Prices in market rise = APL families
- Local / Decentralized Food banks v/s far away centralized
- Agric Infra Fund
- Village Storage Scheme - Budget 2020 = SHGs
- Farm Subsidies
 - CIP / MSP = Unsustainable; Distortion (envmt also - Paddy)
 - Consumer Subsidies borne by Central govt = fiscal burden
 - MSP - Monocrop strategy = envmt damage + groundwater
- Food Processing
 - Transformation; value addition
 - Commercial value
 - Very low in India + Low value addition
 - Supply Chain Mgmt
 - Traders, Middlemen (eg. APMC Act)
 - Asymmetric information (farmers not getting price signals etc)
 - Upstream and Downstream requirements (eg. wholesalers, consumers)
 - Quality of food
 - Taste, health benefits
 - Consumer choices / options + Standard of living
 - Food fortification (eg. Iron fortified anemia) -> Malnutrition
 - Preservations
 - Anti-bacterial etc (Health concerns)
 - Link b/w Agric / farmers and Economy / market
 - Employment intensive
 - Trade, Exports -> Foreign exchange
 - Migration of youth from farmers (eg. ARYA scheme)

- Food inflation (risks + prevent) eg. Frozen SAFAL peas available all-year
- Post-harvest mgmt
- Infra, cold storage (all points of Storage, Transporting, Marketing etc can be used)
- **Insurance products**
- **Unorganized (eg. Scheme for formalization of Micro Food Processing Enterprises)**
- High cost of packaging etc
- Expensive products -> Not much benefit to poor people
- Cultural (fresh food preferred in India)
- Modernization of manufacturers; small scale diffic
- Supermarkets emergence / role (eg. Reliance Fresh)
- Malpractices (Adulteration)
- Quality control and safety (eg. Cleanliness of food processing units)
- Startups and industry / private sector can play a role
- Skilling
- Agric Marketing
 - Vicinity v/s far away markets, geographic isolation
 - Transport from farm gate to market (eg. Kisan Rail, Mango rail)
 - Intermediaries / Middlemen (remove = direct sale eg. Rythu Bazaars)
 - **Market intelligence** = Information to farmers (lack/extend)
 - Demand in market
 - Price discovery + forecast fluctuations
 - Auction + price predictions
 - Branding of produce (registration etc)
 - Distress sale
 - Price volatility - risks (climate, weather)
 - Essential Commodities Act - hoarding etc
 - Fragmentation of agric market (APMC) = multiple licenses
 - e-NAM to integrate + digital
 - Collusion among traders - Adulteration + Hoarding
 - Mega Food Parks scheme
 - Agri Market Infra Fund (2000 crore) - NABARD
 - Grameen Agric Markets (GrAMs)
 - Single point of levy of market fees (not duplicate)
 - Single trading license (unified)
 - FPOs - bargaining power
 - Monopolies of big markets
 - PPP for markets

Land Reforms

- VAM
 - Kumarappa + 2nd FYP + NSS 1950s data
 - Operation Barga (WB) = Share-croppers as tenants
 - Japan, Korea Model = Land reforms leading to Faster, Sustainable Devlpt
- British systems = Ryotwari, Mahalwari, Permanent Systems
- Feudal character of agrarian economy; need of rapid agric growth; unproductive systems
- Social Justice and equity - Land to the tiller, distribn; better conditions
 - Tribals (FRA) not alienated from land; Inclusive growth
- Absentee land ownership; Landlordism; forced free labour; **Patron-client relnship**
- Abolition of Zamindari (parasitic intermediaries); Delays = illegal transfers done
- Land ceiling = too high; some states made act, some didn't; differed (uniformity dimension)
 - Exemptions; Benami transfers; **alleged infringe of constitutional guarantees (31A)**
= Land as property
- Tenancy Reforms (exploitation; high rent + tenure/eviction insecurity = unwritten leases)
 - Farmers Ownership (direct relation with state) = incentive for long-term investments
- Legal issues with land leasing - frequent litigation; many states have banned
- Non-farm jobs, allied sectors etc; Migration (ARYA etc; Feminizn)
- Safeguards needed (Lease, Land rights, eviction, rent)
- Delays (land record recognition)
- Loopholes (eg. Exemptions, criteria, delays; Sharecropper v/s tenant rights distinction)
- Protests by public often prevent progressive change
- Complexity, Multiplicity, non-uniformity of land laws
- Pending cases; Use democratic framework / ADR
- Compensation to tenants etc when evicted
- Beneficiary targeting (often rich farmers)
 - Green revoln; inequitable + Sustainability dimension
- Cooperatives role + SHGs (Microfinance)
- Contract Farming, Capitalistic farming; Progressive revenue models
- Inefficient utilizn of land = barren, uncultivated
- Inequitable / Land redistribution (86% SMFs); 1.06 Ha; Popln pressure
 - Emotional attachment to ancestral land (farmers); inferior land given to state
- Cumbersome process + Corruption; lobbying by big farmers
- Land pooling and collectivization = Allow mechaniz + economic / efficient; But resource use efficiency = Small farms better and more employment
- Agric income untaxed; Subsidies; Scope for law evasion; Conflict with inheritance laws

- **Group titles (eg. for women's groups / SHGs)**
- **Land Acquisition by States; redistribute, compensate etc**
 - **Attracting Pvt investments - state can help + business envmt**
 - Increased cost; complex laws; Political; farmers may not benefit
 - Loss of livelihood; Spiritual view of land; malpractices
- **Common Property Resources and Govt Wastelands** utilize = give to poor
- **NGOs, SHGs involve**
- **Ownership holding (single household) v/s Operational Holding**
- **Failure of reforms = Naxalism**
- Innovative measures = Land Area Certific (LAC) = Organic
- **Women rights over land (Draft Land Reforms Policy + 12th FYP)**
- **Institutional Finance (Land devlpt banks eg. SCDARBs, PACs)**
 - Working + fixed capital; moneylenders
- Land records less (SWAMITVA); "Patta"; up-to-date
- Land records non-digitized (Bhoomi portal Karnataka); Computerization needed
- **Land Acquisition (Article 31)**
- Bhoodan Movt, Gramdan; Jan Satyagraha
- Strong opposition to reforms - strong / monopoly of rich farmers / landowners
- **Land reforms = State subject**; Planning Commission etc challenges; Cooperative Fed
- **NSS data of 1950s (use anywhere) = Inadequate; delayed; not usable in policy**

Agriculture Examples

- Urban and Peri-urban agriculture (UPA)
- Agri-tourism
- Feminization of Agriculture
- Priority Sector Lending
- Koronivia Joint Work on Agriculture (UNFCCC) = Food security
- Direct Seeded rice, System of Rice intensification
- 2023 - International year of Millets (UNGA)
- Saffron Bowl Project (DST)
- Seed Vault (Chang La)
- Biofloc technology (Aquaculture)
- Hydroponics, Aeroponics
- Nano-urea (IFFCO)
- Aerial seeding / cloud seeding
- One Nation One Fertilizer (branding)
- DMH11 (GM Mustard)
- Purple Revolution (Lavender)

- PM Formalization of Micro Food Processing Enterprises
- PM Fasal Bima Yojana
- PM KISAN (Income support / DBT)
- Bharat Tap (Water conservation)
- PM KUSUM
- ZBNF, Organic Farming (PM PRANAM)
- Agric Accelerator Fund = Agri-startups
 - Agri-preneurs
 - ARYA (Attracting Rural Youth to Agric)
- Millets (Shri Anna)
 - Indian Institute of Millet Research, Hyderabad
- PM PRANAM (Natural fertilizers)
- Horticulture -> Atmanirbhar Clean Plant Program
- PM Matsya Sampada Yojana
- Bio-Input Resource Centres (Agric tech)
- Primary Agric Credit Societies (PACS)
- PLFS : 45% population in agriculture
- Indian Agric Reserach Institute (IARI)
- MSP backing = possible violation of AoA of WTO
- Indian Farmers Fertilizer Cooperative (IFFCO)

Land

- SVAMITVA Scheme
- Digital India Land Records Modernization Programme (DILRMP)
- ULPIN (Unique Land Parcel Identification Number)

S&T Examples

- Semiconductor Mission - since dependent on China, Japan etc
- PLI, DLI, Semiconductor devlpt program
- Electronics Cluster
- Drone use (generic)
- New and Emerging Strategic Technologies (NEST) division inside MEA
- 'Techade' = Decade of Technology
- 4th Industrial Revolution (AI, Data analytics etc)
- El Salvador Bitcoin legal tender
- Bahamas Digital Currency in 2020
- Space - UK called for "**Astro Carta**" for space sustainability

- Kessler Syndrome
- SSA - Situational Space Awareness
- ISRO - Project NETRO
- India-France Joint Vision for Space Cooperation
- India-France world's largest Nuclear park in Jaitpur Maharashtra
- BharatNet (PPP mode) = Rural Internet Connectivity Project (ALL 6 lakh villages)
- Vigyan Jyoti Prog (Women in STEM)
- Space
 - Aditya L1 (Sun)
 - NISAR (NASA + ISRO)
 - Devasthal Optical Telescope
 - Project NETRA (debris)
 - Dark Sky Reserve (Ladakh)
 - ISRO launched Amazonia, Singaporean satellite
- Biotech
 - Stem cells
 - e-DNA
 - Wolbuchia technology - dengue
 - Biofloc technology
 - Bioplastics
- ICT
 - 3 centers of excellence for AI
 - India Stack (APIs)
 - Perovskite solar cells
 - Sand batteries
 - PM WANI (internet)
 - NFTs
 - Global Partnership on AI
 - Software as a Service (SaaS)
 - Trojans, WannaCry
 - Design Linked Incentive Scheme
- Energy
 - ITER
 - Criticality reached (Nuclear Fusion)
 - Battery Swapping
 - FAME
 - Shoonya Campaign (EVs)

Micronotes (GS3 - Disaster Mgmt)

Disaster Management

- India Situation (Facts / VAM)
 - 60% drought prone; 60% seismic zone III, IV, V (earthquake max casualties)
 - Himalaya = active tectonic; earthquake + landslide, avalanches
 - Himalayan rivers in youth stage = change of course (deposits) = floods
 - 7500k coastline = cyclone (eg. Nisarg, Amphan) + tsunami; Western disturbances
 - Leeward side of Ghats = low rainfall by SW monsoon = droughts
 - High variability of rainfall = difficult to plan
 - Latitudinal expanse = Both heat + cold waves (Siberian plateau)
- Disaster Causes and related points
 - Sudden, serious, widespread; Exceeds capability to cope
 - Natural Hazard + Vulnerability = Disaster
 - Emergence of new threats = Locust attack, Medicanes
 - Magnitude, Frequency, Spatial and Temporal distribution / Pattern of disaster (eg. Arabian Sea heating)
 - Slow onset / rapid onset; Creeping emergencies like desertification
 - Natural causes (tectonics, monsoon etc)
 - Change in river courses (flood)
 - Heavy rainfall; melting of glaciers etc
 - Tectonics
 - Volcanic eruptions (eg. Tsunami, earthquake)
 - Temperature changes, global warming; Sea Surface temp
 - Anthropogenic
 - Land-use change (urbanizn; coastal devlpt; deforestn; dams)
 - Popln pressure = water crisis etc, pressure;
 - Unsustainable agric - overuse groundwater + fertilizers = pollution; monocropping
 - Poverty = vulnerability (no pucca houses)
 - Slums etc - disease outbreak; unhygienic
 - Awareness lack + ignorance (eg. not following protocols)
 - Poor city design (eg. drainage systems = urban floods)
 - Technological failures (eg. Industrial fires, Short circuits)
 - Sociological Disasters (riots, stampedes, wars)
- Disaster Specific Points
 - Earthquake

- Tectonics; can't predict; most devastating; eg. Koyna; Killari; Bhuj, Gujarat
- Seismic Zoning Map - Zone 2,3,4,5; Seismological Centres = dissemination
- Intersection of tectonic plates
- Active faults (eg. Main Himalayan Thrust Fault MHT)
- Movmt of Arabian plate + Aus plate
- Tsunami
 - Harbour waves; sudden displacement of water by earthquakes etc
 - Kerala 2004 = 300,000 casualties; 2007 - early warning saved the day
 - Coastal regulation zones; Inundation areas
 - Steering water = angled walls + porous dikes; Blocking = Hardened terraces
 - INCOIS; ICZMP; international tsunami warning system
- **Consequences; Tangible and Intangible vulnerabilities**
 - Loss of property, lives, communication networks etc
 - Poor and underprivileged are worst hit
 - Damage to infra (eg. Bridges, dams) which can later be further damage
 - Ancillary (eg. Earthquakes = change in river course; Floods = electrocution)
 - Chain effects (eg. Earthquakes + aftershocks / tremors)
 - Fountains of muds (eg. earthquakes) = crop failure
 - Scientific progress done but still huge damage, losses; frequency increased
 - Agricultural Losses Crops, livestock etc = Food security; water supply / essential services affected
 - Indirect impacts = Damage to irrigation canals etc
 - Vulnerable sections are hit more adversely
 - **Social cohesion loss possible; Community structures, cultural artifacts**
 - Psychological trauma (hence, counselling)
 - Interruption of day to day life (eg. Children's education)
 - Increased risk (eg. Earthquakes can weaken structures which may collapse later)
 - Assymetric damage
 - Can eat away long-term gains of economic development
 - Forced Relocation and Resettlement of many people
- Disaster Preparedness Dimensions (Way Forward / Lacunae / Challenges etc)
 - Standard Operating Procedures (SoPs) (eg. Evacuation plans); not ad-hoc
 - Specific plans for each disaster / situation
 - Community-level preparedness = First responders
 - Coordination framework (Centre, state, local; B/w 2 states etc)
 - International Collaboration (eg. CDRI, BBBW of G7)
 - Capacity building of personnel as well as people
 - Early warning systems (use of ICT - AI) = Accurate modelling (eg. O-SMART)

- Automatic alerts to reduce time delay
 - Hazard analysis + Vulnerability mapping (eg. High flood prone areas)
 - Vulnerability Atlas (BMTPC) update and enlarge scope
 - **Inventory of assets + estimation of potential damage / harm / losses**
 - Disaster training in schools curriculum
 - Mock drills (eg. Delhi earthquake mega drill 2012)
 - **Disaster Insurance**
 - **Disaster resilient Infra - Retrofitting of old buildings; Build back better**
 - Bureau of Indian Standards = Safe construction : codes/guidelines
 - Analyze soil type before construction
 - Risk transfer instruments = Insurance
 - Awareness = radio, television ads etc
 - Indigenous methods (eg. Andaman tribes - floods)
 - **Focus on Disaster Risk Reduction rather than Mgmt**
 - NDRF batallions - need of quicker response; Mobile groups at diff locations
 - NDMA, State DMA cooperation (eg. DDMA-NDMA earthquake exercise)
 - Bioshelters etc
 - Emergency Medical (Pre-hospital) care (absent / primitive / inadeq / improve)
 - eg. Mobile Field Hospitals and Mobile Surgical Teams
 - Infrastructure of hospitals / local level
 - Trauma care + Govt-aided rehab (jobs, normal life) (eg. Apex Trauma Centre at AIIMS)
 - WHO guidelines (Look + listen + Link)
 - Mental Health (eg. NIMHANS can play role)
 - Building codes
 - Construction material
 - Rapid urbanization
 - Nature of settlements in vulnerable areas
 - Awareness of seismic / other risk
 - Cooperative Federalism (Health is a state subject) (eg. Lockdowns by Epidemics Act led to friction)
 - **Residual Risks** - which are neither prevented nor reduced
 - **Islands** should have own coping capacities (diffic to reach quick)
 - **Civil Engineers, Architects;** Trained personnel - masons etc
 - **Structural safety audits of infrastructure and villages, esp prone areas like CRZ**
- Misc General Points
 - Clear Definition (eg. Heatwaves for plains, hills has clear criteria)
 - Recognition (eg. Emerging threats like Locust)

- Paradigm Shift = From relief centric (reactive) to proactive = preparedness, prevention, mitigation
- **For Sustainable Devlpt, disaster mitigation has to be built into devlpt process**
- **Multi-Hazard approach : Not view them in isolation;** eg. Cyclones, Earthquakes cause floods
 - Not compartmental but integrated preparedness
- Relief, response, rehab etc = State List; Centre-state coordin imp
- "Disaster" not there in any list = Add it
- Last mile-connectivity = reaching even the remotest villages
- Role of NGOs + trauma etc also; delivering medicines, food supplies
 - Rehabilitation of victims
- Communication = Social media / radio / alerts; Install emergency Radio over IP etc
- All stakeholders (Public, local administration, civil society)
 - Fix accountability on adminis for avoidable losses
- Education in DM since school; colleges compulsory
- Identify Vulnerable communities / regions - Awareness + close monitoring
- Common Service Centres for info dissemination even in local languages
- Local level also have Disaster Mitigation Funds at all times
- CSR funds earmark portion to disaster resilience
- New Funding mechanisms (Risk transfer, insurance, risk sharing) eg. Catastrophe Bonds
- Micro and Macro Disaster Impact Analysis for better response / learning
- Detailed Risk assessment / not being done / not capable (this for above also)
- Cadre of Disaster Mgmt officials in each state
- NDRF strength + funding + training + coordination etc
- Impending disasters - Deploy NDRF beforehand / start taking measures
- Central Relief Commissioner empower + support staff / weak office
- National Institute of Disaster Mgmt conduct collab courses with colleges / online module
- Decentralized / bottom-up approach
- Minimize delays / red tapism
- Traditional methods (eg. Andaman tribals survive tsunamis easily)
- Social capital (eg. In Leh, everyone collaborated to rebuild)
- Unpredictability v/s Predictable
- Mass media
 - Journalists - interrupt working of personnel / cooperate
 - Sensitizn of public
 - Awareness

- Funds mobilization
- Helping families connect
- Quick dissemination of govt advisories etc
- eg. Cyclone of Odisha - quick communication saved the day
- Institutional support of Ministry of Science and Tech
- Professionalize DM / lack of priority given to it
- District DM plan
- Route planning - how to evacuate
- Inter-agency coordination (eg. Uttrakhand cloud burst there were lack)
- Compliance of policies (weak/make stricter) eg. Coastal Regulation Zone rules of construction
- Specific targets (not yet in NDMP)
- Research (eg. Anticipate Earthquake via animals' response)
- Technology
 - Geospatial - prone areas identify (GIS / Remote sensing)
 - **Bathymetry for Tsunami Modelling**
 - Route planning - how to evacuate
 - Forecast / early warning
 - Rescue operations = Thermal Sensors and Heartbeat Detectors
 - Digital technology / internet penetration
 - Satellite imagery (rescue operations, prone areas, evacuation routes etc)
 - Artificial intelligence to analyze patterns
 - IoT for quick alerts
 - Radar sensing
 - Big Data for vulnerability mapping
 - Digital Elevation Models
- Disaster-proof / resilient cities (AMRUT) - City planning incl DM
- Awareness
- Crowdsourcing (funds)
- Human losses reduced but economic losses high
- Low frequency high impact events
- Better identification and reporting of disasters
- Hazard-specific guidelines and response / lack / capabilities limited
- Short-term and long-term plans
- Involvement of Women in local rural areas
- Dynamic nature (emerging disasters like Sound Pollution, Light pollution, Forest fires)
- Knowledge sharing (across countries and agencies, states)
- Best practices sharing (eg. at CDRI)

- Incorporate DM and DRR in all govt schemes, eg. MGNREGA durable assets in accordance with DM
- **Safety Audits (eg. Fire safety audits in hospitals)**
- Red Alert Systems for high priority districts
- Fire and Rescue Services enhance
- Compensation to families (eg. Coal Mine collapse in Telangana, families given relief)

Disaster Mgmt Examples

- Arabian Sea - Cyclone hotbed
- Lightning (disaster) - most
- Dam Safety Act 2021
- AMOC weakening (due to Global warming) -> Cold europe
- Urban Heat Island effect (GW)
- B3W (G7)
- CDRI
- Blue Dot Network
- Cyclone Asani, Biparjoy - live trackers
- Bomb Cyclones
- Cloudburst (Chamoli)
- Medicanes
- Locust
- Derecho (Windstorm)
- Twin tropical cyclones (Asani & Karim)
- Atmospheric River (Pineapple Express)
- Doomsday glacier (Thwaites)
- Joshimath Land Subsidence
- Dam Safety Act 2021
- Industrial Disasters - Indian Explosive Substances Act
- Doppler Weather radars for early warning system / surveillance
- SST 1 degree rise in Indian Ocean
- Coral Reefs
- Small-scale ones like Building Collapse, Residential fires, Vehicle accidents
- Road Accidents - Lancet Study; SDG 3.6 Road accidents
- Fire Safety Audit (esp in Hospitals etc)

Micronotes (GS3 - Security)

Security

- Specific Points / Examples
 - Border Areas
 - Border Area Devlpt Prog (BADP)
 - Comprehensive Integrated Border Mgmt System (CIBMS)
 - Integrated Check Posts
 - **Madhukar Gupta Committee** on Border Protection
 - LWE
 - Red Corridor
 - Sukma / Dantewada attacks
 - SAMADHAN Formula
 - ROSHNI Training Scheme for LWE affected districts
 - Burkapal Case - Rights of tribals in LWE areas
 - Cybercrime
 - IT Act + National Cyber Security Policy 2013
 - Types
 - Ransomware eg. WannaCry, Petya
 - Cyber systems vulnerability (eg. Log4j Shell)
 - 0 day vulnerability
 - Zero click attacks
 - Side Channel Attacks (SCA) - IoT
 - Cyber Espionage
 - Organizations
 - CERT-IN + NCIIPC + NCCC
 - **Cyber Surakshit Bharat Initiative**
 - **Budapest Convention**
 - Terrorism and Organized Crime
 - UNOCT (UN Office Counter Terrorism)
 - Hawala Transactions
 - FICN (Fake Indian Currency Notes)
 - FATF (40 + 9) + Vienna Convention = Money Laundering
 - Enforcement Directorate (ED) + PMLA 2002
 - Golden Crescent + Golden Triangle
 - New Organized Crimes
 - Digital assets stealing (eg. NFTs, Digital Art)

- Crpytojacking
- Urban Naxals, incite violence
- Radicalization (eg. ISIS)
- Contract Billing
- Indian System / Initiatives
 - NATGRID
 - CCTNS
 - Cert-In
 - SAMADHAN formula
 - NCRB for data
- Causes of Issues
 - Feeling of neglect by govt
 - **Trust deficit**
 - Lack of devlpt / Focus on devlpt / Equitable
 - Specific issues like Land Reforms (eg. Naxalism)
 - Unemployment + Frustration
 - Non state actors + influence
 - Cross-border crime (eg. Golden Crescent drugs -> other crimes associated)
 - Organized crime (eg. Sand smuggling -> Mafia)
 - Security-public interactions, often hostile; need cooperation for info/intel; report suspicious activities
 - Media - aggravate issues / non-sensitive (sensationalism)
 - Excessive army deployment = Mistrust, hostility, morality of soliders, etc
 - Alienation of local population / interference in culture
 - Propaganda (eg. Govt shown in negative light), indoctrination
 - Suspicion
 - Legislation / Policy weakness
 - No National Strategic Doctrine
 - Due importance not given yet to Security Mgmt
 - Terrorist acts (like UAPA, TADA) had weaknesses such as possible misuse
 - Weak police / crime fighting system (Understaffing, untrained, lack of tech etc -> Modernize)
 - **Prakash Singh guidelines**; Better working hours, benefits, salary, Public support.
 - Technologically behind the perpetrators (eg. State sponsored terrorism)
 - Weak intelligence / coordination system (Intra-agency; eg. MAC, NATGRID)
 - Lack of specific policies for each issue
 - Centre-state issues (eg. CBI consent; NIA concurrent issues)

- Army diversion / already busy
- Lack of public support (eg. Police viewed as a brutal, anti-public agency)
- No central anti-terrorism agency (eg. NCTC proposed)
- Synergy b/w Legal, Law enforcement, Judicial agencies
- Budgetary allocation for armed forces etc
- Lack of data
- Anonymity (eg. in cybercrimes)
- Inadequacy of Law enforcement agencies
- Lack of trained personnel
- Lack of feeling included in governance / administration
- Illegal Migration
- Threats / Issues
 - Insurgent groups; obstruct working of devlpt projects
 - Undermine legitimacy of govt
 - Diversion of resources
 - Economy affected
 - Volatile / Unstable currency
 - Trade, business impeded
 - **Ease of Doing Business reduced (Investors don't prefer volatile regions)**
 - **FDI**
 - Volatility of **stock** market
 - Damage to property, infrastructure -> affects growth
 - Disrupts Society's normal functioning
 - Mistrust / Disharmony / Lack of peace
 - Youth lured into such acts; their lives affected (eg. Drug trafficking, LWE -> Unproductive)
 - Waste of demographic dividend
 - Law and Order issues
 - People do not feel safe (eg. Naxal areas, Border areas)
 - Hampers social, digital and financial inclusion of people in violence-inflicted areas
 - Alienate masses + indoctrination
 - Hampers governance
 - International image
 - Reduced investors / relations
 - Violation of ppl's Fundamental and Human rights (eg. Safe society)
 - Interrelation with other crimes and security issues
 - Smuggling, Black Money
 - Resentment against government

- Way Forward for Security Threats (Apart from Converse of Causes)
 - Economic growth and development
 - Address the issues
 - Good, inclusive governance
 - Devlpt (eg. Special Infra Schemes)
 - Infrastructure (eg. Road connectivity schemes)
 - Jobs in India -> Make in India, MSME initiatives
 - **Perception Mgmt (counter-narratives)**
 - Special Protection Group (SPG) to protect important persons
 - Social Security (Educ, Health)
 - Engaging with them / Peace talks (eg. Tripartite Accord)
 - Surrender + Rehab schemes (eg. Naxal Surrendur-cum-Rehabilitation policy)
 - Govt schemes
 - Specialized force for specific purposes
 - Media utilize for sensitize; harmony
 - Regional coordination (eg. SAARC, BBIN) -> Info sharing, bank account blocking / transactions
 - Global stance (eg. Comprehensive Convention on Counter Terrorism at UN) -> Common **definitions** etc
 - Community Policing / Surveillance (**eg. Home and Hearth Units of Arunachal**)
 - Robust policy
 - Information dissemination
 - Unified Intelligence / Data Centre / Reservoir
 - **Standard Operating Procedures (SoPs)**
 - Emergency Measures
 - Capacity building of security agencies as well as public (eg. Lessons in school regarding reporting suspicious activities)
 - Monitoring (eg. AI, RADAR, Satellite data)
 - New setups like **Integrated Theatre Command**
 - Use of technology (eg. UAVs for monitoring; AI, Big Data)
 - Recognition of areas with issues
 - Awareness (eg. Cyber space not to trust ppl)
 - Collaborative mechanisms to act quickly
 - Funds earmarked towards ..
 - Appoint Chief Information Security officer in major organizations associated
 - Modernize security personnel + armed forces, agencies
 - Deploy troops in vulnerable areas like LWE affected (eg. Greyhound Police in Andhra for LWE)

- Favourable surrender policies (eg. Surrender-cum-rehab policy for LWE)
- Education / Literacy (eg. ROSHNI scheme for LWE)
- Winning hearts of people not just forcing
 - Peace talks, consultative
- People - to - people interactions increase across states, to avoid alienation feeling
- Human Rights prioritize
- De-radicalize youth
- Data + Centralized database
- Robust Policy on ..
- Technological upgrade (eg. to acquaint with Dark Web)
- **'Heart as a weapon' Doctrine**
- **National Security Doctrine**
- Security Agencies, Personnel
 - Army / Police
 - **Ribeiro Committee, Malimath Committee, Prakash Singh judgement**
 - Mental Health / Frustration (eg. CRPF constable open fired)
 - Psychological aid, trauma care
 - Good working conditions needed
 - Other skill training
 - Theatre Commands
 - Quick Response Teams (QRTs) should be ready
 - Sensitize
 - Tenures fix
 - Separate investigation and law and order functions of Police (Prakash Singh)
 - ICT, Modernization
 - Training quality
 - Over-deployment = Ill-will / distrust
 - Mistreated by people
 - Promotion / career opportunities
 - Budgetary allocation (eg. for CAPF)
 - Misc
 - Mission-based deployments (eg. in IOR Ships)
 - Navies need reach and sustenance
 - Collaboration (eg. India-US Defence Tech and Trade Initiative DTTI)
- Misc
 - Changing nature of challenges
 - Evolving threats (eg. AI)
 - Legal aspects (eg. UAPA, TADA)

- Human rights concerns (eg. Preventive detention strict)
- Global image (eg. Harsh laws criticized)
- International obligations (eg. UNHRC)
- Policy shifts
- Political consensus
- Community engagement
- Judicial reforms
- Infrastructure
- Physical measures (eg. Smart fencing)
- Digital interventions (eg. CCTV)
- ICT (eg. AI / ML -> patterns)
- Interdisciplinary approach (eg. Banking - terror financing)
- Predictive Policing (eg. Broken window theory)
- Reactive approach -> Proactive
- Holistic response
- Decision-making
- Underutilization of technology, personnel
- Expertise
- Terrain / topography
- Climate difficult

Defence

- Self-reliance (eg. Make in India)
- Manufacturing (eg. Positive indigenization List)
- Cluster-based approach (eg. Ordnance factory Khamaria)
- Technological transfer
- Collaborations
- Security ensure
- Spying concerns
- Reliability
- No delays
- Export potential
- Save forex
- Employment creation
- Strategic importance
- Net Security provider (eg. SAGAR)
- Technological advancement
- R&D

- Capital infusion / budgetary allocation
- Diversify (eg. Combat vehicles, LCA Tejas)
- Defence organizations (eg. DRDO) - more
- Defence Procurement Procedure (DPP)
- Policies (eg. Offset policy)
- Strategic Partnership models
- PPP
- Innovation
- Favourable ecosystem
- Technological gaps
- Complicated procedures
- Funding
- Skill devlpt
- Capacity building
- Regulatory hurdles

Security Examples

- Agnipath Scheme
- Positive Indigenization List
- LWE - Dantewada + Sukma districts
- Burkapal Case - Rights of Tribal population in LWE areas
- Blue Dot Network
- Colombo Security Conclave, GMC
- Regional Security Dialogue
- Goa Maritime Conclave
- Vibrant Villages Programme
- Border Area Devlpt Prog
- PM DevINE (North East)
- Army / AFSPA = Jeevan Reddy Committee, JS Verma Committee, 2nd ARC
- India-Myanmar : 16 km FREE MOVEMENT ZONE
- Sweden's 'Terrorist Offenses Act'
- Joint Coastal Radar Surveillance Systems = IOR = Maritime
- EEZ Surveillance
- Fusion Centre IFC-IOR in Gurugram
- Narco-terrorism
- Mission Based Deployments in IOR (Ships)