

# **CURRENT AFFAIRS FOR MAINS 2022**

**[Part 2]**



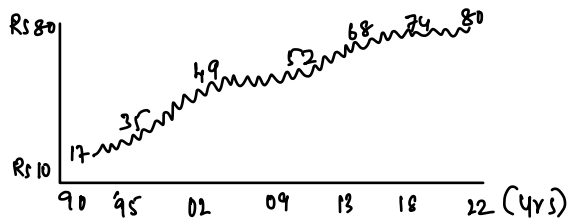
## DEPRECIATION OF RUPEE



→ Rupee breached Rs 80 for 1 us dollar for the first time in July 2022



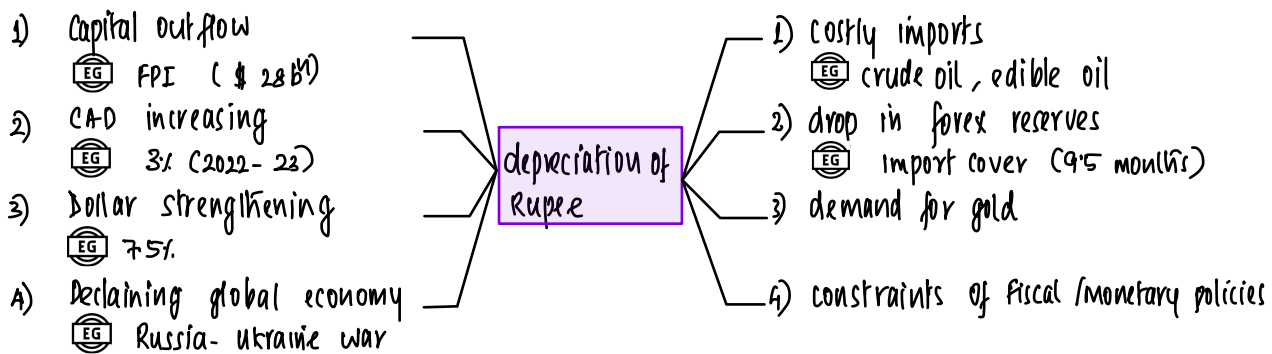
### TRENDS



### EXCHANGE RATE

- NO of Rupees required to buy 1 dollar
- Depreciation - decreasing value of Rupee vis-a-vis dollar
- Appreciation - increasing value of Rupee vis-a-vis dollar
- REER - Real Effective Exchange Rate
  - ↳ weighted avg value in relation to a basket of currencies of its major trading partners

### # IMPACT



### Positive Impact on export

↳ theoretically benefits exports → but it depends on global economic outlook



### STEPS TAKEN

- 1) measures by the RBI
- 2) Trade settlement in Rupee
- 3) EG India-Russia trade
- 4) Norms relaxation on NRE Accounts
- 5) Hiked duty on Gold

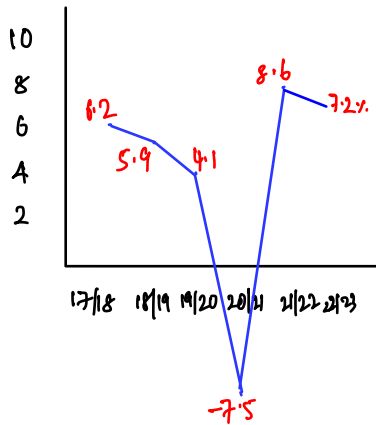
## \$5 TRILLION ECONOMY

Centre & States should work together as 'team India' to make India a \$5 trillion economy' - PM

"India must spend \$1.4 trillion to be a \$5 trillion economy by 2024-25  
→ Economic Survey 2021-22.

### STATUS OF THE ECONOMY - DATA

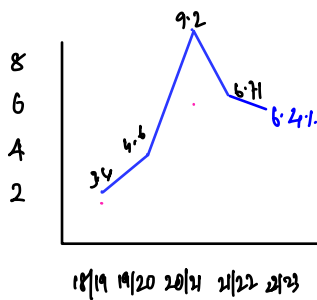
- presently \$3.3 trillion economy
- GDP growth rate



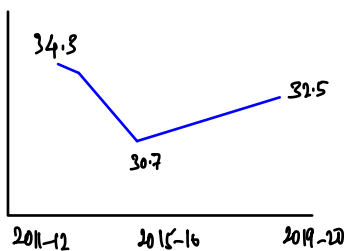
RBI - GDP growth estimate at 7.2% (2022-23)

### DEFICIT

#### FISCAL DEFICIT

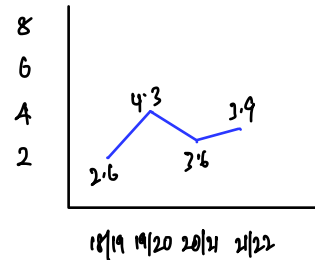


### INVESTMENT

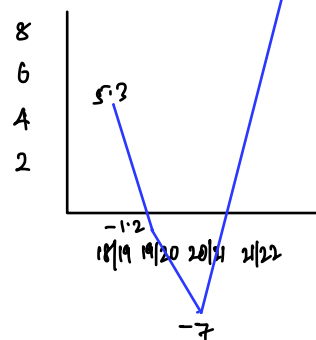


### SECTORS

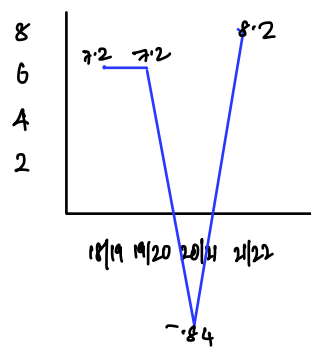
#### AGRICULTURE



#### MANUFACTURING



#### SERVICE



- 7) Inflation
  - 8) currency
  - 9) CAD
- discussed separately

**CONTRIBUTING FACTORS**

- 1) ECONOMIC
  - ↳ economic revival
  - ↳ Centre govt measures
    - ↳ increase in capex (Budget)
    - ↳ PLI, Disinvestment targets
    - ↳ GST reforms
  - ↳ RBI steps
    - ↳ monetary policy - tightening
    - ↳ trade in Rupees
- 2) POLITICAL
  - ↳ political stability & effective leadership
  - ↳ energy from Russia
- 3) SOCIAL
  - ↳ demographic dividend
- 4) TECHNOLOGICAL
  - ↳ JIG economy
  - ↳ 4th industrial revolution
  - ↳ GCC
  - ↳ start up ecosystem
- 5) GLOBAL
  - ↳ china +1 strategy
  - ↳ friend shoring IPEF

**STRATEGY**

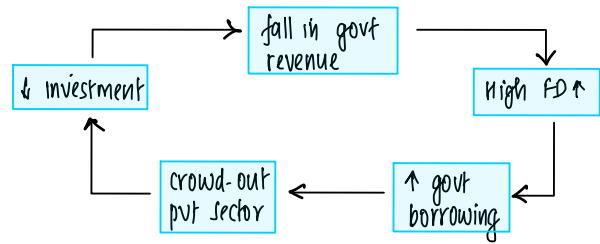
- Barbell strategy (Economic Survey)
- Budget priority areas

**PRIORITIES**

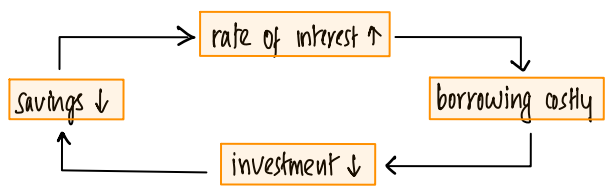
1. PM Gati Shakti
2. Inclusive Dpt
3. Productivity enhancement & investment, sunrise opportunities energy transition & climate action
4. Financing investments

**CONCERNS - 5 vicious cycle**

1) Fiscal



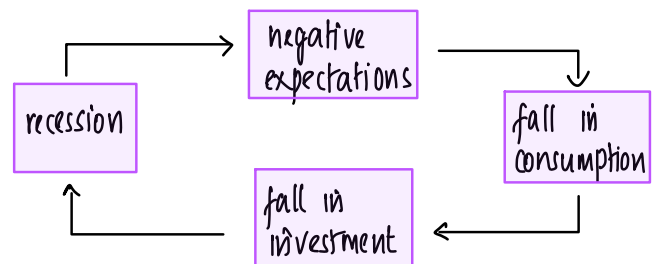
2) Financial



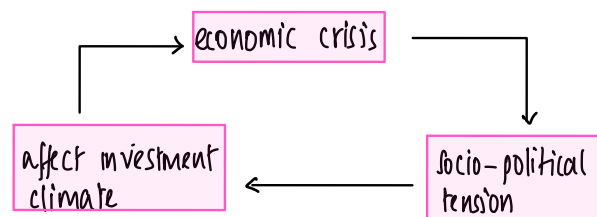
3) Wage



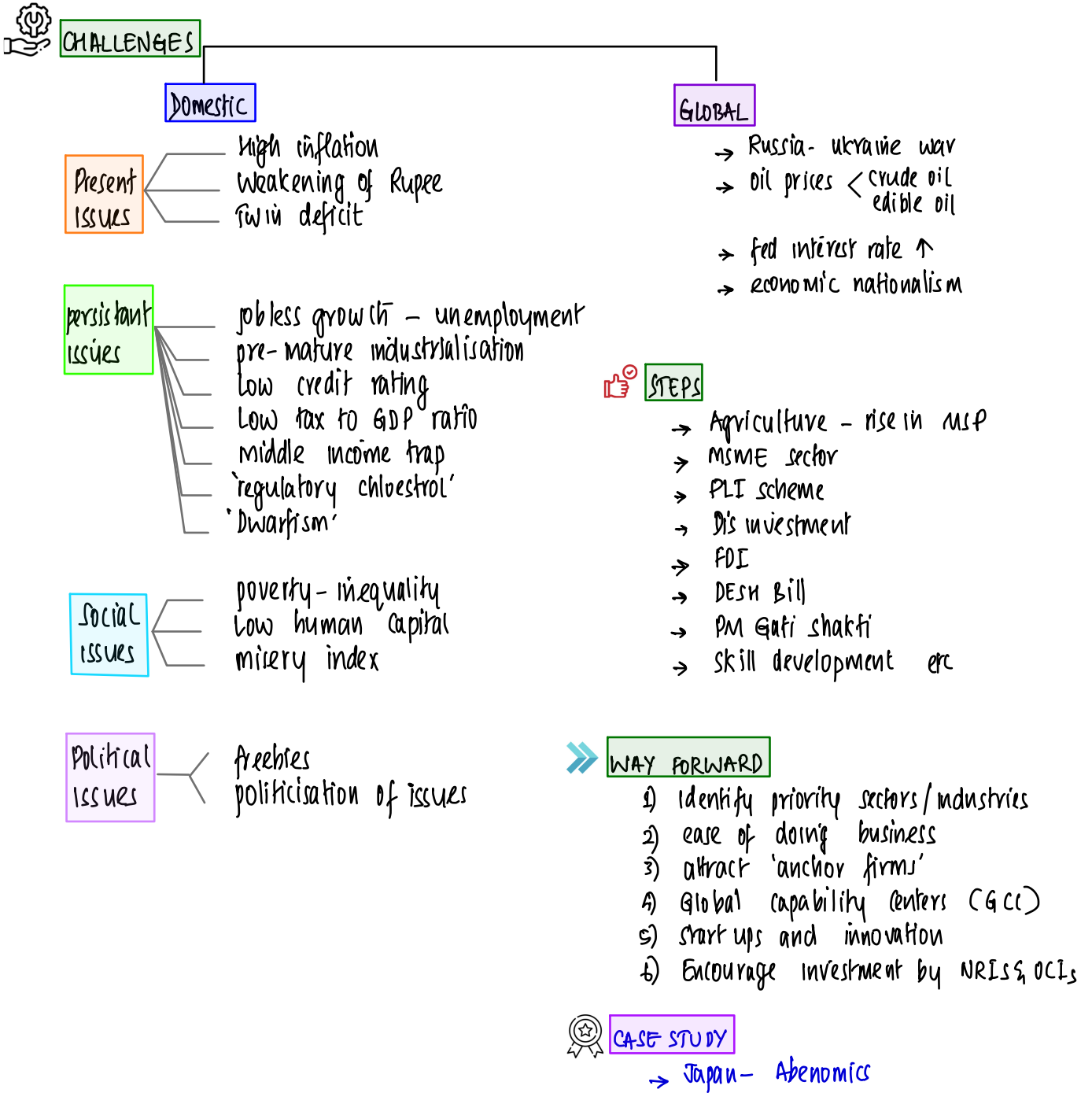
4) Psychological



5) Socio-political







## GENDER BUDGETING



→ NITI Aayog recommended 'Gender Budgeting Act'

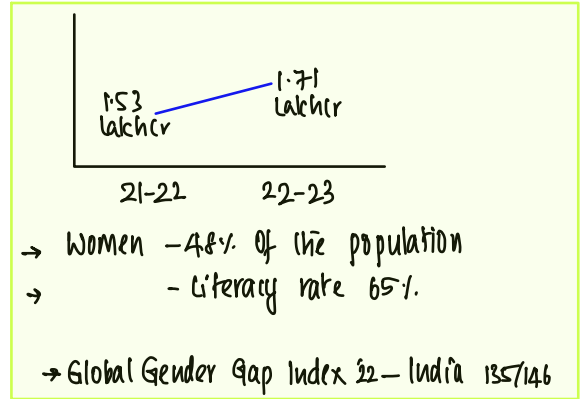
### CONSTITUTION

Article 14, 15, 16, 39

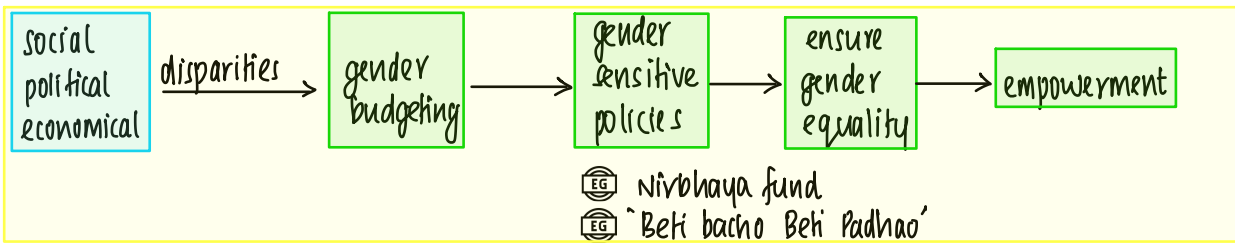
### GENDER BUDGETING

- financing for gender equality
- includes gender sensitive formulation of legislations, resource allocation, implementation and impact assessment

### DATA



### IMPORTANCE

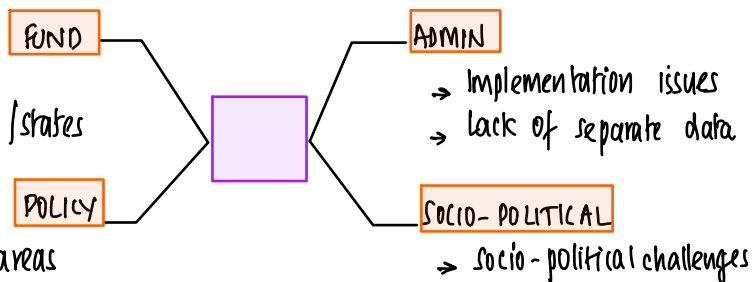


### KEY AREAS

- 1) Education & skills development
- 2) Economic participation
- 3) Leadership & democratic participation
- 4) gender based violence & access to justice
- 5) poverty reduction, health & well being

### # CHALLENGES

- inadequate allocation
- non-allocation by ministries/states
- non-utilisation of funds
- exclusion of many areas
- no prioritisation



### NITI AAYOG - DMED SUGGESTIONS

- 1) Mainstreaming GB
- 2) more fund allocation
- 3) finalise 'National Policy for women'
- 4) Improve social acceptance of transgenders
- 5) Gender disaggregated data

### GLOBAL

Canada, Sweden

- SDG 1 - No poverty
- SDG 2 - Zero hunger
- SDG 8 - Decent work & economic growth
- SDG 10 - Reducing inequality

## GIG ECONOMY

 → NITI Aayog report - "India's booming gig & platform economy"

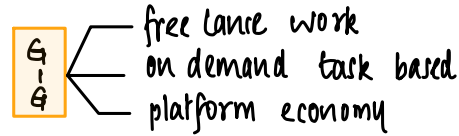
## CONSTITUTION

DPSP - Article 38, Article 39

## GIG ECONOMY

→ Each piece of work is like an individual 'gig', so the gig workers are normally paid 'per piece'

→ Eg: uber, ola, swiggy, Zomato etc



## Economy

## # ISSUES

### 1) Social security

- Code on social security 2020 announced by the centre to deal with social security of unorganised workers, gig workers, platform workers. But it is yet to take effect
- They demand coverage under various legislations viz ESI Act, maternity benefits Act, unorganised workers social welfare security Act etc

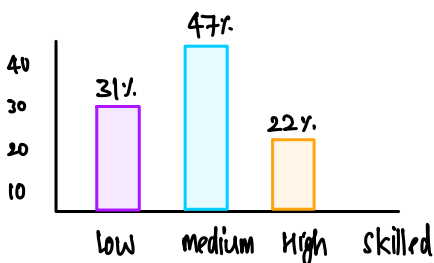
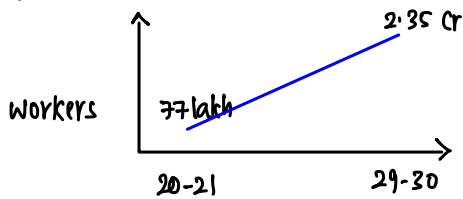
### 2) Political

- violation of their rights under Article 21 and non recognition of them is violation Art 14 and Art 23
- App based service providers argue that there is no employment contract

### 3) Economy

- informalisation of economy
- high dependence on platforms

## GIG ECOSYSTEM (Source- Niti Aayog)



→ global gig economy index - India among the top 10.



## POSITIVES

- 1) Job creation - non-farm
- 2) flexibility
- 3) consumer benefits
- 4) Demography of India
- 5) innovation

## CHALLENGES

- 1) Digital divide
- 2) low social protection (case in sc)
- 3) labour rights - no grievance redressal
- 4) no proper regulation
- 5) jobs created majorly in urban centres
- 6) labour market polarisation

## NITI AAYOG SUGGESTIONS

- 1) Platform to provide social security
- 2) create a social security fund
- 3) fiscal incentives to platforms with high opportunities for women & PWDs
- 4) Govt create 'platform initiatives' and carry out survey and census



**UKSC** declared uber drivers as workers & not independent contractors, entitling them to social security benefits



- SDG 1** - No poverty
- SDG 2** - zero hunger
- SDG 8** - Decent work & economic growth
- SDG 10** - Reducing inequality

## NITI AAYOG



→ NITI Aayog governing council meet



'Planning Commission was a master of resources but not a master of ideas'



### NITI AAYOG

National Institute for Transforming India

↳ Estbd in 2015

#### FUNCTIONS

- Policy & programme framework
- Cooperative & competitive federalism
- monitoring & evaluation
- Think Tank, knowledge & innovation hub

#### STRUCTURE

- PM- chairman
- Governing council - CMs + LGs



### PLANNING COMMISSION

- estbd in 1950, dissolved in 2014
- FYP formulation & implementation
- Providing finance to the states



### IMPORTANCE

- 1) Think Tank of the govt.
- 2) Foster innovation
  - Ⓜ Innovation Index
- 3) Expert and lateral entrants
  - Ⓜ Atal innovation mission
- 4) Policy shaping Ⓜ Electric vehicles, POSHAN Abhiyaan
- 5) Cooperative & competitive federalism
  - Ⓜ SDG Index, EODB Index

### # CHALLENGES

- financial
  - ↳ no financial powers
- Investment
  - ↳ no role to increase pub/ pvt investment
- Think tank
  - ↳ lack of constructive criticism
  - ↳ mandate is wide & vague
- Social advancement
  - ↳ no social role



### SUGGESTIONS

- fr. FC chairman Vijay kelkar recommended that 'NITI Aayog should have been allowed to retain some resources'

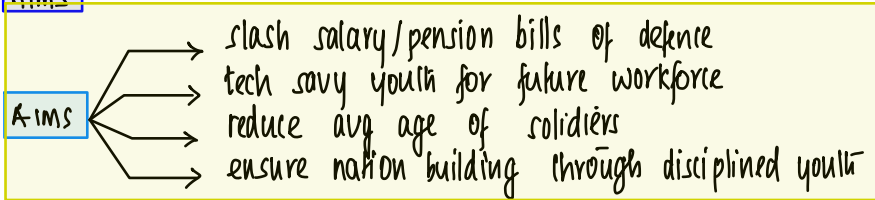


→ Scheme for recruiting 'Agniveers' across 3 services

**SCHEME**

- Pan India recruitment
- 4 year tenure ; with 6 months basic training
- After 4 yrs, 25% agniveers will be selected for regular cadre for another 15 yrs
- 75% will be demobilised with 'Seva nidhi' exit package of Rs 11.71 lakh & Skill certificates
- No pension or gratuity
- 6000 youths in 2021 of 17.5 to 21 yrs age

**AIMS**



**POSITIVES**

- Service
  - Younger force - future ready
  - money for R&D & procurement of defence
- Economy
  - reduce the salary - pension bills
    - ↳ reduce revenue deficit
  - Skilled workforce - employability
- Society
  - nation building through disciplined youth

**CRITICISM**

- No pilot project to test the scheme
- will dilute professionalism, military ethos
- risk averse - looking for second career
- demobilisation of trained soldiers
- psychological impacts

**GLOBAL**

→ Similar scheme in USA, Israel etc

## DEMOGRAPHIC DIVIDEND

NEWS → 'Youth in India' report 2022 (MOSPI)

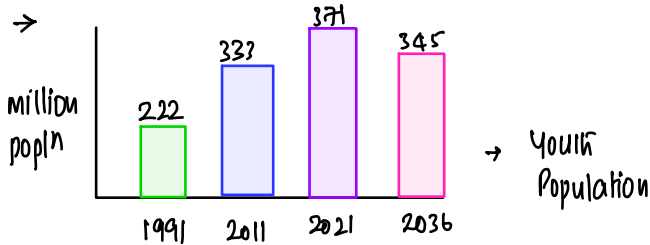


### DEMOGRAPHIC DIVIDEND

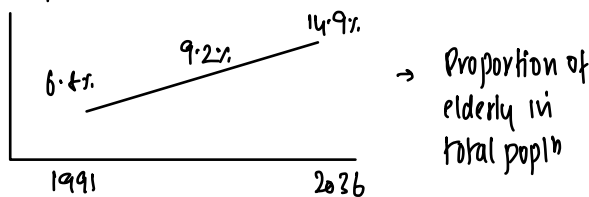
→ It refers to the rise in the economic growth due to rising share of working age people in the population

DATA Youth in India report 2022

→ Proportion of population aged 0/15 is projected to decline & elderly is to increase

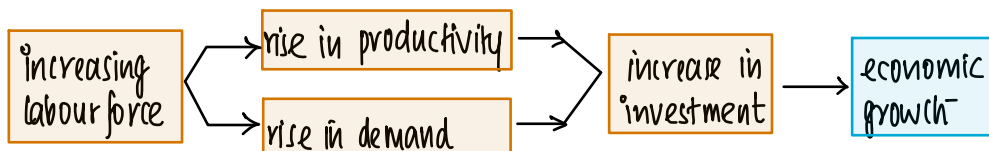


→ elderly



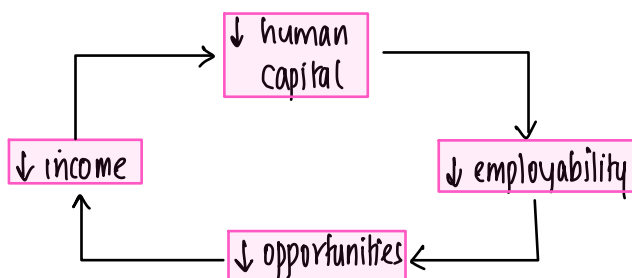
→ Bihar, UP, MH, MP, RJ - projected to >52% country's youth

### # DEMOGRAPHIC DIVIDEND & Eco GROWTH



### CHALLENGES

→ lower human capital



- intergenerational inequalities
- other
  - de-industrialisation
  - de-globalisation
  - disparities - regional
  - 4th industrial revolution
  - low investment in social infrastructure
  - lack of 'skill wage premium'
  - freebies populism

### INITIATIVES

- Agripatta scheme
- 'Skill India'
- labour codes
- Recognition of prior learning
- SATM programme
- New Education Policy
- Gig economy
- start up India
- MSME reforms
- PLI, DESH

## JOB CREATION



→ Centre govt announced the creation of 1 million jobs by 2024-25

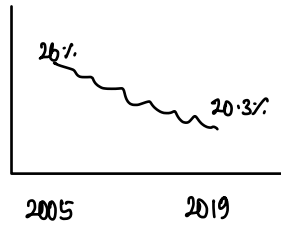
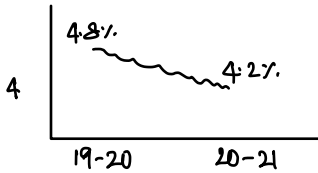
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### DATA

unemployment rate - PLFS (NSO)

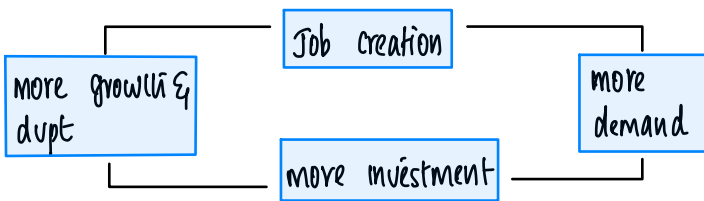
Female LFPR (World Bank)



→ working age population (15-59) ≈ 66% (2018)



### NEED



### EMPT GENERATION - 5 ASPECTS

1) **Employer** - Pub, Pvt

→ govt not a major emp generator

→ other issues

- data collection
- unintended consequences of policies (EG) maternity benefits act
- reduction in MGNREGS allocation
- no proper gender budgeting
- freebies - populism
- demand for reservation

2) **Employer** - men, women

→ falling FLFPR

→ migration

- Human capital →
  - low skill
  - low productivity
  - gender inequality (EG) wage gap
  - "discouraged workers"

3) **Sector** - Agriculture, Industries, Services

→ jobless growth

(EG) Service sector led growth

→ pre-mature deindustrialisation

→ Impact of covid - lock down (EG) K shaped recovery, travel & tourism etc

4) **Types** - Formal, Informal


→ large informal sector (EG)

5) **Region** - Urban, Rural

## INITIATIVES

- Atmanirbhar
- increase in Capex
- Atmanirbhar Bharat Abhiyaan
- National Infrastructure Pipeline
- MGNREGA
- PM SVNidhi
- Schemes for MSMEs, Textiles
- PLI scheme
- Skill development
- DESU bill etc

## WAY FORWARD

- Economic Survey 2017
  - Labour intensive manufacturing
    -  Textiles, leather
- Economic Survey 2019
  - 'Network products'
  - 'Assemble in India for the world'
- NITI Aayog 'Strategy for New India @ 75'
  - improve data collection
  - encourage formalisation
- IPEF - friend shoring
  - China +1, GCC



## POPULATION



→ India to surpass china to become World's most populous country by 2023

📍 India - 2% world's land area  
17% world's population



### DATA

→ World Population Prospects Report by UN says India is projected to surpass china in 2023

YEAR	INDIA	CHINA
2022	1.412 b <sup>n</sup>	1.426 b <sup>n</sup>
2050	1.688 b <sup>n</sup>	1.317 b <sup>n</sup>

→ World population 9.7 b<sup>n</sup> in 2050

→ India achieved Replacement level Fertility Rate of 2.1 (MORFW)

→ Sex ratio 940/1000 (2011 census)

→ Literacy levels - male 82%, female 65%

### # CAUSES

→ Decline in death rate + high birth rate = population ↑

↳ lack of population education  
 (EG) family planning, contraception

↳ early marriages → longer child bearing age

↳ poverty → economic necessity of more working hands



### CHALLENGES

- Poverty and inequality - bare necessities index
- Disguised unemployment
- food/essential shortages
- migration
- unplanned urbanisation
- pressure on physical & social infrastructure
- environmental degradation
- Increasing dependency ratio - elderly, children
- gender inequality - lower sex ratio at birth

### 👉 BENEFITS

- Human capital - eco contribution
- Competition - Innovation
- large market - economies of scale

### # FAMILY PLANNING 2030 VISION

- strategies to cover - priority areas
- ↳ teenage child bearing
  - ↳ lack of use & access to contraceptives
  - ↳ lack of male participation in awareness programmes

### ➡ WAY FORWARD

- Population education



→ Scheme for recruiting 'Agniveers' across 3 services

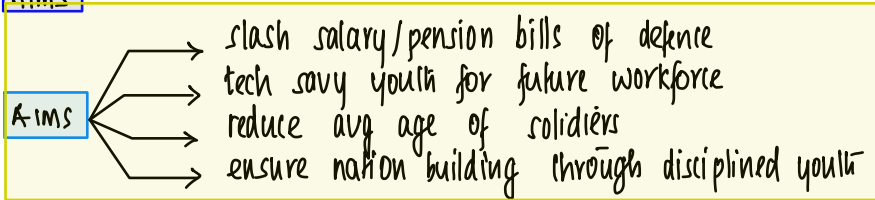


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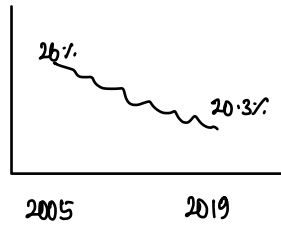
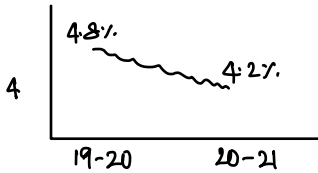
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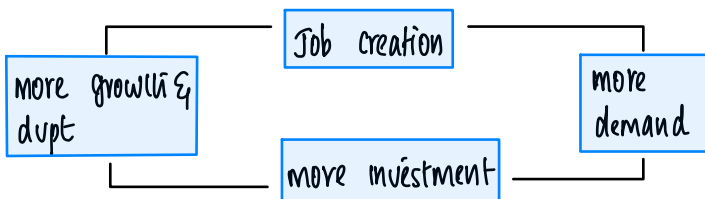
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## MINIMUM SUPPORT PRICE



→ Centre constituted a committee to examine how to make the MSP for crops more effective



"The two planks of India's 'famine avoidance' strategies are assured price and assured market" - MS Swaminathan



### MSP

It is a 'minimum price' for any crop that considers as remunerative for farmers and hence deserving of support

### 🔍 CALCULATION

Govt now fixes MSP for 23 crops. Govt announces MSP at the start of each cropping season based on some pre-fixed formulae. These variables are called A<sub>2</sub>, FL & C<sub>2</sub>

Crops covered are cereals, pulses, oil seeds, raw cotton, jute, copra etc

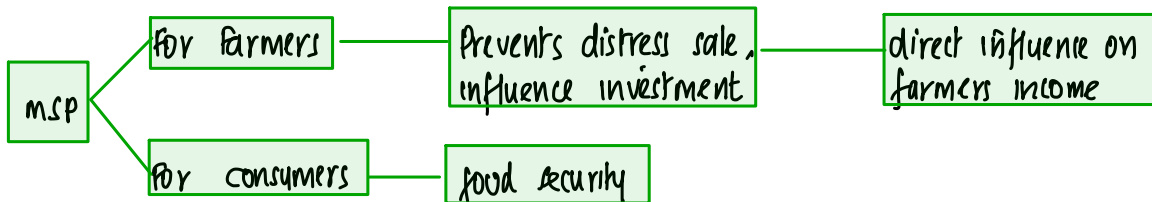


### OBJECTIVES

Protection from price drop for farmers  
food security  
incentivise desirable crop production



### SIGNIFICANCE



### ISSUES

#### Govt side

- not legally bound to pay MSP
- subsidy burden
- open ended procurement
- regional disparity in procurement



### LEGALISATION OF MSP - CHALLENGES

- heavy subsidy burden on Govt
- assured purchase
- mandatory coverage of all crops
- surplus production

#### Farmers side

- demanding 'C<sub>2</sub>' for calculation
- legalisation of MSP



### SUGGESTIONS

- 1 MS Swaminathan Committee - MSP @ 50% profit above the cost of production
- 2 Shantakumar Committee - revisit MSP policy

#### Economy

- market distortion
- food inflation



### WAY FORWARD

- decentralised procurement
- Price stabilization schemes
- Price Deficiency Payment - PM AASRA
- Incentivise crop diversification
- Promote tech and investment in Agriculture

#### Environmental

- distorted cropping pattern
- Soil health

NATIONAL MISSION ON EDIBLE OILS - OIL PALM

NEWS → Huge edible oil imports could compromise India's interest - report by 'CareEdge'

- 👉 NMED-OP
- Govt announced in 2021
  - make India self sufficient
  - raise oil palm cultivation to 1mha by 25-26 & 1.7/1.8 mha by 29-30
  - financial assistance to oil palm farmers
  - focus areas - north east, A&N islands

📄 PALM OIL

- Edible vegetable oil derived from the fruit of oil-palm trees. The oil is versatile and used in the production of detergents, cosmetics, plastics and Bio-fuels
- most consumed veg oil in India its native to Africa

- 👉 SIGNIFICANCE
- address demand supply mismatch
  - reduce import dependency
  - food security and nutrition
  - land efficiency (EG) 4-10 times output per unit of land compared to soy, sunflower, mustard etc
  - suitable climatic conditions
  - increasing farmers income - employment

- 📄 PAST MISSIONS
- Integrated Scheme of oil seeds, Pulses oil-palm and maize (ISOPM)
  - Oil-palm Area Expansion (OPAE)
  - National mission on oil seeds and oil-palm (NMOOP)

# CHALLENGES

- 1) Envt concerns
  - Its an exotic species
  - deforestation and bio diversity loss
  - global warming
  - water stress
- 2) Farmers
  - long gestation crop
  - benefit to rich farmers
- 3) Previous experiments
  - abandoned a previous attempt in A&N
  - bio diversity loss of Indonesia, Malaysia
  - Sri Lanka stopped
- 4) Other
  - neglect of unconventional sources (EG) rice bran, cotton seeds
  - not enough seed nurseries in India
- 5) REPORT BY CARE EDGE
  - geopolitical crisis (EG) Russia-Ukraine war
  - import restrictions by major edible oil producing countries
  - increasing diversification towards bio-fuels

- ➡➡ WAY FORWARD
- Proper land use planning and implementing fine scale local strategies for palm oil cultivation
  - R&D to increase the yield and oil content in mustard and groundnut
  - Focus on sources like rice bran oil

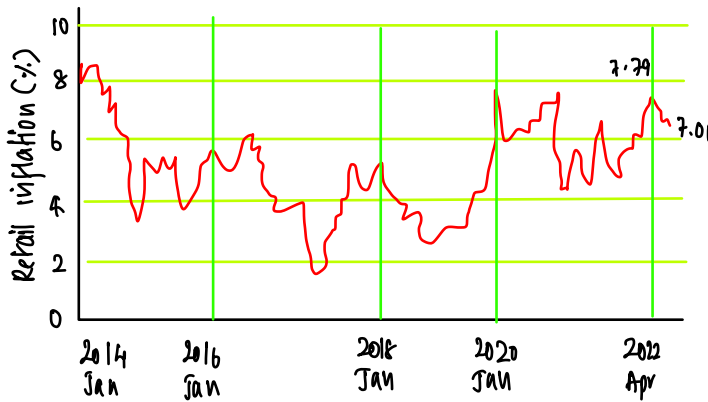
## PRICES & INFLATION



→ Retail inflation in June 2022 - 7.01%



### TRENDS



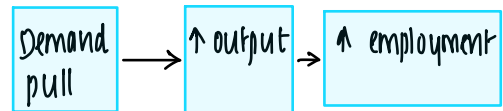
### INFLATION

Refers to a general rise in the level of prices throughout the economy  
By comparing price levels between different periods we can measure the rate of inflation  
inflation is measured by CPI & WPI



### IMPLICATIONS

#### POSITIVE



### CONCERNS

- 'Tax on poor'
- Weakening of Rupee
- worsen BOT
- rising input costs
- inflation expectations
- uncertainty & lack of investment
- 'stagflation'
- 'shrinkflation'
- fall in credit rating



### CAUSES

#### 1) DEMAND PULL INFLATION

- impact of covid → expansionary fiscal and monetary policies
- lockdown and pentup demand
- 'demand shock'

#### 2) COST PUSH INFLATION

- imported inflation '2-oil' issue
- supply chain disruption chips
- increase in food prices seasonality (Tomato, onion)



### OTHER ISSUES

- CPI headline vs core
- CPI vs WPI
- Rural vs urban
- Domestic vs Global



### STEPS

- RBI Policies - inflation targeting
- raising repo rates
- Centre govt reduction of excise duties on diesel & petrol



### WAY FORWARD

- Agriculture
  - changing production pattern
  - Import policy
  - storage & transportation
- GST rationalisation
- PM & ATISHAKTI
- increasing labour productivity
- Trade policy
- Atma nirbhar Bharat



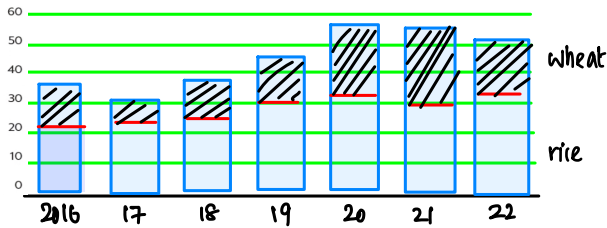
## BUFFER STOCKS & FOOD SECURITY



→ Depletion of wheat buffer stocks



### DATA



Graphs: Food grains in stock in central pool (MMT)



### BUFFER STOCK

→ Govt maintains buffer stock for essential commodities like rice, wheat, pulses etc



### OBJECTIVES

- to provide food security through the PDS
- ensure price stability - keep food inflation low
- guard against unforeseen situations



### WORKING

- operational stocks for PDS & other welfare schemes
- food security stock reserves for meeting shortfalls
  - ↳ procurement by FCI & State govt agencies
  - ↳ stores in warehouses, CWC, state & pvt agencies

EG mandatory buffer stock (wheat) 7.6 MMT



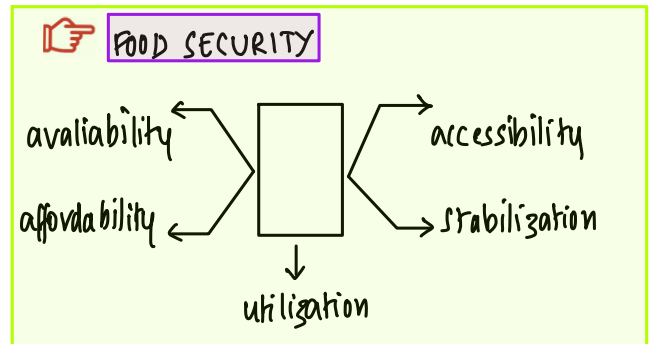
### POSITIVES

- Food subsidy program → Food security & prevent hunger
- surplus food grains usage during 'covid'



### CHALLENGES

- geopolitical crisis → demand for food grains
  - farmers selling to pvt traders
  - continuation of the free grain scheme
  - food inflation
  - WTO & public stockholding issues
  - Procurement issues EG FCI
- depletion of buffer stock





FOOD CORPORATION OF INDIA

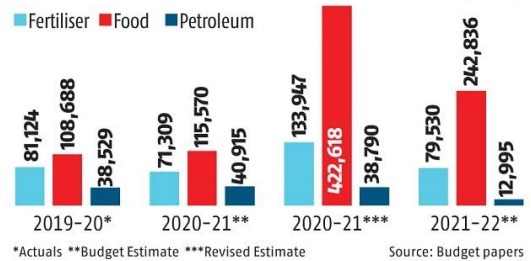
FCI

- Set up under FCA, 1964
- for procurement and stocking of food grains
- Distribution through PDS
- Maintenance of buffer stocks



DATA

THE SUBSIDIES MATHS



# CRITICISMS

- open ended procurement policy
- Govt increasing subsidy burden
- Increasing debt of FCI
- operational inefficiencies
- poor storage facilities and wastage
- Siphoning off from FCI godowns
- Lack of pro active liquidation policy
- FIFO method



ACHIEVEMENTS

- 1) PDS and food security - lifeline to starving people
- 2) food procurement and distribution during covid

SHANTAKUMAR COMMITTEE

- 1) Hand over procurement activities to states that developed capability and infra & support farmers of eastern regions
- 2) Allow pvt sector participation
- 3) use of NWRs
- 4) revisit MSP policy
- 5) transparent liquidation policy



STEPS

- 1) PM AASHA - to ensure that farmers growing oil seeds, pulses & Copra actually get benefit through
  - 1) Price support scheme
  - 2) Price deficiency payment
  - 3) Private Procurement and stockist scheme



WAY FORWARD

- Decentralised procurement

NATURAL FARMING

- Natural farming conclave organised at Surat, Gujarat
- Govt set up a committee to promote ZBNF

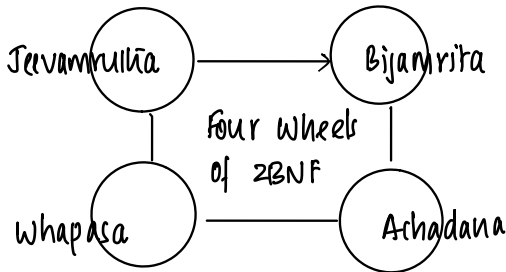
'The basis of progress and speed of the country is the spirit of 'Sabka Prayas'  
- P.M Modi

NATURAL FARMING

- Farming practice that believes in the natural growth of crops without adding any fertilizer and pesticides or any other foreign elements

ZERO BUDGET NATURAL FARMING

- promoted through Bhavatiya Prakritik Krishi Puddhati programme (BPKP)



PROS & CONS

PROS

- locally available inputs
  - ↳ reduce the input cost
- sustainable agricultural practice
  - ↳ restore ecosystem health
  - ↳ reduce water consumption
- climate resilient crops

CONS

- Need scientific validation through multi-location studies - NITI Aayog experts
- noted that yields start dropping after few years
- ZBNF is not really 'zero input'

CASE STUDY

→ Sri Lankan eco crisis → banning of chemical fertilizers

CHALLENGES

- 1) monsoon dependence
- 2) climate resilience issues
  - ↳ extreme weather events
  - EG heat wave - fall in wheat production
- 3) fertilizers - over use
  - skewed use
- 4) water stress EG water guzzling crops (rice, wheat)
- 5) mono cropping

OTHER METHODS

- Organic farming
- Precision farming
- Integrated farming
- agro forestry

DATA



Graph 1: agriculture growth rate

Agriculture - 16% GDP

- Avg growth rate from 1960s - 2.8%
- 52% of agriculture rainfed
- climate change could reduce annual agricultural income by 15-20% on an avg & 20-25% in un-irrigated areas (Economic Survey 2019)

## INFRASTRUCTURE



→ transforming India's infrastructure through 'PM Gati Shakti'



### DATA

- Effective Capex - Rs 10.6 L cr (Budget 22-23)
- Logistics cost in India 14-16% of GDP
- NIP - Rs 111 lakh cr
- NMP - Rs 6 lakh cr

### # ISSUES DUE TO WEAK INFRASTRUCTURE

- 1) lower investment → lower economic growth
- 2) higher logistics cost → high transaction cost
- 3) effect on various sectors - agriculture, industries, services
- 4) demographic change - working age population
- 5) demands of urbanisation
- 6) climate resilient infrastructure
- 7) fulfilling the SDG-9

### # CHALLENGES OF INFRA SECTOR

- 1) Capital intensive
- 2) Long gestation projects
- 3) Project expertise
- 4) construction and O&M risks
- 5) failure of PPP models
- 6) land acquisition / envt clearance
- 7) envt vs development debate

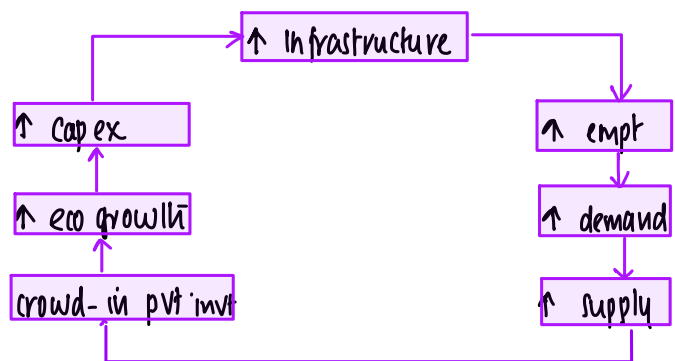
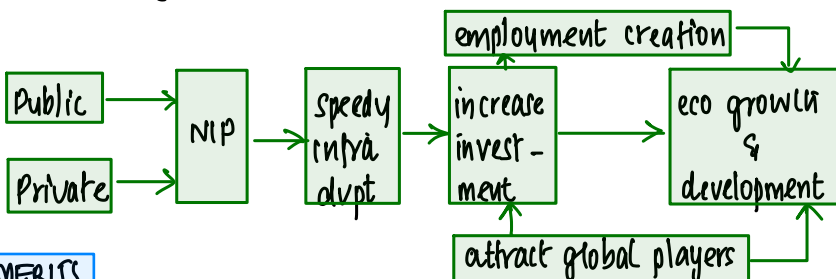


Diagram: virtuous cycle of better infrastructure

## NATIONAL INFRASTRUCTURE PIPELINE

### # NIP

→ It consists of projects with an allocation of Rs 111 lakh crores during the years from 2020 - 2025. It includes economic and social infra projects major sectors are energy (24%), roads (18%), urban (17%), railways (12%) etc. The funding ratio - Centre (39%) : States (40%) : Pvt sector (21%)



### 👍 MERITS

#### ECONOMY

- 1) economic slowdown → counter cyclical policy
- 2) reduce logistics cost → increase competence
- 3) improve connectivity → development of hinterland

#### Govt

- 1) increased eco activity → improve revenue base
- 2) productive asset base

#### Pvt sector

- 1) investor confidence
- 2) prepared projects

#### Banking sector

- 1) less stress due to active project monitoring

#### Common man

- 1) job creation → ease of living → inclusive growth

## # NMP

## NATIONAL MONETISATION PIPELINE

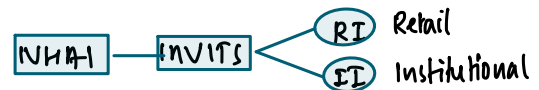
Limited period transfer of govt assets to unlock 'idle capital' to the pvt parties in return of an upfront money

### FEATURES

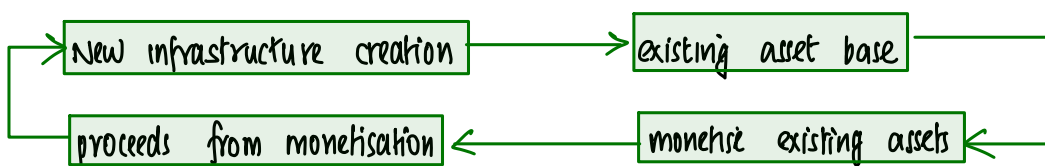
- 1) leasing out assets valued @ Rs 6 Lakh crore
- 2) ownership will remain with the govt
- 3) lease out brownfield projects
- 4) major sectors Road (27%), rail (25%), Power (15%), also include telecom, aviation, stadiums, warehousing etc
- 5) NMP will be coterminous with NIP (2024-25)

### MODELS

- 1) TOT - Toll operate Transfer
- 2) INVITs - Infrastructure Investment Trusts
- 3) REITs - Real estate Investment Trusts



### DIAGRAM



### WHY NMP?

- fiscal resource for govt
- infrastructure creation
- de-risking pvt sector

### NMP

- 1) Pvt sector involved in O&M
- 2) brownfield projects
- 3) no construction risk
- 4) simpler process

### PPP

- 1) pvt sector involved in B-B-T
- 2) greenfield & brownfield projects
- 3) construction & operation risk
- 4) complex - lot of issues & disputes

### CHALLENGES

#### GOVT SIDE

- 1) making the scheme attractive to pvt sector
- 2) concerns of crony capitalism
- 3) under valuation of assets - low bidding
- 4) dispute resolution mechanisms

#### WAY FORWARD

- 1) Proper regulation
- 2) explore other options of raising money
- 3) increase tax compliance
- 4) development financial institutions (DFI)

#### PVT SECTOR SIDE

- 1) lack of identifiable revenue streams
- 2) tariffs are regulated in some sectors
- 3) policy uncertainties
- 4) contract enforcements

#### FOR COMMON MAN Prof Biswajit Dhar

- 1) 'performing' vs 'idle' assets
- 2) concerns of hike in 'user fees'
- 3) built by tax payers money + 'user fee'
- 4) stigmatised capitalism

## # PM GATI SHAKTI MASTER PLAN

- It is a digital platform that connects 16 ministries viz road, rail, shipping etc. for holistic planning and execution of the infrastructure projects.
- Various economic zones will be covered to make Indian business more competitive.
- It will leverage technologies viz satellite mapping and data tools for real time monitoring of the projects



## BENEFITS

- 1) Coordination between ministries
- 2) Planning and obtaining clearances
- 3) Prioritisation of projects
- 4) Centralised tracking of projects
- 5) Boost last mile connectivity
- 6) Reduce logistics cost

➤ **ECONOMIC SURVEY** - suggested active centre-state participation in Infra projects

## MICRO, SMALL & MEDIUM ENTERPRISES (MSME)



- Centre govt considering an MSME code for streamlining all rules & regulations



### DATA

- Contribute — 30% of GDP
- 40% of exports
- empt — 11.10 crore
- 76% male ; 24% female
- Economic survey 21-22 — 95% of MSME on Udyam portal are 'micro'



### DEFINITION

- Amendment to MSME Act 2006 (for both manufacturing & services)
- 1. Micro - 1 cr (invest) 5cr (turnover)
- 2. Small - 1-10 cr ; 5-50 cr
- 3. Medium - 10-50 cr ; 50-250 cr



### SIGNIFICANCE

- 'backbone of Indian economy' ] 'Growth engine'
- EG GDP, exports, empl
- higher labour to capital ratio



### CHALLENGES

**Capital** — formal credit  
— rising capital intensity  
— non-release of payments to MSMEs

**Labour** — skilled workforce  
— social security

**Land** — initial cost  
— tier 2-3 cities

**Raw materials** — non-availability

**Technology** — transformation

**Policy** — 'Dwarfism'  
— Complex laws, envt clearance  
— GST - input tax credit

**Market** — market access  
— Competition from other countries



### STEPS

- PM Mudra Yojana — Collateral free loans
- Emergency credit line Guarantee Scheme (ECLGS) to mitigate the distress faced by the MSMEs
- Equity infusion of Rs 50,000 cr to enhance the capacity and to encourage them to get listed
- UDYAM portal for MSME registration
- TREDS — for immediate money



### SUGGESTIONS — Economic Survey 2019

- 1) Sunset clause for size based incentives
- 2) Access to credit for young firms
- 3) Focus sectors like Tourism — high spillover effects.



## ANIMAL HUSBANDRY



→ focus on animal husbandry, food processing and agriculture modernisation to become self-sufficient & global leader in agriculture - PM (NITI Aayog & C)

### # SIGNIFICANCE

- 1) Economic security
  - income for farmers
  - agricultural use (e.g.) bullocks
- 2) Economy
  - major producer of milk, egg, meat
  - leather industry
  - emp for rural women
- 3) Environment
  - manure - animal waste
  - indigenous variety conservation
- 4) Social security
  - insurance against disasters
  - (e.g.) meet financial emergency
- 5) Nutritional security
  - proteins from milk, egg, meat

### # CHALLENGES

- unorganised sector
- gaps in forward - backward linkages
- lower quality of live stocks
  - (e.g.) 80% bovines are low on productivity reared by small & marginal farmers
- infrastructure deficiencies
  - (e.g.) chilling infrastructure for dairies
- low awareness about indigenous breeds
- spread of animal diseases
- shortage of veterinarians
- contribution to global warming

### WAY FORWARD

- R&D
- Quality of breeds & fodder
- effective marketing

### BEST PRACTICES

- Amul model

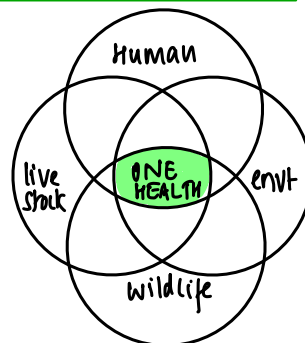
### DATA

- Livestock census 2019 - total livestock population showed an increase of 4.6% over previous census
- it shows a decline in indigenous cattle population
- India is world's largest milk producer
- live stock sector contributes 4% of GDP; 25% of agricultural GDP

### STEPS

- 1) Rashtriya Gokul Mission
  - conservation of indigenous breeds
- 2) National livestock mission - to ensure qualitative & quantitative imp. in livestock production & capacity building of stakeholders
- 3) National Animal Disease Control Programme - for FMD & Brucellosis
- 4) Animal Husbandry Infrastructure Development Fund (AHIDF) - to support pvt investment in dairy processing, value addition & cattle feed infrastructure
- 5) e-Gopala - comprehensive breed improvement market place and information portal

### ONE HEALTH INDIA



- Dpt of animal husbandry launched 'one health' pilot project in Uttarakhnad
- to achieve 'one health' through technology and finance
- The bridge between human and wildlife health are domesticated animals, which are the carriers of a lot of disease

**BUDGET PRIORITIES**

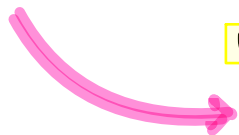
**PM GATI SHAKTI**

**ISSUES**

- Lack of coordination
- no prioritisation of projects
- Cost and time overruns
- project clearance
- Lack of multimodal connectivity
- high logistics cost
- products not competent



- National master plan for world class infrastructure and logistics synergy
- Covers 7 sectors
- Digital Platform - 6 pillars
- Connects 16 ministries



**ULIP (Unified Logistics Interface Platform)**

- Integrate 24 logistics systems across 6 ministries and DPs to provide real time data and for efficient movement of goods through different modes
- multimodal logistics Park in PPP mode

**RAIL**

**ISSUES**

- low market access
- supply chain issues



**One station One Product**

- To promote supply chain of local products using the railways and making each railway station a promotional hub

- slow parcel movement



Integration of railways and postal services

- Train accidents



**KAVACH Technology**

- Automatic Train Protection System

**PARVATMAIA**

**ISSUES**

- hilly areas
- environmental sustainability
- connectivity
- tourism opportunities



**Parvatmata**

- National Ropeways Dpt Program
- Nodal ministry - NORTH



**INCLUSIVE DEVELOPMENT**

**AGRICULTURE**

**ISSUES**

- soil degradation
- environmental issues
- inefficient water use
- high input cost
- fertilizer subsidy ↑



- **Chemical free natural farming**
- 5km wide corridor along the Ganga
- **Zero Budget Natural Farming**
- **Paramparagat Krishi Vikas Yojana**
- **Bhartiya Prakritik Krishi Padhati**

**ISSUES**

- malnutrition
- water inefficiency
- climate change
- low awareness



- focus on **millet products**
- post harvest value addition
- enhance domestic consumption
- branding millet products
- 2022-23 international year of millets

**ISSUES**

- low technology adoption
- low mechanisation



- **Kisan Drones**
- crop assessment
- spray insecticides & nutrients
- digitise land records
- **Sub-Mission on Agriculture Mechanisation (SMA-M)**
- increasing reach of farm mechanisation to small and marginal farmers

**MSME**

**ISSUES**

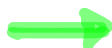
- registration of new firms
- unorganised workers
- job opportunities



- UDYAM Portal** → no MSME for registration of new firms
- E-Shram Portal** → no labour National level database of unorganised workers
- NCS** → no labour Job portal
- ASEEM** → no skill development

**ISSUES**

- enhance performance



- **RAMP (Raising & Accelerating MSME Performance)** to enhance the overall productivity

**SKILL DEVELOPMENT**

**ISSUES**

- skilling
- reach



- **DESH SHAKTI e-portal**
- Digital Ecosystem for skilling and livelihood

**EDUCATION**

**ISSUES**

- online learning
- 3As



- **PM eVIDHYA** → 'one nation one digital platform' program for multimode access to digital and online education

**HEALTH**

**ISSUES**

- 3As
- digitalisation of records



- **National Digital Health Mission** - for integrated digital health infrastructure
- 4 key features :
  - health ID,
  - personal health records
  - digit doctor
  - health facility registry

**ISSUES**

- malnutrition
- women empowerment



- **Mission Shakti** - unified citizen centric life cycle support for women; subcomponents are Sambal, Samarthya
- **Mission Vatsalya** - create healthy and happy childhood
- **Poshan 2.0** - integrated nutrition support scheme
- **Saksham Anganwadi** - upgradation of anganwadis with better infrastructure

**NORTH EAST REGION**

**ISSUES**

- infrastructure
- livelihood activities



- **PM DevINE** - Prime ministers development initiative for North east
- fund infrastructure and social development projects based on the felt needs of north-east region

PRODUCTIVITY ENHANCEMENT & INVESTMENT, UNRLE OPPORTUNITIES, ENERGY TRANSITION AND CLIMATE ACTION

BATTERY SWAPPING

ISSUES

- reduce emission
- e-vehicle adoption
- inter-operability



→ Battery swapping policy

- user can swap a battery to keep vehicle running
- uniformity & inter-operability stds

DEFENCE SECTOR

ISSUES

- defence indigenisation & modernisation
- infrastructure



- Defence R&D will be opened up for industry, startups and academia
- independent body will be setup for testing and certification requirements

C-PACE

ISSUES

- exit challenges



- C-PACE - Centre for Processing Accelerated corporate exit - for voluntary winding up of companies

AVGC

ISSUES

- empty opportunities
- emerging sector



- AVGC - Animation, Visual effects, Gaming, Comics Task force of share holders that will recommend measures to strengthen the development of the sector

ULPIN

ISSUES

- no proper land records
- land disputes



- Unique Land Parcel Identification No. - states will be encouraged to adopt ULPIN to facilitate IT based management of records

SEZ

ISSUES

- failure of SEZ Policy
- export promotion



- changes to SEZ Act

PLI

ISSUES

- self reliance
- exports



- PLI scheme for SEZ - Production Linked Incentive scheme

## RAILWAYS



- Centre launched 'startup for railways'
- Budget 22-23 priorities



### DATA

- India's biggest employer - around 14 lakh
- operating ratio : 98.36 (CA& report)
- 11th largest network in the world
- 82% electrified
- 23 million passenger per day



### STEPS

- IRMS
- Dynamic pricing model
- Disinvestment of rail PSUs, NMP
- Adarsh station scheme
- National Rail Plan 2030
- Ro-Ro model
- Kisan rail
- Vande Bharat express

### # CONSTRAINTS (NITI Aayog -

strategy for New India @75)

- 1) congested networks
- 2) organisational structure - delays in decision making
- 3) infrastructural problems - tracks, terminals
- 4) neglected non fare revenues
- 5) high freight tariffs (cross subsidisation)
- 6) Rail safety
- 7) poor quality of service



### PRIVATISATION

Railways sought participation from pvt, PSUs, states

#### PROS

- 1) Railways
  - ↳ modernisation
  - ↳ profit orientation
  - ↳ technology adoption
  - ↳ competition ↳ Efficiency
- 2) Economy
  - ↳ fiscal prudence
  - ↳ infrastructure augmentation
  - ↳ passenger & freight in favour of rail
  - ↳ logistics sector improvement
- 3) Passengers
  - ↳ more trains
  - ↳ Improved Quality of service
  - ↳ Improved safety

#### CONS

- 1) Pvt players
  - ↳ No independent regulator
  - ↳ infrastructure deficiencies, congestions
  - ↳ No level playing field (Pub vs Pvt)
- 2) Economy
  - ↳ Neglect of remote areas, last mile connectivity
  - ↳ unbalanced regional growth
  - ↳ Not worked in other countries (EG) UK
- 3) Socio-political
  - ↳ mass transport system
  - ↳ fare rise
  - ↳ jobloss



### BUDGET 22-23

- 'One station one product'
- integration of railways & post
- 'Kavach' for rail safety



### Bibek Debroy Committee

- Suggested liberalisation for entry of new operators in railways



### WAY FORWARD (NITI Aayog)

- 1) completion of existing projects (EG) DFC
- 2) Asset monetisation
- 3) Rationalise fare structure
- 4) Enhance rail safety (EG) KAVACH
- 5) modernisation of railway stations
- 6) Technology adoption (EG) High Speed trains

## POWER SECTOR - DISCOMS



- The PM drew attention to Rs 2.5 trillion worth of dues of gencoms & discoms
- Electricity (A) Bill 2022
- Energy Conservation (A) Bill 2022

### 👍 ELECTRICITY

- electricity has an important role in removing poverty through supporting industrialisation
- Access to affordable, reliable, sustainable and modern energy is the sine qua non to SDGs

### # CHALLENGES

#### 1) Financial

- accumulated financial loss
- NPAs - financial contagion
- cost & revenue gap
- reducing cost of renewables
- under procurement

#### Operational

- Inefficiencies
- AT&C losses
- tariff differentiation
- mal-administration

#### Industries

- high fares
- Quality & reliability
- impact 'make in India'

#### Environmental

- Pollution
- NOC targets

#### Political

- freebies - populism
- politicisation of the issues

#### Energy security

- lack of resources (eg fossil fuel,
- import dependence lithium, uranium
- imported inflation

#### Societal

- opportunity cost
- inclusive development

#### Energy equity



### DATA - No Power (July 2022)

- Total installed capacity 403 GW
- Fossil fuel 236 GW (58.5%)
  - Coal 204 GW (50.7%)
- Non fossil fuel 167 GW (41.5%)
  - RE (wind, solar & other) 114 GW
  - Hydro 11.6%
  - Nuclear 1.7%
- financial dues of power sector companies Rs 2.5 lakh crore
- India - 3rd largest importer of oil
  - imports 80% of its needs

### # ELECTRICITY (A) BILL 2022

- multiple distribution licensees in the same area
- Tariff fixing by the regulator
- graded and timely tariff revision
- empower the central govt. to prescribe the criteria for discoms
- 'upso' applicable only to govt companies
- promote green energy



### POSITIVES

- ↳ competition in retail distribution of power
- ↳ choice for customers
- ↳ avoid predatory pricing
- ↳ discipline discoms



### CONCERNS

- ↳ indirect privatisation
- ↳ opposition by farmers groups & workers in the power sector
- ↳ power under concurrent list (state's opposition)
- ↳ urban - rural disparity
- ↳ energy equity

## # REVAMPED DISTRIBUTION SECTOR SCHEME

### SCHEME

- Centrally sponsored scheme
- reforms based and result linked scheme
- Outlay Rs 3.03 lakh cr over 5 years from 2021-22

### AIM

- improve quality, reliability & affordability of power supply to consumers through financially sustainable and operationally efficient discoms
- reduce AT&C losses to 12-15% & cost-revenue gap to zero by 2024-25

### FEATURES

- Smart metering
- Feeder segregation
- Convergence with PM KUSUM scheme

## # OTHER SCHEMES

- Saubhagya scheme - rural electrification

## # ENERGY CONSERVATION BILL 2022

- mandatory minimum use of non fossil sources
- setting up carbon trading markets
- bringing large residential building under EC

## ➤ WAY FORWARD

Energy access  
 Energy affordable  
 Energy equity  
 Energy security  
 Energy diversification  
 Energy transformation

## 👉 SDG-7

## SEZ - DESH



→ Domestic Enterprise & Service Hub (DESH) Bill 2022 to overhaul SEZ



### DATA

→ Share of SEZ export in India's total exports in 2021-22 is 19.8%  
(Dpt Commerce)

→ Operational SEZ - 268

Ⓜ GIFT City, Gujarat

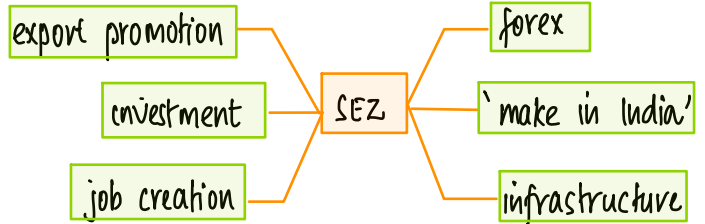
### SEZ

→ estbd under the SEZ Act 2005 as designated areas where the trade rules are liberalised to promote more exports

### FEATURES

- Govt support Ⓜ tax exemptions
- Duty free exports
- Net forex positive
- Domestic Tariff Area

### POSITIVES



### # CHALLENGES

#### Policy Issues

- inconsistent with WTO norms
- Ⓜ export subsidies
- policy changes Ⓜ MAT introduction
- misuse of SEZ policy

#### STRUCTURAL

- Small SEZ
- Different models
- regional disparities
- Service Sector domination

#### FUNCTIONAL

- unutilised land
- credit crunch
- dispute resolution

#### COMPETITION

- tough global competition
- domestic sales restriction
- location disadvantages

### # DESH BILL 2022

#### Key changes

#### Domestic market

- sell in the domestic area
- equalisation levy for sale in domestic market

#### Forex clause

- removed 'net forex positive clause'

#### functional

- WTO compliance
- Partnership with states
- optimum utilisation of 'enclaves'
- Online single window



### POSITIVES

- Boost domestic manufacturing
- job creation
- Self reliance



### GLOBAL CASE STUDY

- ↳ German Mittelstand companies
- ↳ Chinese SEZ model

### SUGGESTIONS

- Baba Kalyani Committee
- Convert SEZ into EEE
- ↳ 'Economic Enclaves'



### WAY FORWARD

- integration with global value chain
- 'Network products'
- Ease of doing business



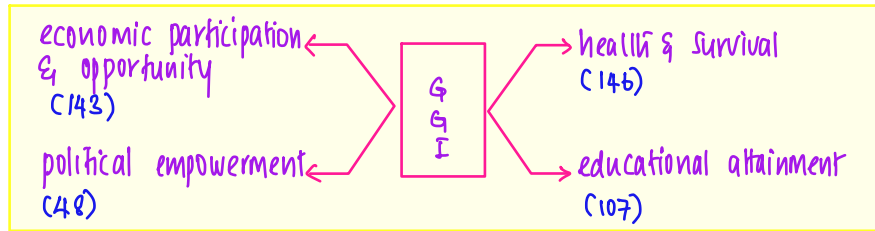
GENDER EQUALITY

NEWS Global Gender Gap Index 2022

**GENDER EQUALITY** (UNICEF DEF)  
When people of all gender enjoy the same rights, resources, opportunities and protections

"I measure the progress of a community by the degree of progress which women have achieved"  
→ Dr. B.R Ambedkar

**GGI 2022** (WEF)  
→ India's rank - 135/146



**CONSTITUTION**  
Art 14, 15, 19, 21 etc

# ISSUES

**POLITICAL**

- ↳ Low representation of women in Pt/LA
- ↳ Less women in political leadership
- ↳ policy inertia

**ECONOMIC**

- ↳ low FLFPR
- ↳ 'invisibilisation of women's work'
- ↳ gender wage gap
- ↳ 'motherhood penalty'
- ↳ work place safety
- ↳ unintended consequences of policies
- ↳ <sup>EG</sup> maternity benefits act 2017

**EDUCATIONAL**

- ↳ lower literacy rate
- ↳ 3As of higher education
- ↳ STEM education

**HEALTH**

- ↳ 'missing women'
- ↳ malnutrition

**SOCIO-CULTURAL**

- ↳ Patriarchy
- ↳ 'shadow pandemic'
- ↳ 'time poverty'
- ↳ <sup>EG</sup> Time use Survey (MOSPI)
- ↳ early marriage

**TECHNOLOGICAL**

- ↳ cyber crimes
- ↳ cancel culture

**INDICES RELATED**

- ↳ accuracy is questioned

**TRANSGENDER ISSUES**

- social exclusion — discrimination
- lack of opportunities
- HR violations, exploitations

**INITIATIVES**

**legislations**

- Reservation in local bodies
- MTP Act, PCNDT Act
- PSHWA 2013, PWDVA 2005
- Transgender persons Act 2019
- National Commission for women

**Executive**

- Gender budgeting
- Stand up India
- She box
- women in combat forces

**JUDICIAL**

- Triple talaq verdict
- Vishaka guidelines
- NALSA case
- Navtej Singh Johar case

**INTERNATIONAL**

- ↳ SDG 5: Gender equality
- ↳ CEDAW - Convention on the Elimination of All forms of Discrimination Against Women
- ↳ Beijing Declaration & Platform for Action

**International women's day theme (2021)**  
"gender equality today for sustainable tomorrow"



ABORTION LAW

NEWS → SC verdict on abortion  
→ abortion law of the USA

ABORTION

→ removal or expulsion of embryo or foetus from the uterus, resulting in or caused by its death

DATA/REPORTS

- Lancet 2018 Study : 15.6 million abortions were accessed every year in India (2015)
- Shortage of obstetrician-gynaecologists - 70% in rural India (MOHFW)
- 61% of all unintended pregnancies end in induced abortion (WHO)

MEDICAL TERMINATION OF PREGNANCY (A) ACT 2021

OBJECTIVE

→ to expand the access to safe and legal abortion services

AMENDMENTS

- 1) Termination
  - increase in upper gestation period from 20 to 24 weeks for special categories of women including survivors of rape
  - Opinion of one doctor (upto 20 weeks) two doctors (20-24 weeks)
  - upper gestation period not applicable to substantial to substantial foetal abnormalities diagnosed by a medical board

- 2) safe abortion — irrespective of women's marital status
- 3) confidentiality clause - protect privacy

SC (JULY 2022)

SC held that a woman's right to reproductive choice is an inseparable part of her personal liberty u/A 21 of the constitution. She has a sacrosanct right to bodily integrity

# ISSUES

1) Individual rights  
→ fails to recognize absolute reproductive autonomy  
EG Puttaswamy case

2) Legal  
→ increase in upper limit is with conditions  
→ role of medical board & doctors

3) Judicial  
→ EG Lower court vs SC view

A) Health access  
→ lack of access to safe abortion  
→ information asymmetry  
→ unsafe abortion → loss of life

B) Ethical  
→ pro-life v pro-choice

6) Socio-cultural  
→ societal taboo  
→ gender inequalities  
→ "missing women"

USA VS INDIA

→ The USA supreme court overturned the landmark Roe v Wade judgement (1973) which gave women the right to abortion

→ SDG 5 Gender equality

## MARITAL RAPE



→ Differing verdicts by the HCs



### MARITAL RAPE

→ Non consensual sex in which the perpetrator is the victim's spouse



### LAW

- Section 375 (1C) defines the offence of rape
- Section 375 (2) says sexual intercourse with wife who is above 18 years would not amount to rape
- Section 376 defines punishment for rape



### ISSUES

- Against Constitution - Art 14, 21
- Invisibilisation of the crime
- Doctrine of coverture
- Against the objective of Section 375 (1C)
- Judicial restraint
- Against CEDAW



### IMP CASES

- 1) Independent Thought v UOI (2017)  
SC held that man will be punished for rape if he is found to be guilty of sexual intercourse with his minor wife
- 2) J Puttaswamy case (2017) SC recognised right to privacy as a FR which include 'bodily autonomy'
- 3) Kerala HC (2021) said marital rape is a valid ground for divorce



### SUGGESTIONS

1. Justice Verma Commission recommended to criminalise marital rape
2. Parliament should legislate and remove the Section 375 (2) IPC



### COUNTER VIEW

- Making it an offence affects 'institutions of marriage'
- Difficult to prove
- Possibility of misuse

LEGAL AGE FOR MARRIAGE



Prohibition of child marriage (amendment) Bill 2021

CHILD MARRIAGE

→ Legally ; marriage in which girl - below 18 yrs & boy - below 21 yrs

# REASONS

Social

- social acceptance
- Dowry practices
- gender stereotyping

Economic

- girls viewed as economic burden
- Lack of emp't opportunities

Political

- Lack of awareness
- Low women representation

Admin

- no proper implementation of the laws
- loopholes in laws - PCMA



"If you educate a man, you educate an individual, but if you educate a women, you educate a family"



DATA

- Child marriage (NFHS-5) 27% (2015-16) 23% (2019-20)
- UNICEF - India is home to the largest no of child brides in the world
- more prevalent in Bihar (46%) West Bengal (41%) Raj (40%)

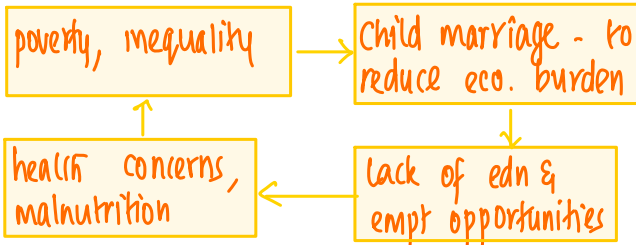


PRESENT LAWS

1. Sharda Act, amended in 1978 and raised the marriage age from 15 to 18
2. Hindu marriage Act & Christian marriage Act - 18 (female), 21 (male)
3. Muslims - marriage of minor who has attained puberty is valid under the Personal law
4. Special marriage Act & PCMA - 18 & 21



IMPACT



# PROHIBITION OF CHILD MARRIAGE (PCMA)

1. child - 18 yrs (female) 21 (male)
2. child marriage is voidable by either of the parties
3. pay maintenance
4. punishment



AMENDMENT

1. raised age - 21 for female (same as male)
2. child - who has not completed 21 yrs
3. voidable period - raised from 2yr to 5yr
4. applicable to all religious communities



OBJECTIVE

→ bring gender parity & ensure women empowerment



PRESENT STATUS

→ Bill referred to standing committee




RATIONALE

1. Constitutional goals - gender parity
2. early marriage impact women's health (MMR, IMR, malnutrition)
3. early marriage impact education and eco opportunities
4. better emotional development & maturity
5. prevent abuse of minors

# OPPOSITION

1. median age of 1st marriage for women - 20yrs
2. majority of early marriage occurs among 'deprived'
3. more impact on rural women
4. Decrease depends upon socio-eco factors
5. age raise may increase parental authority
6. 'Women infantilization'
7. bill interferes with personal laws
8. globally 18 yrs is accepted for adulthood

 **IMP JUDGEMENT**

1. Seema Begam v State of Karnataka, HC held that no Indian citizen on the ground of belonging to any religion can claim immunity from the application of PCMA

 **CASE STUDIES**

- Khasi community Meghalaya
- Rajasthan Bill to allow regn of child marriages

**GLOBAL**

- France, Australia cares
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)
- SDG Target 5.3

 **WAY FORWARD**

Society

- awareness generation
- societal opposition to early marriage
- decision making role for women

state

- access to schools
- skill training & eco opportunities
- address root cause - poverty
- amendment to section 375 IPC (marital rape)
- PCA - be made - null & void ab initio
- proper implementation of laws

HIGHER EDUCATION

- NEWS → Foreign universities in India
- Implementation of NEP

CONSTITUTION

- Article 21 A RTE
- Education in concurrent list

BENEFITS

Higher Education

- employment
- development
- social mobility

# GENERAL ISSUES

Academic

- Low enrolment
- quality - employability
- Faculty quality
- Low R&D; research publications
- lack of STEM focus
- Curriculum
- lack of international outreach
- Public vs pvt education
- Edutech companies

Infrastructure

- lack of resources
- lack of infrastructure
- Central vs state universities
- Few seats, high fees
- migration to other countries (EG) ukraine

Governance

- Regulation
- political interference
- debates related to chancellor of universities
- lack of autonomy
- Corruption and mal-administration

Ranking

- poor international ranking
- criticisms against NIRF ranking

Social Justice

- '3As'
- Exclusion
  - ↳ poor, SC/ST, gender equality
- demographic dividend
- learning loss after covid
- 'HE' in local language

“There is no better investment towards a society's future than the high quality education of our young people”  
— NEP 2020

DATA

- OVER 255 million youth (15-25 age)
- AISHE (All India Survey on HE) (2019-20)
  - ↳ GER 27% (21.5%)
  - ↳ Institutions of national imp to 135 (75)
  - ↳ PH D students 2.03 lakh (1.17 lakh)
  - ↳ Total no of teachers 15lakh (42.5% female)
- over 4.4 L students went abroad for HE in 2021 (US, Canada, UK) (by BOI)

# SPECIFIC ISSUES

1) NEET

- Equity in education
- Discrimination to state board students
- Language bias
- Against autonomy to universities
- Pro-pvt schools and pvt coaching class
- One size fits all approach
- Opposition by states (EG) TN

2) FOREIGN UNIVERSITIES / FDI IN HE

- De-regulation of HE, Twinning initiative
- Pros
  - internationalisation of education
  - global acceptability of courses
  - Quality - prestigious institutions
  - Competition
- cons
  - prevent brain drain
  - foreign capital - forex
  - Commercialisation
  - Massification of HE
- WA → proper regulation

👉 NEP 2020 - HIGHER EDUCATION

- Four Year undergraduate programme (FYUP)
- Multiple exit/entry system (MEES)
- Academic Bank of credit (ABC)
- Foreign colleges in India
- GER increase
- Mphil to be discontinued
- National Research Fund
- Restructure institutions

# OTHER INITIATIVES

- HECI, HEFA
- Digital university (Budget 22-23)
- MADAD portal
- Swayam etc

🔍 SUGGESTIONS

- K. Radhakrishnan Committee (2022)
  - ↳ off shore campus
  - ↳ international quality faculty
  - ↳ STEM focus

🗣️ VIEWS

- Capability approach Prof Amartya Sen
- Productivism Prof Dani Rodrik

SDG 4

Ensure inclusive & equitable quality education & promote life long learning opportunities for all



FOREST RIGHTS ACT



Implementation issues even after 15 years of FRA



DATA

As of April 30, 2020, MoTA received 42 lakh claims of which titles were distributed to 46% of applicants



FRA 2006

- Objective: To safeguard marginalised groups and balance the right to envt with the right to life and livelihood
- It recognise the pre-existing rights of tribals and other forest dwellers
- It is implemented by the MoTA



KEY PROVISIONS

- Recognise, settle and vest rights
  - ↳ Land rights
  - ↳ management & protection rights
  - ↳ community rights
- Ownership of minor forest produce
- Implementation by Gram Sabha
- FRCs to investigate the claims



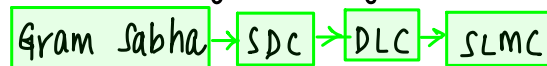
POSITIVES

- It would address historical injustice and empower communities
- Dignity and livelihood opportunities
- Address insurgency/naxalism
- Better forest management - Conservation of flora & fauna



PROCESS

The claim goes through



ISSUES

- Eviction orders (1.2 million households in 17 states)
- Inefficiency of Gram Sabha
- Non formation of the FRCs
- Bureaucratic mismanagement
- Lack of land records
- Reluctance of forest authorities to give up control
- Alienation of tribals



SUGGESTIONS

- TSR Subramaniam Committee recommended a comprehensive approach to the forest management
- NC Saxena Review committee recommended to increase the tribal representation in the FRCs. It also said that forest dept should adopt a humane approach while dealing with the community



CASE STUDIES

- Dediapada, Gujrat
- Eturunagaram Forest in Telangana



WAY FORWARD

- Skill training & emp't opportunities
- Role of NGOs - awareness generation
- Strengthen laws - PESA



PESA

HEALTH FOR ALL

→ Right to Health Bill 2021, a pvt member bill was moved in Rajya Sabha in July 2022

HEALTH SECTOR OVERVIEW

- 1) Health professionals
  - ↳ Doctor to population ratio - 1:1456 (WHO 1:1000)
  - ↳ Highest short fall of Doctors - UP, Chhattisgarh
- 2) Infrastructure
  - ↳ Hospital beds 5:10000 people
- 3) Expense
  - ↳ Govt spending on health sector - 1.5% of GDP
  - ↳ out of the pocket expenditure - 62% (WHO)

# GENERAL ISSUES

- Social determinants of health
- Health divides
  - ↳ Rich vs poor
    - ↳ Lower health insurance
    - ↳ poverty health vicious cycle
  - ↳ Pub vs pvt
  - ↳ urban vs rural
- Health infrastructure
- Low focus on maternal & geriatric care
  - ↳ UN world population report 2022
- Less focus on mental health
- local - community level interventions
  - ↳ role of ASHA workers

RES.D

- IPR issues
  - ↳ branded vs generic pharma

Disease burden

- Double disease burden
  - ↳ NCD & CD
- under nutrition vs obesity
- WASH
  - ↳ water sanitation, hygiene
- Zoonotic diseases (eg) covid, monkey pox
- Drug abuse
- tobacco use

DATA

NFHS-5 (2021)

- 1) Demographic shift ; sex ratio 1020:1000
  - ↳ lower in PJ, NY, GJ, MH, MP, Assam
- 2) child sex ratio : 929:1000
- 3) TFR 2 ; UP, BI, JH > 2
- 4) child health
  - ↳ reduction in underweight to 32% (35%)
  - ↳ reduction in wasting to 19% (21%)
  - ↳ reduction in stunting to 35% (38%)
- 5) Reduction in child marriage to 23% (27%)
- 6) women
  - ↳ Anaemic - 67% (of reproductive age)
  - ↳ increase in contraceptive prevalence rate to 67% (54%)
  - ↳ increase in institutional birth to 69% (79%)
  - ↳ Ownership house/land colonies jointly 43%
  - ↳ Bank a/c - 74%
  - ↳ mobile - 77%

OTHER IMP DATAS

- life expectancy - 69.7 years
- IMR 32 deaths per 1000 live births
- MMR 103 deaths per 1000 live births

CONSTITUTION

- Article 21, 39, 42, 47

SDG

- Goal 3, Goal 6



→ malnutrition - hidden hunger

→ **FORTIFICATION**

- addition of key vitamins & minerals to food
- Eg rice, salt etc

NEED

- cereal centric policy → diet
- hidden hunger (NFHS-5 report, GNI)

CONCERNS

- Adverse health impact - excessive dosage

→ **ANTI MICROBIAL RESISTANCE (AMR)**

→ Antimicrobials becoming ineffective <sup>EG</sup> Antibiotics

- 49.5 lakh deaths in 2019 (Lancet report)
- leading cause of death
- easily curable diseases are now killing people due to AMR
- No antibiotic for certain bacteria
- over use - misuse and OTC
- Natural evolution
- Antibiotics use in animal husbandry
- water, sanitation & hygiene

**Role of state**

- Health in state list
- Poor record of outbreaks
- policy issues

DRUG PRICING

- Drug Prices Control order issued under ECA
- National List of essential medicines (NLEM)
- Regulation by NPPA

ISSUES

- ↳ exclusion of medicines from NLEM
- ↳ Lobbying by Pharma Companies
- ↳ API - import dependency on china

⏪ **3 GENERAL FAILURES - Prof Amartya Sen**

- 1) Neglect of primary health care
- 2) Pre mature reliance on put care
- 3) Lack of informed public discussion

### # RIGHT TO HEALTH BILL 2021

- make health a FR to all citizens
- ensure equitable access and maintenance of a standard of physical and mental health conducive for a life in dignity

### # GOVT PROPOSAL (AUG 2022)

- PM Samagra Swasthya Yojana
- ↳ (Subsuming PM-JAY, ABDM, PM ABHM)
- ↳ Aim to provide universal access to equitable, affordable and quality health care

### # OTHER

- Heal by India
- Heal in India
  
- One health approach
- Eat Right India mission
  
- ASHA workers - recognised as WHO World Health leaders award

### ≡ SUGGESTIONS

- IGTU FC & NITI Aayog
  - ↳ PPP model in health care
- Parliamentary standing committee on Home Affairs
  - ↳ Public Health Act to check and control over pvt hospitals
- NITI Aayog
  - ↳ Health insurance for India's 'missing middle'

### ➤ WAY FORWARD

- Provision of school health service
- 'National Tribal Health'
- Public Health & management cadre (PHMC)
- AYUSH
- WHO reforms

## ETHANOL BLENDING



- India achieved the target of 10% ethanol blending in petrol 5 months ahead of schedule



### ETHANOL BLENDING

- an agricultural bi-product mainly obtained from sources like sugarcane, rice, wheat or maize



### BENEFITS

#### ENVIRONMENT

- reduction in fossil fuel consumption
- less pollution
- NDC targets

#### ECONOMY

- reduced import of crude oil
- savings of forex
- energy security, volatility in prices
- self reliance
- job creation

#### FARMERS

- source of income



### REPORTS

- India's bio economic report 2022
  - ↳ 80 billion USD (2021)
  - ↳ likely to reach 300 bn USD (2030)
- NITI Aayog - EBP can save Rs 30,000 cr per annum



### CATEGORISATION

- 1st gen - from food crops
- 2nd gen - non food crops
- 3rd gen - algae



### STEPS

- 1) National Policy on biofuels 2018
  - 20% blending in petrol by 2030
  - categorisation
    - Basic (1st gen)
    - Advanced (2nd & 3rd)
  - Allows surplus food grains for ethanol production
  - R&D
- 2) EBP - Ethanol Blending program  
Govt advanced E20 to 2025 from 2030
- 3) PM JI-VAN  
Support 2nd gen biofuel production



### CHALLENGES

#### Production

- less production of ethanol
- Sugarcane - major source
- high usage of water
- inefficient land use
- food security concerns

#### Infrastructure

- Storage (E10 & E20 supply)
- supply chain issues
- interstate movement issues

#### Consumption

- vehicle manufactures - compatibility



### WAY FORWARD

- Augment production
- Environmental clearances for production plants
- vehicle manufacture - future ready (E85, E100)
- tax breaks for ethanol



### GLOBAL

- Brazil model



- Bio-circular economy
- waste to wealth

## SOIL HEALTH - LAND DEGRADATION



- 'State of the world's land and water resources for food and agriculture' report by FAO talks about soil pollution issue
- COP-15 of UNCCD held @ cote d'ivoire (w. Africa)

Reversing soil degradation is vital if we want to feed a growing global population, protect bio diversity, help address climate crisis  
Qu-Dongu (FAO DG)



### TERMS

#### LAND DEGRADATION

- Temporary or permanent lowering of the productive capacity of the land
- It is caused by climate variability and human activities

#### DESERTIFICATION

Land degradation in dry lands

#### LAND DEGRADATION NEUTRAL

amount and quality of land resources remains stable or increases

#

### REASONS

#### Anthropogenic

- Deforestation
- intensive farming
- over use of ground water
- over grazing
- over use of fertilizers
- expansion of agri, industrial & urban areas
- soil pollution
- wetland degradation
- illegal mining

#### Natural

- soil erosion (wind, water)
- natural disasters



### IMPLICATIONS

#### Economic

- ↳ agricultural productivity
- ↳ critical infrastructure 🌐 road

#### Environmental

- ↳ Biodiversity loss
- ↳ climate change

#### Socio-political

- ↳ food insecurity
- ↳ climate justice
- ↳ job loss, migration



### STEPS

- Soil health card
- Restoration of 26 mn degraded land by 2030
- wetland protection
- CAMPA fund for afforestation
- ZBNF
- NAP to Combat Desertification



### GLOBAL

#### UNCCD

- COP-15 "Land, life, legacy: from scarcity to prosperity"
- Bonn challenge - restore degraded land



### WAY FORWARD

- Afforestation
- Community efforts
- fertilizer sector reforms
- Crop diversification
- Satellite imageries

#### SDG: 15



### DOMESTIC

Gross Env't Product (Chhattisgarh)

ECO-SENSITIVE ZONE

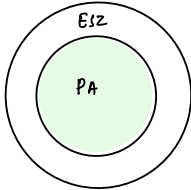


→ Draft notification of ESA in western Ghats



ESZ

- Ecologically fragile areas
- As per National Wildlife Action Plan (MoEF) land with in 10 km around the protected areas is to be notified as ESZ
- However the 10 km area can vary
- Notified under EPA, 1986



→ certain activities are permitted, some are regulated and some prohibited (mining)



SIGNIFICANCE

- shock absorbers for PAs
- protection of biodiversity
- prevent introduction of exotic species
- prevent man-animal conflict
- refine the envt near PAs.

# ISSUES

- 1) State govt opposition
  - Karnataka, Kerala etc
  - adversely impact the local residents
  - affect the developmental activities
  - No scientific survey has undertaken

- 2) Local people
  - people's opinion is not taken
  - farmers fear losing their livelihood
  - fear of eviction

- 3) Environmentalist
  - demand imposition of ESA
  - region already affected by unregulated development and anthropogenic pressure



SC ORDER JULY 2022

SC directed all states to have mandatory 1 km ESZ from the boundaries of PAs, NP, WLS and no new permanent structure or mining will be permitted



SUGGESTIONS

- Dr Kasturirangan Committee - 37% of the total land area of western ghats to be declared ESZ
- Gadgil Committee - entire western ghat is ESA

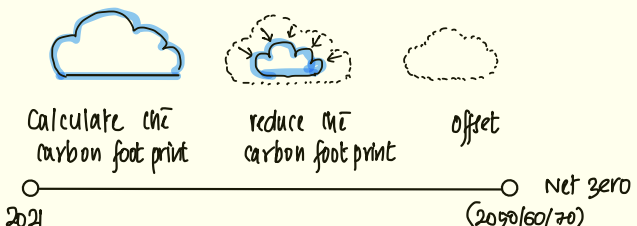
NET ZERO - NDC TARGETS

NEWS → India updated its NDC (Aug 2022)

💬 "one life one world"

**NET ZERO EMISSIONS**

- Refers to a balance where emissions of GHG are offset by the absorption of an equal amount from the atmosphere
- imp step to tackle climate change and its effects



Calculate the carbon footprint (2021) → reduce the carbon footprint → offset → Net zero (2050/60/70)

- Indian commitment @ COP 26; achieve Net zero emissions by 2070

**INDIAN CASE**

- 3rd largest emitter
- high population - needs
- focus on growth & development
- vulnerable to climate
  - ↳ extreme weather events
- lack of resources & technologies

# ISSUES

- 1) climate change
  - extreme weather events
  - India's vulnerabilities
- 2) climate targets
  - NDC is voluntary
- 3) COAL
  - phase out v/s phase down
- 4) climate backsliding
  - energy dilemma
- 5) climate justice
  - equity, CBDR
  - developed v/s developing
  - rich v/s poor
- 6) climate colonialism
  - 'colonialism in green'
- 7) Carbon colonialism
  - profit maximisation out of carbon fixing
- 8) Climate finance
  - rich countries not met their targets
- 9) climate denialism

**INDIA'S NEW NDC TARGETS**

- 1) reduce emission intensity by at least **45%** from 2005 levels by 2030 (15th NDC - 33-35%)
- 2) **50%** electricity generation from renewables (40%)
- 3) create **2.5-3bn** tonnes of additional carbon sink

# CHALLENGES

- 1) Funding - India need \$ 10 trillion to meet its net zero target
  - NDC is 'conditional'
- 2) Fossil fuel
  - dependence on coal & oil
- 3) Renewable energy
  - scaling up generation
  - technology dependence
  - raw material dependence
- 4) Clean energy
  - need to be in NSG
- 5) Economy
  - agriculture dependence
  - animal rearing
  - manufacturing focus

**INDIAN INITIATIVES**

- 1) One Sun One World One Grid  
 Launched by India & UK - world's first transnational network of interconnected solar power grids
- 2) Infrastructure for Resilient Island States

**Previous initiatives**

- 1) ISA
- 2) CDRI

**LIFE STYLE FOR ENVIRONMENT (LIFE) MOVEMENT**

**NEWS** introduced by India @ COP 26

**OBJECTIVE**


- promote environmentally conscious life style focused on 'mindful & deliberate' utilization instead of mindless & wasteful consumption'

**# ISSUES**

Production

- unsustainable production
- low life cycle products
- energy inefficiency
- exploitation of resources

Consumption

- Irresponsible consumption
- non-biodegradable  plastics
- pvt ownership vs public utilities
- pollution, waste generation

**» SUGGESTIONS - TERI**


- 1) focus on energy efficiency
- 2) use of biofuels
- 3) carbon pricing
- 4) carbon sequestration
- 5) use of renewables



## PLASTIC POLLUTION

 → Govt banned single use plastic (SUP) from 1<sup>st</sup> July 2022

### SUP

→ Plastic items that are used once and discarded  packaging items, polyethylene bags, straws etc



### REPORTS



- Annual plastic generation in India 3.5 MMT
- 30% plastic waste is recycled in India
- >40% plastic is in the form of SUP

### BENEFITS


- Cheaper & better than other materials
- Better shelf life
- Reduced pressure on wood producing trees
- Easy to transport

### # CONCERNS


#### ENVT

- >500 years to decompose
- pollution  land fill creation
- affect bio diversity  microbeads, SUPs

#### MARINE LIFE

- marine pollution  89% plastic in ocean is SUP (UNEP)


#### HEALTH

- toxic chemicals - carcinogenic  BPA
- toxic emissions from plastic burning
- bio accumulation
- bio magnification

#### SOLID WASTE

- inadequate solid waste mgmt
- plastic litter blocking drainages
- unsustainable tourism

### OTHER ISSUES

- sorting, collecting issues
- no cheaper alternatives
- enforcement of rules  EPR
- impact on plastic industry

### IMPACT OF SUP BAN

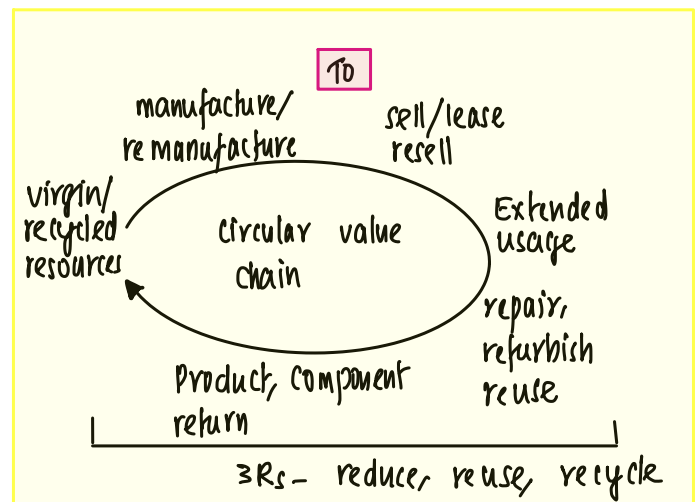
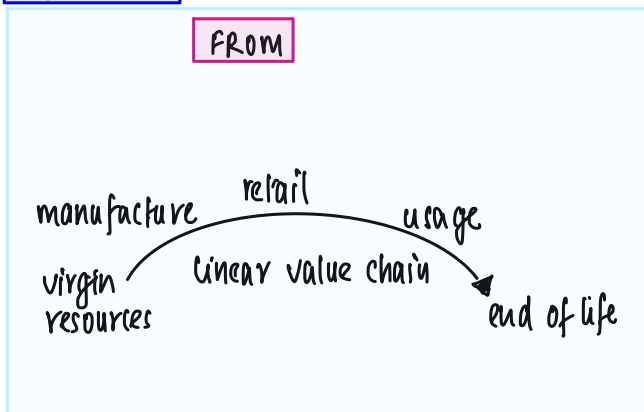
- Admin challenge
- affect small vendors/business



### PLASTIC WASTE MGMT RULES 2022

- 1) Extended Producer Responsibilities
- 2) EPR certificates
- 3) Compensation based on polluter pays principle
- 4) Centralised online portal

### ➤ WAY FORWARD




 GLOBAL

- ↳ China (2020)
- ↳ EU (2021)

## DOMESTIC

- ↳ 'Kasiru Dala' - Karnataka

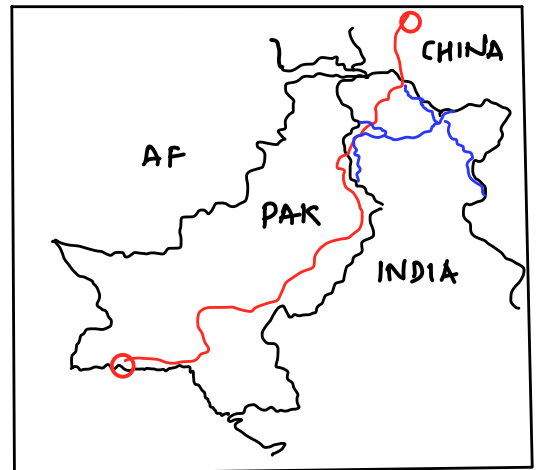
 NEED OF THE HOUR

- Establish international legally binding agreement (UNEA)
- Bio plastics
- Independent Env't Regulator in India

CHINA PAKISTAN ECONOMIC CORRIDOR (CPEC)



China & Pakistan signed a new agreement as part of CPEC phase 2 (Feb 2022)



# CPEC

Flagship project under china's BRI.  
It links Gwadar port in Pak to Kashgar Xinjiang, China.  
Phase 1 : Infrastructure & energy projects  
Phase 2 : Industrial cooperation  
The corridor passes through Pak, India

CHINA'S OBJECTIVES

- 1) Energy & trade corridor from middle east
- 2) Development of Xinjiang - Uighur majority province
- 3) Links strategically imp Gwadar port & IOR
- 4) solve china's 'malacca dilemma' - choke point

PAK'S BENEFIT

- 1) Chinese investment - boost to economy
- 2) counter USA

CHINA - PAK CONCERNS

- 1) Security concerns and unrest
- 2) Opposition in Pak - 'another east india co'
- 3) political and geological stability

INDIA'S CONCERNS

Passes through POK

- against sovereignty & territorial integrity of India
- geo strategic advantage of Gilgit Baltistan
- sensitive and disputed territories

External security

- facilitate military movements of china, Pak
- china Pak pincer strategy
- Gwadar port as chinese base
- String of pearls of china

Internal security

- cross border terrorism
- weapons & support to insurgency

Other

- expansion of CPEC - Af, CAR etc

INDIAN COUNTER STRATEGIES

- Development of Chabahar
- 'Necklace of diamonds' strategy
- 'Two Quads'

## E-WASTE



→ Draft e-waste management rules 2022



### E-WASTE

→ Electronic waste ie electronic products that have become unwanted, discarded and have reached the end of their useful life



### DATA (CPCB)

- India generated 1 million tonnes of e-waste in 2019-20
- Collected just 10% in 2018-19
- CPCB issued show-cause notices to 186 producers for not meeting collection targets

### # CHALLENGES

#### Generation

- wider use, mindless consumption
- cheap products
- low life cycle products
- lack of uniform stds (EG) mobile charger
- lack of recycling
- lack of consumer awareness

#### Disposal

##### 1) Pollution

- ↳ Air, water & soil pollution
- (EG) Imp. elements found in e-waste
- ↳ Lead, mercury, cadmium etc.

##### 2) Health risks

- ↳ negative birth outcomes
- ↳ affect lung function, respiratory effects
- ↳ DNA damage, cancer etc

#### Collection & recycling

- unorganised sector
- no strict implementation of rules (EG) EPR
- unscientific methods
- no large scale recycling



### STEPS

→ E waste rules

- EPR
- Buy back scheme
- Producer Responsibility Orgn

→ Draft rules 2022

- EPR
- Recycling targets
- Steering committee for monitoring implementation
- Env't Compensation Fund



### WAY FORWARD

- R&D
- awareness generation
- recycling infrastructure
- strengthen implementation
- 'circular economy'



### GLOBAL

BASEL Convention

HEAT WAVE

NEWS → Total heat wave days in 2022 over 5 times more than 2021



"We have a choice. collective action or collective suicide. It's in our hands"  
- Antonio Guterres (UN Sec Gen)

HEAT WAVE

- period of abnormally high temp over a region
- max temp reaches 40°C for plains; 30°C hilly areas
- Departure from normal → 4.5°C to 6.4°C

WET BULB TEMPERATURE

- Lowest temp to which air can be cooled by the evaporation of water into the air

URBAN HEAT ISLAND

urban-rural temperature differential



DATA

- India's avg temp has risen 0.62°C from 1901-2020 (IMD)
- India is on track to experience heat wave cross 35°C (WBGT) (McKinsey report)
- children are at increasing risk of heat waves
- heat wave related mortalities (2015-2020)
  - 2137 people died in north west India & 2444 in South India

# REASONS

- Global warming
  - ↳ rising GNGs
  - ↳ increased use of AC, automobiles, generators
  - ↳ deforestation
  - ↳ rapid urbanisation etc.
- urban heat islands

# IMPACT

ENVT

- global warming
- bio diversity loss
- melting of glaciers
- forest fires
- marine heat wave → cyclones

AGRICULTURE

- Decreased yield (EG) fall in wheat prodn
- Farm fires
- food insecurity
- food inflation

HEALTH

- increased mortality, morbidity
- spike in pollution
- overloading emergency services

ECONOMY

- peak electricity demand
- increased emission
- Industrial production affected

SOCIAL

- climate justice

CASE STUDY

- Brick kiln



### HEAT ACTION PLAN (HAP)-NDMA

- use materials that keeps indoor cooler
- early warning system about heat waves
- improving health infra to treat heat stroke patients



### WAY FORWARD

#### Mitigation-Adaptation

- Smart surfaces
- negative radio active forcing
- Increase green cover
- plan infrastructure & housing

#### Health

- medical insurance
- health advisories (hydration, nutrition)



### BEST PRACTICES

Ahmedabad - first South Asian city to prepare HAP

MARITIME SECURITY



→ Yuan wang-5 - chinese vessel docked in Sri Lanka port

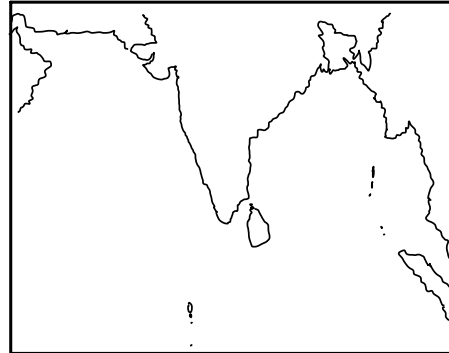


"Indian ocean is the region where India asserts, china eyes and the us intervenes"



IOR SIGNIFICANCE

- 1) security (external & internal)
- 2) Blue economy
  - ↳ EEZ, ocean resources
- 3) energy security
- 4) SLOC
- 5) bilateral relations with IOR



PIC 1. IOR - maritime boundary



INDIAN APPROACH

- India's sphere of influence
- Inclusiveness; openness; unity
- Net security provider
- Zone of peace
- bilateral/multilateral relations



CHALLENGES

1) Chinese expansionism

- Yuan Wang-5
  - 'dual use'
  - areal reach of >750 km
  - impact bilateral relations (Sri Lanka)
- string of pearls
- overseas military base
- weaponisation of supply chain
- South China sea dispute

major power rivalry

- Proxy wars
- Diego Garcia - us military base
- disputed regions - chagos

other

- choke points in IOR
- non traditional threats
  - Piracy
  - Drug-human trafficking
  - Terrorism
  - Organised crimes
- climate crisis & disaster mgmt
- India's strategic confusion



INITIATIVES

- Quad, INFRA
- SAGAR
- Multilateral cooperation
- military exercises
- 'Necklace of diamonds' strategy



**DATA PROTECTION LAW**

EG → Centre will draw the data protection bill

“Data is the new oil”

**DATA (IT)**

→ It is the collection of information, statistics & analytics that is stored in a computer or a network

**DATA**

→ > 692 million internet users in India (IAMAI report)

→ Big Data - 4Vs

**PRESENT LAWS**

→ IT Act 2000

**SIGNIFICANCE**

- 1) Big Tech
  - Data analytics
- 2) Economy
  - AI & IR
  - Digital economy, e-commerce
- 3) Govt
  - Digital India, e-gov
  - Policy making
  - National security
- 4) Individual
  - more informed choices
  - social media

**SC**

→ K.S. Puttaswamy case - Right to privacy is FR

**SUGGESTIONS**

→ Justice BN Srikrishna Committee draft data protection Bill 2018

**# CONCERNS**

**Individual**

- Individual privacy & safeguards
- no informed consent
- cyber crimes - cyber bullying

**Tech**

- Data manipulation
- Data sovereignty

**Govt**

- fake news - mob lynching
- Cyber security
- regulatory gap
- interlinking of data

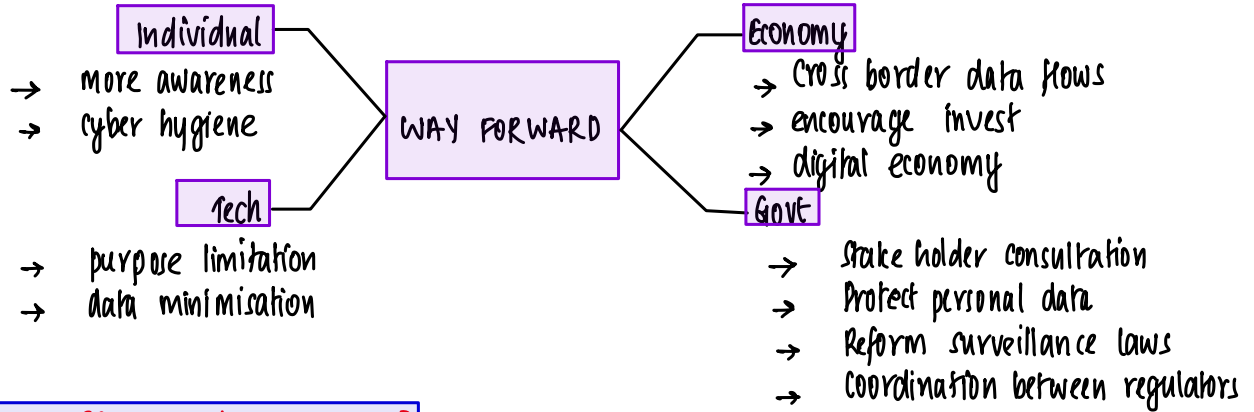
**Reason for withdrawing of the Bill**

- ↳ JPC recommendations
- ↳ Concerns by the tech industry
- ↳ data localisation
- ↳ objection by 'Privacy advocates'

**JPC RECOMMENDATIONS**

- 1) include non-personal data and hardware manufactures that collect data
- 2) social media platforms should be accountable for their content & set up a statutory media regulatory authority
- 3) social media firms should setup office in India and 'mirror copy' of data should be in India
- 4) Develop an indigenous alternative to SWIFT network for financial transactions
- 5) include psychological manipulation as harm
- 6) report data breach within 72hr
- 7) JPC members raised concerns regarding exemptions to central agencies

WAY FORWARD



EU DATA PROTECTION ACT (GDPR)


- General Data Protection Regulation.
- It aims to give control to citizens and residents over their personal data.
- GDPR provides for Right to be forgotten


RIGHT TO BE FORGOTTEN


It empowers individuals to ask orgns to delete their personal data


## MILITANCY IN J&K

 → Over 250 O&W arrested in J&K

 **O&W**  
→ helps militants in movement, ammunition supplies and accommodation

 **HYBRID MILITANTS**  
→ Who are not listed as ultras but persons radicalised enough to carry out a terror strike and then slip back into the routine life

 **LONE WOLFS**  
→ lone actor attack; someone who prepares and commits violent acts alone outside the command structure and without assistance from a group

 **RADICALISATION**  
→ process by which an individual or group comes to adopt increasingly extreme political, social or religious ideas

### # CHALLENGES

#### 1) Societal

- 'us vs them', polarisation
- marginalisation, distrust
- radicalisation - indoctrination
- 'soft targets'
- IDPs

#### 2) Security agencies

- face less militancy - traceability
- sleeper cells
- spike in incidents

#### 3) State

- infiltration - cross border terrorism
- create fear - prevent normalisation of life
- prove admin ineffective
- terror economy

#### 4) Technology

- social media, anonymity
- fake news, disinformation
- eco-chambers



### MEASURES

#### GOVT

- De-rad, counter-rad
- strengthen policing
- intelligence sharing
- monitoring cyberspace

#### Community

- 3 pronged counselling (Family - clergy - professionals)
- community based activities
- civil society / media
- effective counter narratives



### CASE STUDIES

- Mission Pehal
- Sri Lankan model

## NUCLEAR PROLIFERATION



- China's expansion of its nuclear arsenal
- Conference upholding NPT



'A nuclear war cannot be won and must never be fought'  
 - Joint statement by PS (UNSC)

### # ISSUES

#### geo political

- unstable security climate
- Russia - Ukraine conflict
- us - china - new cold war

#### Other

- actions of authoritarian leaders
- muscular military policies
- ineffective nuclear regims
- nuclear apartheid



#### DATA (SIPRI)

- Defence expenditure
  - USA 801 B<sup>n</sup> USD
  - china 293 B<sup>n</sup> USD
  - India 76 B<sup>n</sup> USD
- Nuclear inventory
  - Russia (5977), USA (5428)
  - china (350) India (160)
  - Pak (105)
- India top weapons importer in 2017 - 2021 period



### INDIAN CASE

#### Threats

- India - china border conflict
- china Pak axis - 2 front war
- TNWs by Pakistan
- Non-state actors - terrorism

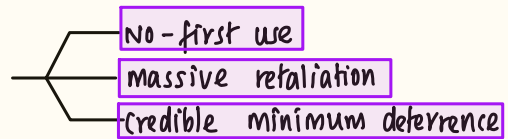
#### Instability

- Taliban in Afghanistan
- military junta in Myanmar
- Indo-pacific region

#### Agreements

- Road blocks to NSG entry
- Not an NPT member

### # INDIA'S NUCLEAR DOCTRINE



#### RETAIN NFU

- responsible nuclear power
- nuclear deterrence
- NSG waiver & civil nuclear deal
- no disproportionate drain on India's defence budget

#### ABANDON NFU

- Emerging challenges - new approach
- 2-front war - Pak's TNWs
- Ambiguous policy
- Need more fire power



### TRENDS

- Bipolar nuclear deterrence to tripolar nuclear structure
- state and non-state actors role
- Arms race - nuclear race
- Technology and cyber warfare



### NEED

- Nuclear deterrence
- strategic autonomy
- territorial integrity



### MEASURES

#### International

- NPT
- MECR (NSG, WA, AG, MTCR)
- CTBT, START
- Treaty on Prohibition of NWS



### WAY FORWARD

- Quad - AUKUS
- INFRUS
- Defence modernisation - indigenisation
- strategic autonomy

## CYBER SECURITY

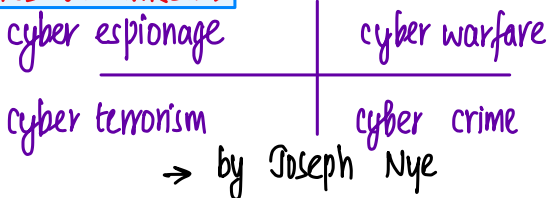
CS

These are techniques of protecting computers, networks and programs and data from unauthorised access or attacks that are aimed at exploitation

DATA

India reported >50,000 cybercrimes in 2020 with 12% surge over 2019; 578 incidents of fake news on social media (NCRB Data)

### TYPES OF THREATS



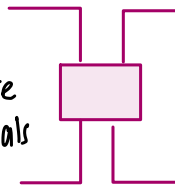
### CHALLENGES

#### Technology

- AI/IR; data
- Import dependency - hardware
- lack of cyber security professionals

#### global

- lack of global coopn
- state sponsored attacks



#### Individual

- digital illiteracy
- low reporting of cases

#### Govt

- lack of robust legal enforcement
- low preparedness

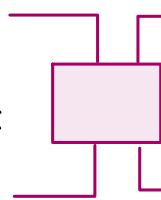
### IMPACT

#### Polity

- surveillance
- e-gov services

#### Social/individual

- cyber crimes
- fake news
- mental health
- grievance redressal



#### Economy

- financial stability
- ransomware

#### Security

- cyber war / terrorism
- non-state actors
- vulnerability of critical infrastructure

### MEASURES

#### LAWS / POLICY

- 1) IT Act 2008
- 2) National Cyber Security Policy

#### INSTITUTIONS

- 1) NCIIPC
- 2) NCSCC
- 3) CERT IN

#### OTHER INITIATIVES

- 1) cyber surakshit Bharat
- 2) cyber Crime volunteer

### WAY FORWARD

- 1) follow 'zero trust' model
- 2) Active defence
- 3) Awareness Creation
- 4) Indigenisation - R&D
- 5) Improve cyber hygiene

### BEST PRACTICE

- Cyberdome project Kerala
- Intelligence Fusion and Strategic Operations (IFSO)

## DEFENCE SECTOR REFORMS

### 👉 CHIEF OF DEFENCE STAFF

- A four-star military officer
- "Principal military advisor" to the Defence minister on all tri-services
- Permanent chairman of Chief of Staff Committee
- He will lead Dpt of military Affairs (DMA)
- member of Defence Acquisition Council Defence Planning Committee
- military advisor to the nuclear command authority



### ADVANTAGES

1. Modern warfare require strategic planning
2. facilitate jointness and integration of 3 services
3. Service chiefs devote time to operational roles
4. Harmony between civil & military admin
5. Efficiency in national security

### CHALLENGES

1. service parochialism
2. civil-military relations
3. changing nature of warfare
4. indigenisation

### ➤➤ WAY FORWARD

- Joint Services Act
- Integrated theatre commands



### GLOBAL

- >70 countries have CDS like post

### 👉 INTEGRATED THEATRE COMMANDS

#### 📄 THEATRIZATION

ITC is to synergize the capabilities and combat potential of the 3 services

#### PRESENT SITUATION

- 7 commands for Army & IAF
- 3 commands for Navy
- 2 joint commands
  - i) A&N ii) Strategic Forces Command

19

#### 🗨️ BENEFITS

- Tri service synergy
- Optimisation of resources
- integrated training
- readiness against 2-front war

#### CHALLENGES

- 1) Consensus among 3 forces
- 2) Mismatch in assets
- 3) Integration of other forces ; BSF, ITBP etc
- 4) Threat of sub conventional warfare & terrorism
- 5) military modernisation

#### 🗨️ COMMITTEE

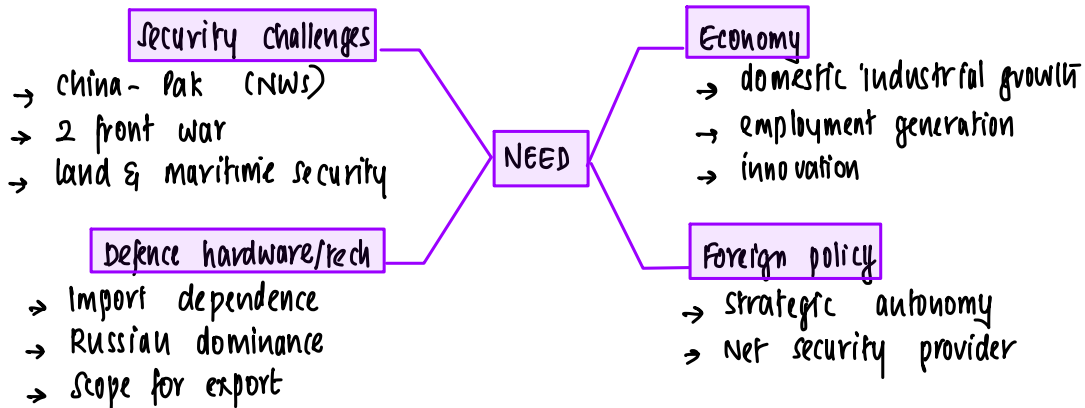
- Kargil Review committee recommended creation of CDS & ITC

#### ➤➤ WAY FORWARD

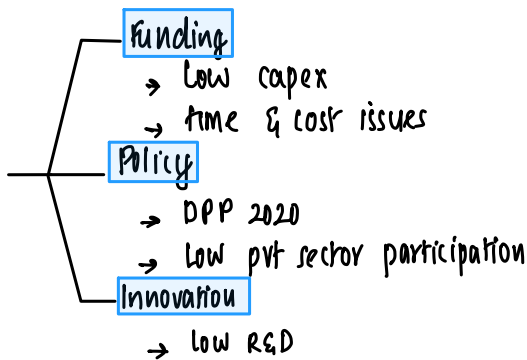
- indigenisation of defence
- budget allocations
- national security strategy

## DEFENCE INDIGENISATION

### # NEED



### # CHALLENGES



### » WAY FORWARD

#### Reforms

- Defence organisational reforms
- DADO strengthening
- tech participation
- Incentivise pvt sector
- Budget allocation



## INDIA CHINA

### BACKGROUND

- Historical & cultural relations
- Panchasheel principles
- Border conflict - 1962
- India's major trade partner
- multilateral cooperation



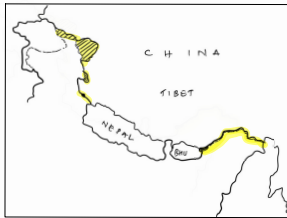
'It would be difficult to realise the goal of an "Asian century" if the two countries did not join hands'

→ S. Jaishankar (MEA)

### # CONFLICT

#### Border issues

- Differing perceptions of LAC
- Border conflicts - Galwan valley
- 2-front war
- infrastructure development along the border
- 'Salami slicing' by China



#### Water disputes

- dam building and water diversion along Yarlung Tsangpo (Brahmaputra)

#### Maritime issues

- 'String of pearls'
- South China sea dispute
- Chinese Monroe doctrine

#### Power confrontation

- objecting India's NSG, UNSC entry
- China-Pak relations
- 'strategies' of China - 3 warfare - 5 fingers
  - multiyear coercion campaign
- wolf warrior diplomacy

#### Hurdles to peaceful settlement

- boundary demarcation
- 'boxed up' in South Asia
- Chinese expansionism

#### Measures

- Defence modernisation, indigenisation
- Comprehensive border management
- Strategic balancing → CBMs
- Focus on economic growth

### # COMPETITION

- Trade and investment
- resources and market
- Asian leadership
- 'weaponisation of supply chain'
- Belt and Road Initiative

#### Measures

- attempts to economic decoupling
- Stringent FDI norms
- Project cancellations
- mandatory 'country of origin' details
- digital strike - ban on apps
- 'vocal for local'

#### Economic relations

- Trade deficit
- Dependence - China less dependent on India
  - India more - electronics, pharma etc
- Imports and consumer options
- Re-routing of goods to India
- Chinese funds in Indian startups

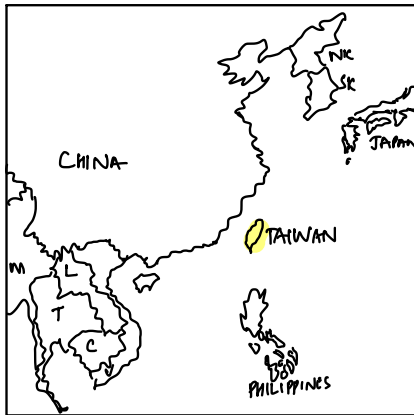
### # COOPERATION

- WTO
- UNFCCC
- BRICS
- SCO

👉 CHINA - TAIWAN

"One people, one culture, one language one country"  
 → xi Jinping

< china (PRC)  
 Taiwan (ROC)



ONE CHINA POLICY - under this, any country willing to establish diplomatic relations with china (PRC) must acknowledge that there is only 'one china' and has to cut down formal ties with Taiwan (ROC)

ANALYSIS

- India, USA etc accepts 'ocp'
- However India maintains economic relations with Taiwan
- USA Taiwan defence relationship

## INDIA - USA

NEWS → US surpassed China to become India's top trading partner (2021-22) "We are headed for a poorer, meaner and smaller world"

### BACKGROUND

**Phase 1**

- NAM
- US-Pak relations
- US aid to India

"World order is militarily unipolar, economically multipolar and politically confused"

Shiv Shankar Menon

**Phase 2**

- India-USSR
- Pokhran 1

**Phase 3**

- end of Cold war
- NEP of 1991
- Civil nuclear deal
- emergence of China

**Phase 4**

- bipartisan consensus
- strong ties (Quad, I2U2)

### # CONVERGENCE

#### Political

Democracy, shared values

#### Strategic

Counter-China  
FOIP

#### Global Issues

Counter Terrorism, climate change

#### Diaspora

People to people relations

### # CONCERNS

#### Geo-political

- USA vs Russia, China, Iran
- withdrawal from Afghanistan
- ties with Pakistan

#### Economic

- WTO
- IPR (Special 301)
- 'Fed rate hike'

#### Sanctions

- CAATSA

### # COOPERATION

#### Defence

- major defence partner
- 4 foundational agreements
- defence deals

#### Strategic

- 2+2 dialogue
- Quad, I2U2

#### Economic

- Trade relations
- IT/ITES
- IPEF

### # China Factor

#### Pro

- counter Chinese expansionism
- Quad, AUKUS
- China+1

#### Cons

- 'G2'
- economic integration
- Chinese investments
- India shares border with China

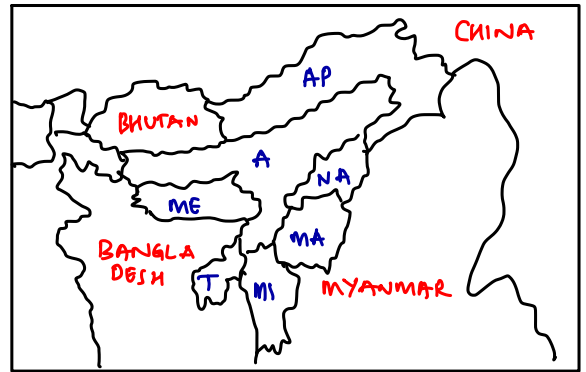
## NORTH EAST INSURGENCY



Govt intends to withdraw AFSPA completely from the northeastern region



## NORTH EASTERN STATES



## NE REGION

- geo strategic location
- ethnic & cultural diversity
- rich in biodiversity & natural resource
- insurgency related issues

## # NE INSURGENCY

1. Separatist insurgencies demanding independence
  2. Autonomist insurgencies asserting sub-regional aspirations
  3. Intra-ethnic conflicts
- South Asian Terrorism Portal - Insurgency related deaths in Assam, Manipur & Nagaland have decreased from 1070 (2008) to 17 (2020)

## INSURGENT MOVEMENTS

- 1) ULFA - create an ind. state
- 2) NDFB - Bodoland
- 3) NSCN (IM) - Nagalim
- 4) PLA - Manipur

## # REASONS

1. Colonial legacy
2. ethnic diversity
3. demographic change
4. low infrastructure development
5. sense of isolation
6. external support
7. hardline counter insurgency - AFSPA
8. inconclusive peace talks

## 👍 STEPS

1. Constitutional Provisions - Art 371A; Schedule V
2. Innerline Permit system
3. Peace talks and suspension of operation
4. Rehabilitation schemes
5. Infrastructure & connectivity development
6. AFSPA & counter insurgency operations
7. Coordinated operations with Myanmar

- 👈 COMMITTEES - xaxa  
- Bezbaruah

## ➡ WAY FORWARD

- understanding culture & identity
- infrastructure development & connectivity
- border management
- counter insurgency operations

## AFSPA - ARMED FORCES SPECIAL POWER ACT

### AFSPA

Section 3, AFSPA empowers the governor or the central govt to declare any part of the state as 'disturbed area' if in its opinion there exists a dangerous situation in the said area which makes it necessary to deploy armed forces in the region

### POWERS UNDER AFSPA

1. Section 4 : authorised officer can use force or open fire or arrest without warrant
2. Section 5 : arrested person should be handed over to the nearest police station with 'least possible delay'
3. Section 6 : immunity to the armed personnel

### AREAS WITHIN AFSPA

→ Manipur, Nagaland, Assam, Arunachal, J&K

### SC

→ Naga Peoples Movement of HRs v UOI, 1998  
SC upheld the constitutionality but gave imp directions:

- desirable to consult state before declaration
  - declaration has to be for limited duration
  - use minimal force
- SC in 2016 ruled that armed forces cannot escape investigation for excesses

### # CRITICISMS

- violation of constitutional provisions
- militarised approach to security & human right violations
- opposed by people ; human rights orgn

### COMMITTEES

→ Justice BP Jeevan Reddy committee & 2nd ARC recommended repeal of AFSPA



## ROLE

### POSITIVES

- Democracy deepening
- Access to information
- Communication
- social capital
- EG → 5 year old mahiruh irfan (J&K) viral video on online education
- positive role during covid-19, disasters like floods

### NEGATIVE

- Anonymity, fake news, disinformation
- cyber crimes, cyber bullying
- online radicalisation,
- cancel culture
- echo-chambers
- Right to privacy
- Data manipulation; Big Tech vs state
- EG → Cambridge analytica
- mob lynching



## MEASURES

LAWS - IT Act 2000

- IT rules 2021

- ↳ Traceability
- ↳ Due diligence



## CHALLENGES

- IT rules
- vagueness
- affect end to end encryption
- criminal liability on intermediaries
- Splinternet
- Pegasus - surveillance



## IMP JUDGEMENTS

- Shreya Singhal case, 2015
- K.S. Puttaswamy case, 2017
- Anuradha Bhasin case, 2020



## WAY FORWARD

### Govt

- Data protection law

### Tech Co's.

- Due diligence
- Purpose limitation, data minimisation

### Individual

- cyber hygiene



## CASE STUDIES

- Apple vs FBI
- Pegasus
- Chinese 'great fire wall'