06-Jan-22

INDIAN HUMAN GEOGRAPHY

Population Geography of India

1. Growth, distribution, density of Pop'n
2. Demographic Attributes
   - @ Age Structure
     - 0-18 - Young
     - 53% 18-60 - Mature
     - 60+ - Old
     - → work Work force
     - → Longetivity (Life Expectancy)
     - → dependency ratio
     - * Demographic Revolution (windows)
     - * Geriatrics
   - b Sex-ratio — 940 female/1000 male
     - → HDI → Gender Inequality Index
     - → Women Empowerment Mission - 2017
       - National
   - c Literacy rate
   - d Migration
     - Domestic
     - International
     -] Problems
3. Pop'n Problems & Policies
   - (① , Geriatrics , Dema dividends (work force, longetivity etc) , anti-natalism , health)
4. Health Indicators + Food security

Distribution, Density & Growth of Indian pop'n
↳ Pattern

- India accounts for 17.5% of global pop'n forming 2nd most populous country of world. [2.4% Land area, 17.5% Pop'n]
- In terms of natural conditions (relief & climate) along with different levels of demographic cycle, ↳ diff. dema stages

Pop'n Distribution is highly uneven.

This is justified with [UP (1st), MH (2nd), BR (3rd), WB, Andhra P., MP] accounting for more than 50% of country's pop'n.

Density Distribution (For geographical analysis of pattern)

- India is a dense clustered country with pop'n density of 382 persons per sq. km. (Global - 40 persons/sq. km) (UNFPA)
- Density distribution involves uneven pattern with
  - Dense clustered
  - Moderate clustered
  - Sparse clustered locations

Dense Clustered Locations (BR, UP, PB, HR, Assam, KL, TN, JH, Goa, WB, All UTs except A&N)

- have pop'n density more than country's average
- it includes states of Northern plain along with (4) Peninsular states (KL, TN, Goa, JH (Jharkhand))

*- Bihar (1100 persons/sq. km) and U.P. forms dense clustered states due to their surplus pop'n (bcoz they are in older dema cycle)

* Punjab, HR and Assam projects dense clustered characteristics due to agricultural attractiveness & Thus unabated immigration (uncontrolled)

- KL, TN represents dense clustered states due to economic attractiveness involving both agriculture & industries

- JH with industrial attractiveness & Goa with tourism related attractiveness

- W.B (1000 persons/sq.km) is gradually declining as attractive centre with both agrarian & industrial attractiveness due to lack of generation of economic prospects. (economic)

- All Union Territories (UTs), except Andaman & Nicobar Islands, represents high pop'n density.
  It is largely due to their small geogsraphical size

  for National Capital Territory (NCT) (11,000 persons/sq.km) & Chandigarh (9000 persons/sq.km), exponentially high pop'n density is due to politico-economic attractiveness & thus immigsration.

Moderate density Zones (RJ, GJ, MP, CR, A.P., OR, UK, MH, KN, Meghalaya, Tripura)

- It includes the states that have pop'n density fringing near country's average.
- It fundamentally includes those states of the country which combines extremely dense clustered as well as sparse clustered locations within their political domain.
- (RJ, GJ, MP, CR (Chattisgarh), Andhra.P, OR (Odisha))
* The states of UK, MH, KN, Meghalaya & Tripura are also included in this category.

Sparse Clustered Locations (Arunachal P., A&N Is., J&K, HP, Sikkim, Nagaland, Manipur, Mizoram)

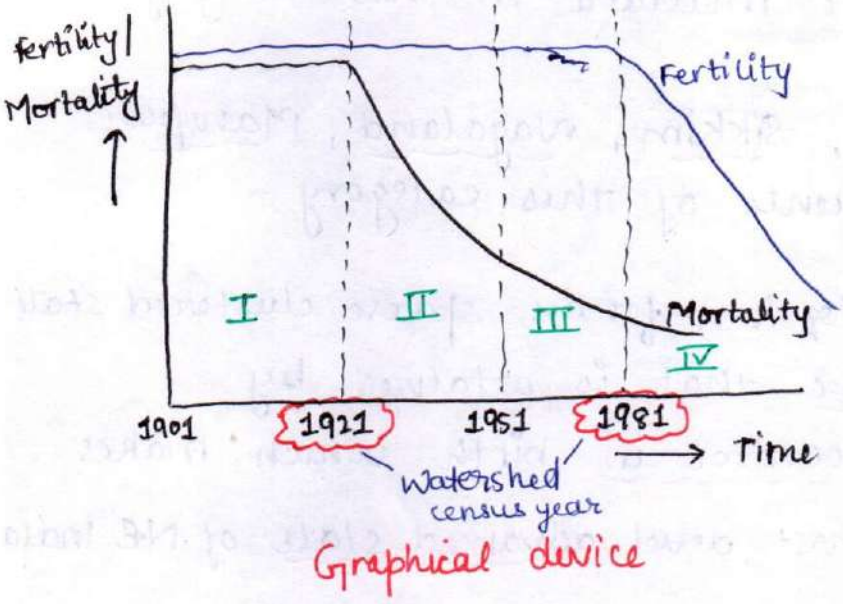
- It includes the administrative units with pop'n density lower than the country's average
- It is thus comprised of unfavourable locations having lesser pop'n.
- Arunachal P. sparsest clustered state (17 persons/sq. km) (Primitive cultural identity majority. Eg: Lohitas, Cookis) (High birth & death rate)
  &
  Andaman & Nicobar Islands the sparest clustered UT (46 persons/sq. km) are included in this category
- Jammu & Kashmir, HP, Sikkim, Nagaland, Manipur, are the other constituents of this category

** Mizoram (52 persons/sq. km) forms sparse clustered state due to small pop'n size that is attained by pop'n planning thus control in birth which makes Mizoram culturally most advanced state of NE India

07-Jan-22

Growth - Trend (Time) - Demographic Cycle in India traced since beginning of 20th century (1901 censes)

Phase		
I	1901-21	- Phase Stable Pop'n Phase
II	1921-51	- Phase of slow growth of Pop'n
III	1951-81	- Phase of Explosive/Exponential Growth of Pop'n
IV	1981-2011	- Phase of growth (Pop'n) with stability



Graphical device

Decedal Growth Rate

1971-81 - 24%

1981-91 - 23%

1991-2001 - 21%

2001-2011 - 17%

Fer - Birth Rate
Mor - Death Rate

(I) Stable Pop'n Phase

- demarcated b/w 1901-21 Censuses
- India having high fertility with counter-balancing high mortality (due to lesser life expectancy & higher infant mortality)
- ∴ The total pop'n thus remained stable.

(II) Phase of slow growth of Pop'n

* - 1921 census is considered to be watershed Census year because India started controlling the death rate (by controlling starvations (Food insecurity) & outbreak of epidemics)

- Demarcated b/w 1921-51 censuses, this phase involved consistent high fertility

- The ever-increasing gap b/w dipping mortality and high fertility reflected in growth of total pop'n.

(III) Phase of Explosive/Exponential Pop'n Growth

- B/w 1951-81 censuses.

- Reflecting consistent dip in mortality with static high fertility.

- Exponentially high developed gap b/w the 2 reflected in exponential growth rate of pop'n,
  * with 1981 census recording highest decedal growth rate of 24%.

(IV) Phase of growth of Pop'n with Stability

- * 1981 census the watershed census year with recognizable decline in fertility trend.

- Demarcated b/w 1981-2011 censuses, this phase reflectes ever-decreasing gap b/w dipped mortality & dipping fertility.

- The 17% of decedal growth rate (in 2011 census) involves

a) Higher than global decedal growth of 13%.

b) 3rd highest from among the most populous 10 countries of the world (after Nigeria (24%) & Pakistan (23% of decedal growth rate))

* c) for the 1st time, Empowered Action Group (EAG) states collectively accounting for 46% of country's total pop'n
* have started controlling fertility (projecting significant decline in the decedal growth rate of country's pop'n)

EAG states ⇒ (8)

UK	CR
UP	MP
BR	OD
JH	RJ

Demographic Attributes

- Indian demographic attributes (or variables) involves the analysis of

a) Age structure — workforce, dependency ratio, longetivity → demographic dividend, revolution windows; Geriatrics

b) Sex-ratio

c) Migration

- Analysis of these demo attributes facilitates understandin of requirements of
  - Planning demographic dividend
  - Planning Geriatrics
  - Women Empowerment
  - Generating Regional parity.

Age Structure

- Represented by Age-sex Pyramid in the demographic studies Age Structure depicts share of total pop'n in 3 different age groups (Young age, Mature age, Old age)

- In this age groupings, young and old age are considered to be dependent pop'n

- India ~~re~~ presently incorporating 53% of total pop'n in working age group thus depicts (Used dependency ratio

Pop'n projections reveal that by 2031 census, share of working age pop'n will (↑) to 60%.

P.T.O

Additionally, by 2031 half of the working age pop'n will be in the most productive age group (39 to 49 years which combines experience with physical calibar/capability)

Indian dominance of working age pop'n (or (W)ed dependency ratio) is thus here to stay.

* This is recognised as Demographic Dividend (census) or Demographic Revolution. (max share of pop'n in working age grp) (Wed dependent ratio)

(UNFPA 2018-19 Projections)

- In comparison to countries like China (which started its demographic revolution in 1994 & will experience the revolution till 2031), India marks the demographic windows (UNFPA) to remain open till 2055 (2018-55 that is 37 years) of dominating share of worker force in total pop'n.

- The Regional Pattern of demographic windows projects major variations as different states are in different stages of demographic cycles.

Southern states like Kerala & Tamil Nadu have closed their demographic windows in 2018 (they were 1st to reach the levels of demo. divi.)

In comparison, most of the EAG states (except UK & OR (Uttarakhand, Odisha)) have demographic windows fully open till 2055.

[EAG States ⇒ (8)
UK, UP, BR, JH, OR, CR, MP, RJ

(Census projections)

- This regional pattern of the demographic windows projects evolving generational gap b/w North & South India.

This is depicted by

a) Almost 15 years from now (2036), Tamil Nadu will have average age of 12 years older compared to pop'n in Bihar.

Moreover, no. of child birth in Bihar will continue to be greater than the no. of child birth in Kerala 40 years ago.

b) Indian demographic trend though overall is projecting much stability however with 2 defined speeds relating to North & South of India, and it is therefore that more than 1/3rd of the total pop'n (↑) in the country (b/w 2011 to 2036) will be from the states of Uttar Pradesh & Bihar (in comparison, T.N & K.L will project decline in pop'n).

It is also projected that Bihar will surpass Maharastra to be 2nd most populous state of the country & Rajasthan will (↑) the pop'n size greater than T.N.

c) Indian Age structure transition from very young country to mid aged country will also project North-South divide with southern states having average age of more than 40years whereas Bihar will continue to hold the tag of the only state with average age of less than 30 years.

(*) Demographic analysis of workforce though essentially is based on levels of dependency ratio but economically it involves (3) more indicators (outlined by NITI Aayog as sources of growth) Total (4) indicators of growth (to trigger Demo. Dividend for growth of economy)

a) (↑) in Labour Force Participation Rate

that is (↑) in proportion of pop'n in ₱ working age grp willing to work. (Gender empowerment)

b) (↑) in Employment Rate

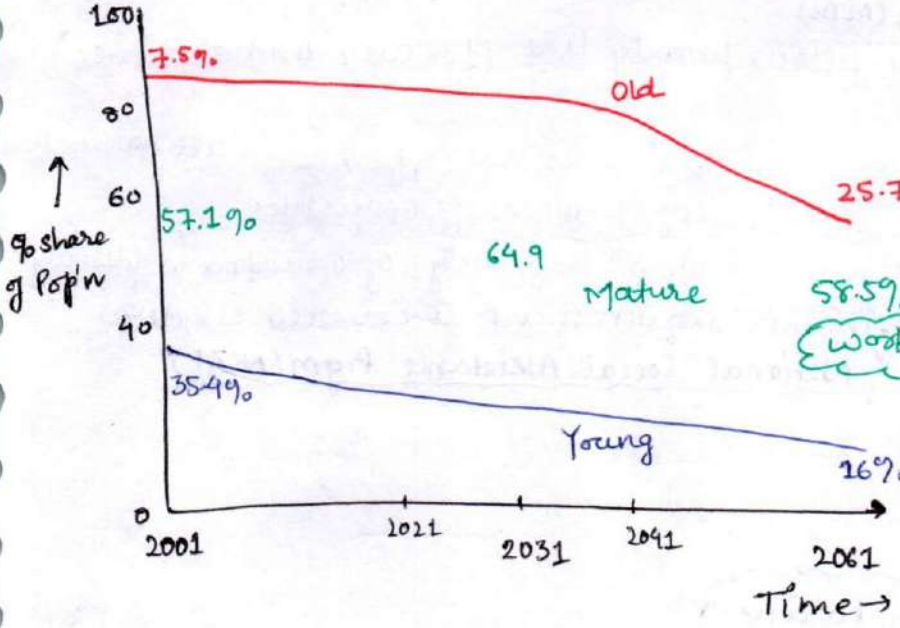
that is (↑) in the proportion of the pop'n willing to work and finds gainful job.

c) (↑) in Labour Productivity Rate

that is (↑) in output per capita that depicts work efficiency. (skilling)

d) (↓) in dependency ratio (already done)

i.e. (↑) in the share of working age pop'n which is attained in the country & will remain prevalent for 25-30 years.



↑ in Geriatrics & dependant Pop'n

Old Age
8% - 2001 ↑
26% - 2061

Max
Working age
2036-2046

(↓) ⇒ (↑) in depend. Pop'n

Young ↓
35% 2001
16% 2061

Geriatrics → Pop'n study that is related to ~~ao~~ old age cohort.

By 2050-55,

① demographic window will be closed

② (↑) in dependency ratio i.e. (↑) in pop'n share of old age pop'n **Geriatrics**

③ (↑) in e^0 that represents (↑) in health facilities
nutritional support
favourable Eco.-Social envr.
+ve

India
- (↑)ed e^0 (67 yr - M, 72 - F)
- Higher e^0 in urban areas than rural, however with out migration of working age pop'n from rural areas, there is higher share of concentration of old age pop'n in rural India (accounting for >70% of old age pop'n)

Geriatrics
-ve
Problems of (↑) in Longetivity

1) rise in nuclear families (growth of occidental culture)

* 2) absence of desired health infra (in tackling age related diseases)

* 3) absena of social acceptance of "requirements" of aged pop'n (>75% of old age pop'n in rural India)
*(90% were engaged in unorganised thus not entitled to pension)

4) general absence of centrality of geriatrics in demographic planning

- Rashtriya Vayoshri Yojana 2017 Assisted by Mo Social Justice & Employment
  - ↓ Assisted living Devices (ALDs)
  - Phy. aid to ~~any~~ old age below poverty line (for any immobilities)
  - ↓ dignified (self dependency) living

But it is not effective in all parameters of Problems of Geriatrics (not centrality of Geriatrics in planning)

- The consistent catering of financial requirement is covered under old age pension part of National Social Assistance Prgm (NSAP)

Geriatrics
Not big challenge today but we are not equipped for tomorrow

Sex Ratio - Gender Parity

- India has been historically eg. of gender based discrimination oriented society

a) reflected by Sex Ratio

Temporally

- in 1951 11 Adm. Units were having sex ratio above equity
- in 2011 ① Adm. Units Kerala, Puducherry have above equity sex ratio.

Spatially

Compared to World

- UNFPA identifies that any sex ratio <990 to be regressive
  India → 940 females/1000 males
- Global sex ratio at 984/1000 male
- 2nd Lowest sex ratio of India among top 10 most populous country

Russia, Japan, USA, Brazil — above equity

Indonesia, Pakistan, BAN, Nigeria — higher than India

India 2nd Lowest after China - 927
↳ (rigidly implemented) anti-natalism

Internal Regional Pattern

- Kerala, TN, Andhra P, Pudu, Lak., A2N have higher Levels of sex Ratio
- HR (877) Chandi (818) PB NCT — Poorest sex-ratio
- Child sex Ratio is more challenging at 914
  No. of girls 0-6 yrs/ 1000 boys of 0-6 yr.
  with consistent decline in last 3 censuses (child sex Ratio)

P. T-O

- None of N" states have child sex ratio above 900
- Only N-E states girls child is welcomed (better child sex ratio)

b) reflected by Gender Inequality Index (GII of HDI)
(National Women Empowerment Mission 2017)

GII

- GII is a composite measure of reflecting inequality in achievements b/w Male-Female pop'n in 3 dimensions

i) Reproductive health —— Maternal Mortality Ratio (MMR)

~~Ratio of~~ no. of maternal deaths per lakh ~~to the~~ no. of live birth per year
No./Lakh live births

at 122 deaths/lakh live births

highest MMR among BRICS countries

Adolescent fertility Rate (AFR)

ii) Labour force Participation Rate

No. of births to women aged 15-18 yrs/ 1000 women in same age ~~age~~

highest among BRICS

National Women Emp. Mission 2017

① PM Matru Vandana Yojana

↓

conditional wage loss compensation programme (to ↓ MMR) so as to ensure medically required leave to females in unorg. sector.

along with

Integrated child Devpt Scheme ← • ICDS, 1975
• Janni Shishu Suraksha (Institutional delivery)

② Sabla (to ↓ AFR) 2010

Adolescent Girls Empowmt Pgm

Nutritional (Centre ~~sponsored~~) State 50:50

Non-Nutritional (50:50 share Centre & State) (100% centre sponsored)

↳ girls entitled to take home ration/hot cooked meals

out of schl girls (not attending school) 11-15 age & all girls b/w 15-18 are entitled to it.

(bcoz schl attending girls are getting mid-day meal in schl.)

Non-Nutritional
↳ Health Counselling
Career "
Skill Devpt
Sanitary
Folic Acid tablets (supplements)

(2) Indicators of Gender Inequality:

i) Reproductive health – MMR & AFR

ii) Labour force Participation Rate (synonymous to Emplyt Rate)

iii) Empowerment

ii) **Labour force Participation Rate** = Emplyt Rate (in global) — In India Both are different

Proportion of country's working age pop'n engaged in labour Mkt.
% share

India depicts lowest female participation
+ highest gap b/w F & M participation among BRICS members

(3) STEP (Support to training in Employment Pogm) priority pogm

- MSMEs
  - supporting women entrepreneurship
  - skilling (will be done in Eco'ic Geog.)
- Mahila e-haat
  - Supporting e-platform for women Entrepreneur's products & their mkting
    - SBI participation for fin. assistance
    - IRCTC participation for logistics.
- Mahila Shakti Kendra
  - convergent support services to Rural Women (involving)
    - Skilling, e-literacy, Awareness abt Nutrition (health), input supply chain.

—*—

(4) Protection (protective clause of Nat. Women Empowerment missions so as to minimize vulnerability of female pop'n)

(Education, Bonded labour, rescued sex-workers etc) (Natural calamity, Social status, Economic status)

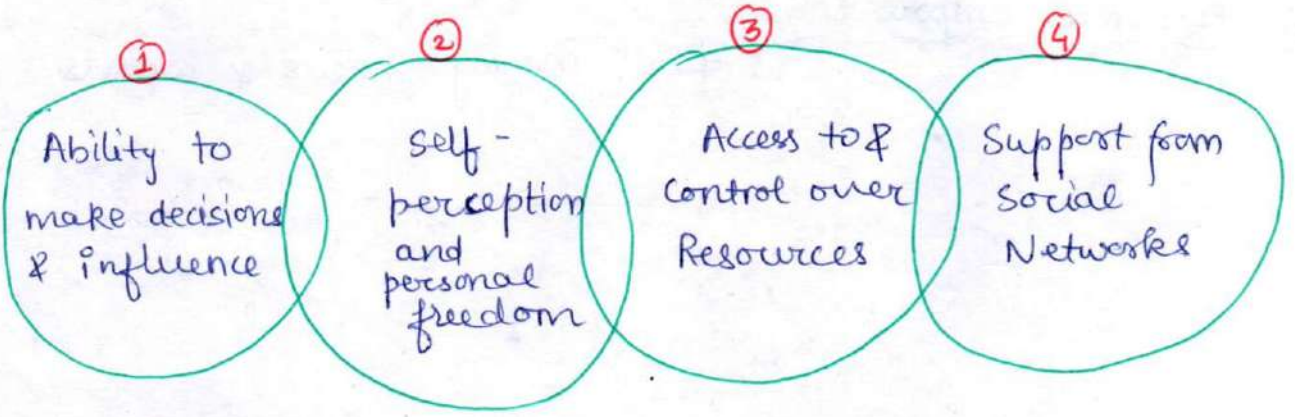
- Swadhar Grah for all women in difficult circumstances, providing temporary shelter till the time that settlion with displaced females or regeneration of economic prospect is attained.
- Sakhi One Stop Centre for Med., legal, police, counselling support for women.
- SHE-Box sexual harassment electronic box (e-box) & protection oriented towards protect" of females at workplace.

iii) **Empowerment**

- % share of seats in National Parliament held by females
  - Poor status of India (2nd Poor, after South Africa) among BRICS
- % share of total Pop'n aged >25 years to have attained secondary education
  - Poor status of India among BRICS for both males & females

Key Dimensions of Women's Empowerment — UNFPA

what affects a **women's ability** to **control** her own **circumstances** and fulfil her **own interests** and priorities?



Types of Empowerment

There are (5) main different types of empowerment

(1) **Cultural Empowerment**

Things to do with : language, food, clothing, religion, customs & history.

(2) **Political Empowerment** :

Things to do with : government, voting and politics

(3) **National Empowerment**

: decision making

(4) **Societal Empowerment**

: the community, other people, protesting or complaining when one section of society is treated unfairly.

(5) **Economic Empowerment**

: jobs, money, needs & wants

Migration - Demo. Attribute

- based on census data that involves
  - migr. by place of birth
  - migr. by place of last residence

→ Cause of Mig.

→ Since 1981 census

- In accordance of 2011 census,
  - 25% of total pop'n are migrant
  - Majority of migrants (>75% migrants) have economic cause of migration.
  - Trends of Migration (Intra-national)

* includes both
Sectoral (Rural, Urban) & Regional (same state, different state) migr

1. Rural - Rural
2. Rural - Urban
3. Urban - Urban
4. * Urban - Rural

1. Rural - Rural (major-most migr trend) → (cause) inequalities in levels of agri. devpt.

→ Intra sectoral Migr

Intra Regional ← higher volume of mobility
- Awadh plains (eastern UP) → Rohilkhand plains (western UP)
- Plateau interiors → Deltaic plains (Andhra; Odisha)

Inter Regional → lesser volume of mobility

UP, Bihar (pop'n surplus) → Source Area

PB, HR, Assam (agri. dev'ed) → Destination → 2011

(2) Rural-Urban – Inter Sectoral Migr has been the dominating most migr in Independent India, however,

* 2001 census onwards, dipped to 2nd rank.

* India has successfully bridged "gap" b/w Rural & Urban areas (Real or perceptional)

Cause:
- sustained push both real & percep. in rural India
- additionally multiplied due to cc. related vulnerabilities of rural activities

• Real ↓

– Rural migrants gamble or 'Queue' for formal urban jobs, accepting unemployment or under employment in the informal sector in the hope of being absorbed in the formed sector.
This leads to

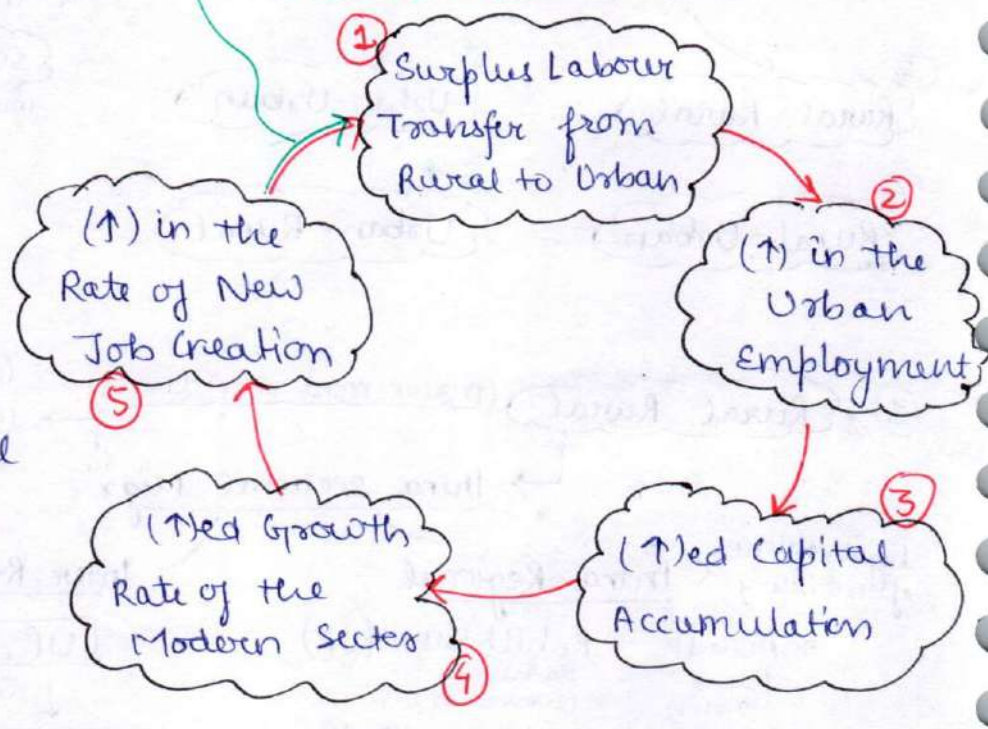
◦ Urban pop'n (↑)

:

◦ deprivation (↑) in urban area, i.e. poverty

◦ (↑) Economic/Social unrest in Urban areas

PROCESS OF RURAL-URBAN MIGRATION (Harris Todaro) 1969



– • R-U Migr have resulted in

- (↑)ed gap b/w census towns & Adm. towns
- caused explosive urbanisation in India

(will be discussed in 'Urbanisation')

→ Source: UP, Bihar (Pop'n surplus areas)

Destination: NCT, Maharashtra (eco'ic attractive, cultural, geog. compatability)
+ Bengaluru are the only Urban Agglomeration with :→

Strong R-U Migration, thus contributing to Top heavy pattern in Delhi & Bengaluru (Rural influx)

③ {Urban-Urban} :- Intrasectoral migration

- have generated TOP HEAVY PATTERN (heavy influx of immigration in top agglomerations)

i.e., 6 Top Urban Agglomerations Mumbai, Delhi, Kolkata, Chennai, Hyderabad, Bengaluru — accounting for 26% of total Urban pop'n

		Greater Mumbai	Delhi	Kolkata	Chennai	Hyderabad	Bengaluru
I	Migrants in pop'n ⇒ (%)	54%	42%	37%	50%	64%	52%
II	Migrants from home State in total migrant pop'n (%) (Intra Regional) (From the same state)	53%	(99%)	80%	a	93%	64%
III	Top (5) 'other states' (Inter Regional)	UP GJ KN RJ BR	UP BR HR RJ UK	BR UP JK OR RJ	KN MH TN RJ UP	TN AP KL RJ MH	

'other states' is defined as states other than the state in which the urban centre is located; Hydrabad has been considered as part of undivided Andhra P. (AP). Census 2011

IV * for G. Mumbai, Kolkata, Chennai, Hyderabad → U-U Migr (influx from urban areas)
Delhi, Bengaluru → R-U Migr.

V For the 1st time (census 2011), Major Migr. has been noticed
* South of Vindhyans (G. Mumbai, Kol., Chennai, Hyderabad)

(4) Urban-Rural — Inter sectoral migration (<5% of total migr trend)

- Old age pop'n movement (after retiring from working)
- shows (↑)ed longetivity (e^0)
- Unique type of migr as different from common trend.

★ Pattern of Internal Migration

i) Pop'n surplus UP + BR are major source area in internal migration.

ii) Geographically & culturally PROXIMATE & economically sound NCT & Maharastra are Major Destination

iii) W.B in general & Kolkata in specific are declining in attractiveness, & (not kept pace with economic growth as required since globalisation)
* Assam has evolved as agrarian destination. (R-R migr) inter-reg. intra-reg.

iv) Southern States inspite of being High Growth States (HGS) are stable in terms of internal migration. However, (culturally & geog. distant from source areas), exception-Bengaluru as evolved destination area.
* However, For the 1st time, migration south of Vindhyans have shown prominence.

v) NW Himalayas, NE Himalayas, Marusthali, Rann of Kutchch
↳ Unfavourable locations, isolated (no movements) in internal migration
Major

Migration Trends (International)

(I) Top 7 destination countries for global diaspora

		No. of Intl. migrants (in millions)
1	USA	46.6
2	Germany	12.0
3	Russia	11.6
4	Saudi Arabia	10.0
5	UK	8.5
6	UAE	8.0
7	Canada	7.8

(II) Top 7 countries of origin for global diaspora

		No. of intl. migrants (in millions)
1	India	15.6
2	Mexico	12.3
3	Russia	10.6
4	China (+ Hong Kong)	10.5
5	Bangladesh	7.2
6	Pakistan	5.9
7	Ukrain	5.8

(III) Home away from home : where Indians go → SW Asia, US, UK

		No. of Indians (in million)	% of total Indian diaspora
1	UAE	- 3.5	22.4%
2	USA	- 2.0	12.8
3	Saudi Arabia	- 1.9	12.1
4	Kuwait	- 1.0	6.4
5	Oman	- 0.7	4.5
6	UK	- 0.7	4.5
7	Qatar	- 0.6	3.8

Persisting real / perceptional inequalities in (PUSH)
- levels of devpt.
- avail. of oppor.
- huge competition
- general deprivation

↑ Economic causes

Population Problems (Policies)

1. Demo. Revolution → Economic Policy of - Inclusion, decentralisation (4 indicator of growth)
2. Geriatrics → Old Age related Planning Vayoshri
3. Gender inequality → National Women Empowerment Mission 2017
4. Health * → Indian National Health Policy 2017
5. Over pop'n → Antinatalism

2.4% area, 17.5% Pop'n

India (2nd pop'n) → USA (3rd) + Indonesia (4th) + Brazil (5th) + Pak (6th) + BAN (7th) + Russia

Overpop'n → demand-supply mismatch → eco'ic deprivat'n & absence of parity
↓ Lack of opportunity
↓ eco'ic & social unrest
↓ politico-economic instability
↓ multiplying geopolitical vulnerability

1940s, KAP (Knowledge Application & Practice) Prgm by UNFPA
Failed: Academic nature; unclear objectives; mistrust among new independent countries.

Antinatalism Pop'n policy oriented towards controlling births thus pop'n size (1951 since)

India - 1st devlng cntry to mobilize Nat. Pop'n Policy.

- I Voluntary & Informative (1951-1975)
- II Family Planning as Family Welfare (1975-2000)
- III Social Justice + Gender Empowerment (2000 onwards)

I Voluntary + Informative (1951-1975) Preliminary Phase

- 1st country with explicit National Pop'n Policy
- on absolute democratic line (as per the choice of people).
- absence of desired Heath/transp./Communication Infra (marked genesis of infra)
- awareness creation with benefits of
  - ↳ small family
  - ↳ gap b/w successive births
  - ↳ means of contraception

↳ **STATISTICALLY FAILED PHASE** as India experienced pop'n explosion in 1970s however practically this phase created ideological & infrastructural foundation.

II Family Planning as family welfare (1975-2000) Developmental/ Modern Phase

- continued with Voluntary + Informative
- added **welfare** as part of **Planning**

↳ based on realisation that parents will adopt family planning only after **HEALTHY SURVIVAL** of children thus orientation towards ensuring health & medical service

↳ beginning of Immunisation + Vaccination prgmm

Prenatal (before birth) / Post natal (after birth)

* **1981** watershed - Birth rate started declining (India entering 3rd stage of demo. cycle)

↳ **Was STATISTICALLY SUCCESSFUL**

- led to realisation of (N) & (S) & divide (Regional disparity)

(EAG states not participated in antinatalism, S° states were yielding results in antinatalism)

III. Social Justice + Gender Empowerment (2000 onwards)

- N^n states (EAG states) failed to respond to anti-natalism due to
  - ↳ poor societal status of females
  - ↳ mass widespread misconceptions
  - ↳ strong desire for male child
  - ↳ grave dimension of societal divide
- With Gender Emp. & Social Justice, EAG states since 2011 have started controlling birth rate.

↳ India is slow & steady successful case of Anti-natalism

★ Health Indicators — (UNDP's (3 Aspects of health indicators) + IPCC (INCCA)'s (Impact of CC on health))

I. UNDP — 3 Aspects of health indicator (overlaps)

WMO + UNEP

II. IPCC (INCCA) ← MoEFCC

Intl. Govt'al Panel on C.C. (Indian Network for CC Assessment)

↳ Impact of CC on health

WMO
World Meterological Organisation

III Indian Health Planning — Mo Health & Family Welfare (MoHFW)

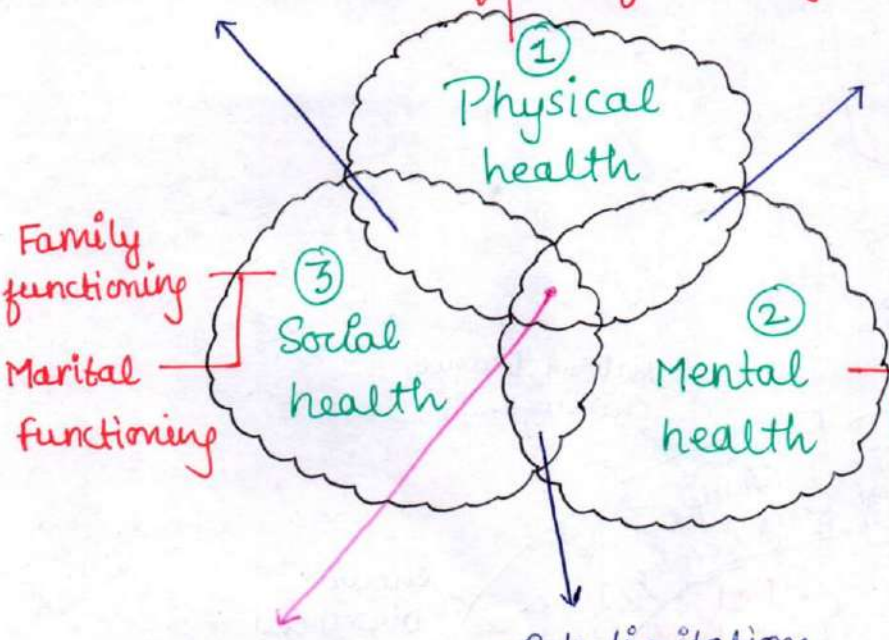
↓ different Prgms

* Health Index Initiative

interlinked with SDGs 1,2,3

* NITI Aayog dashboard

I. UNDP — 3 Aspects of Health Indicators → Overlaps in all demographic functioning thus planning



Physical health

Physical conditioning
- Role limitations due to physical problems

Physical functioning
- Mobility
- Satisfaction with physical functioning
- Prior health

Range of Perceptional/Real health symptoms
- Energy/Fatigue
- Sleep problms
- Health perceptions
- Physical Symptoms
- Health distress
- Health outlook
- Pain

Mental health

Mental illness
- Anxiety
- Depression
- Psychological distress

Cognitive (Perception) functioning
- Psychological well being
- Positive affect
- Cognitive functioning

Social health

Family functioning
- Role limitations due to emotional problems
- Feelings of belonging

Marital functioning
- Role limitations due to health
- Sexual functioning
- Social activity limitations due to health

(Real health challenges)

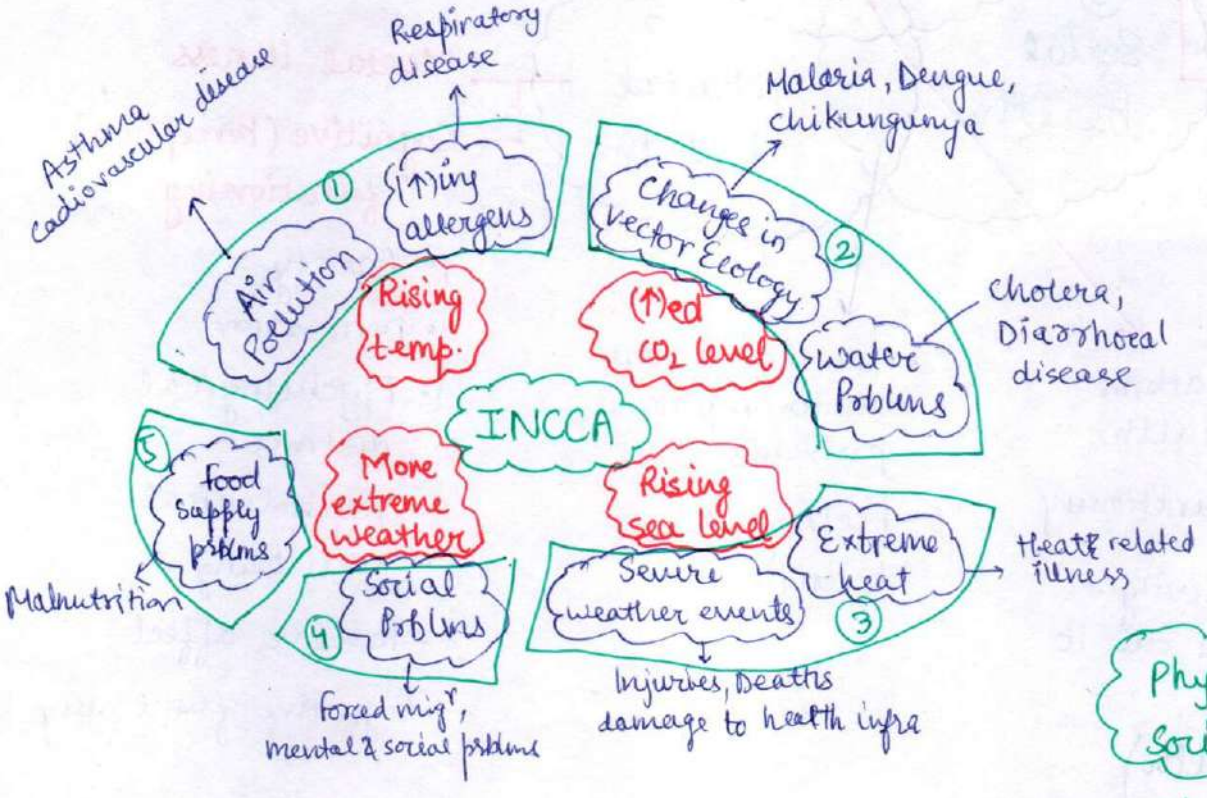
→ They overlap with each other (influencing each other & getting influenced)

↳ Indian network for CC Assessment.

II. IPCC (INCCA)

IPCC Impact of CC on health induces Health Impacts therefore must be considered in Health Planning

- Air Pollution
- Vector borne diseases
- Extreme weather events
- water borne diseases
- forced Migr^n
- (↓) food supplies



Phy/Mental/Social health

+

India as per INCCA is reeling under 5 fold health challenges induced due to CC

Air Pollⁿ	Vector Ecology change	Extreme Weather	Social Problm	Food Supply
• Respiratory disease	• Vectors/water borne disease	• heat stroke • injuries * • collapse of health infra	• Forced Migration	• Starvation • Malnutrition

I Health Indicators {UNDP → Physical, Mental, Social} {MoHFW}

II Climate change is {Real} → influence/impact on health indicators is inevitable

{IPCC} + {INCCA}
Global Indian

India needs / thus have {integrated} climate resilient health planning
(II)

(*) India gives recognition to UNDP's Health Indicators along with inevitable impact of CC on health.
That is the reason that India involves Climate Resilient Health Planning.

(III) Indian National Health Policy 2017

- National Health Mission
- Ayushman Bharat PM Jan Arogya Yojna
- PM Swasthya Suraksha Yojna
- PM Bhartiya Janaushadhi Pariyojna (indian pharmaceutical industry)
- Poshan Abhiyan (National Nutrition Mission)

PM Bhartiya Janaushadhi Pariyojna
- Generic medicines distribution
- providing all-time availability of medicines

- In order to achieve desired success in health planning all programs (written back page) are integrated with Global Goals - SDG

SDG 1, 2, 3

a) SDG 1 No Poverty

Stands for - end poverty in all its forms everywhere so as to (↑) resilience of pop'n & (↓) vulnerabilities.

(2) imp programs mobilized to achieve the goal

- creating Safety Nets (~~MN~~ MGNREGA)
- facilitating Access to basic services (PM Jan Dhan Yojna, basic insurance) Housing for all, bank accounts

b) SDG 2 Zero Hunger

aims at - end hunger, achieve food security, improve nutrition and promote sustainable agriculture.

c) SDG 3 Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages

Ayushman Bharat

- (↑) network of health & Wellness centres (1,50,000 H&W centres by 2022)
- (↑) health insurance (₹5lakh health insurance for 100 million families)

are caused
- (↓)ing Maternal Mortality Rate (122 in 2015-17 from 130 in 2014-16)
- (↓)ing Child mortality (0-5 yr age) (37 per 1000 live births in 2017)

- Lack of awareness (mothers)
- Women ~~Not~~ malnutrition (>50% of Indian women in reproductive age are anaemic)

- age of mother
- spacing b/w births
- delivery locations

– Inspite of health planning involving
  - Climate resilience
  - inclusion
  - 3 Aspects of inclusion
    Phy. Ment. Social
    → Moderate low levels

Global Health Index scores, by UNDP + UNFPA
Barring the exception of S. Africa (lowest)
India's Global Health Index Score is poor even among BRICS

Thus,
lot of health planning & implementation is to be attempted in India.

– NITI Aayog - State Health Index 2019-20 (4th edition) (NITI Aayog + World Bank + MoHFW)
↳ Healthy states, Progressive India → ranks adm. units on their year-on-year health performance.
↳ It is a composite index based on 24 indicators grouped into (3) domains
  - Health Outcome
  - Governance & Information
  - Key Inputs & processes

3 domains of indicators in NITI Aayog's State Health Index 2019-20

Health Outcome
- Neonatal mortality (infant)
- Under 5 mortality (child)
- sex ratio at birth

Governance & Information
- institutional delivery

Key Inputs & Processes
- functional medical facilities
- birth & death registration

- For comparison

Larger States

- UP / Assam / Telangana have highest annual performance level improvement.

* KL, TN are top ranking

UP at bottom
BR

Small States

- Mizoram + Meghalaya max. annual improvement in performance

* Delhi, J&K - Top ranking

UTs

- So, there is regional disparity in health performance of states
- we have some states performing well & some are lagging behind
- creates competitiveness among states.

② National Social Assistance (Annapurna)

③ Sabla (Nutrition)

④ Mid-Day Meal

⑤ ICDS

NOTE : Nat. Food Security Act → NFSA → food distribution (to develop food security) ≠ National food Security Mission → NFSM → agri. deptt. prgrm under Krishi Unnati Yojna

NFSM Food crop
- Rice
- Wheat
- Pulses
- Nutri Cereal

NFSM Cash crop
- cotton
- Jute
- Cane