

27/10/12

MIGRATION

refugee
IDPs.

V.P.GAUTHAM

Permanent change in residence of pop from one place to another between 2 points in time.

Push factor

1. Unemployment
2. Poverty.
3. Religious intolerance
4. Civil war
5. Ethnic rivalry
6. Climate change.

Marriage esp. women (Gujarati)

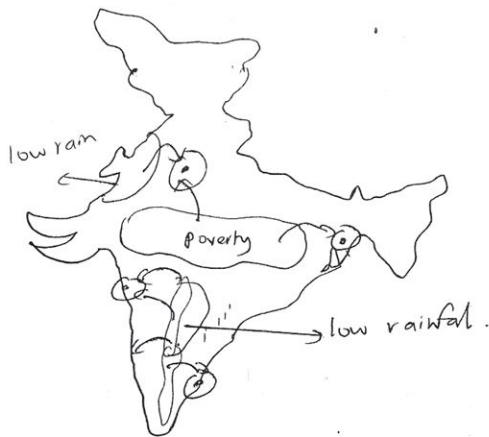
Seasonal migration → agri. labourers

Unequal distribution of resources

Regional disparity

Pull factor :-

1. Better edu. opportunities
2. Better std. of living → recreation, ent.,
3. western ways of living.
4. Central govt. services (Education, High Courts).



Rules of migration:

1. DISTANCE - DECAY RULE

As the distance increases, the no. of ppl migrating b/w two places decreases.

Ramnad \rightarrow Chennai (large no. of ppl)

Ramnad \rightarrow Mumbai (low no. of ppl)

Ramnad \rightarrow New York (very less):

2. STEP MIGRATION..

Migration is usually a step by step process.

village \rightarrow town

town \rightarrow metro

metro \rightarrow cosmopolitan

e.g.: Odaipatti \rightarrow Oddankalaram \rightarrow Chennai

3. SEX SELECTIVE

Mostly, the no. of migrating ppl is more among men than women.

So, areas of outmigration have high sex ratio
e.g.: Kerala (1084/male)

Areas of immigration have low sex ratio.
e.g.: Delhi (866/male)
(since, our population is de-facto, not de jure)
residence \downarrow Not native belonging \downarrow

4. Migration is always towards leading urban centres.

If a person decides to emigrate from India,
he immigrates into New York, NOT Phoenix.

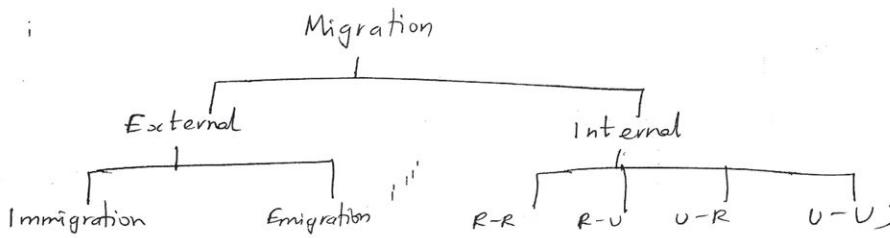
5) Evolution

- 1) Rural to rural (traditional society :- for agri- emp) (3)
women after marriage → political residence
- ↓
- Rural to urban (with industrial societies)
- ↓
- Urban to urban (post modern societies or post-industrial societies).

Counter Migration

6) In all areas of emigration, the intensity of counter migration (immigration) is comparatively very low.

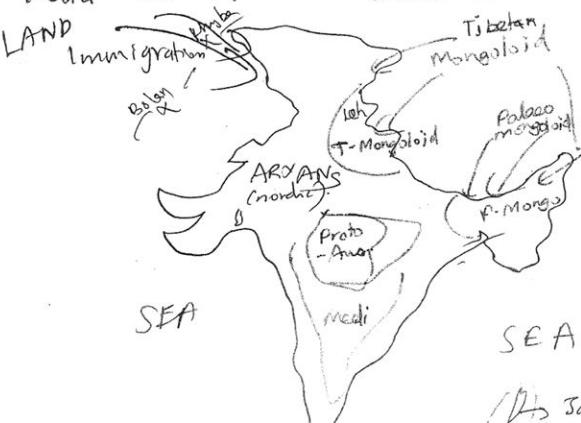
for eg:- ~~the~~ Immigration into Bihar is very less compared to emigration.



HISTORICAL STUDY

Traditionally, India is an immigration country.

India has experienced waves of migration. Most of the migration was through



Khyber & Bolan passes in the North West.
During each wave of migration

The earliest ppl were pushed further south or east to unoccupied areas.

(1) Jarawa, (Negrooids).
(2) Andamanese

(before IVC) Negroid → Jarawa, Austrail Naga, (Andaman NE.)

Proto-Australoid → Bhils, Baduga, Chenchu, Munda,
(IVC) Karava, Malabarase (Central India)

Mongoloids.

Paleo Tibetan
(N.E.) Ladakh

Mediterraneans → Dravidians → Peninsular India;
(later stage of IVC) → farmers group

Brachycephalic → narrow, long head (coastal areas)
↳ Malabar coast

Nordics → Aryans (N. India);

• Usually, the lower classes from an area (here Central Asia) first. So, the earlier migrants (Negroid, Proto-Aus) were lower classes pushed out from C. Europe. When the Nordics came to know about the wealthy life of the migrated classes in India, they came & occupied India (settled down as Aryans).

Thus, Bolan & Khyber pass in Hindu-Kush which allowed waves of migration → is the reason for vast ethnic diversity of India.

- (5)
- ### Migration in medieval period
- Land route first foreign religion into India
 - Political interest Muslim
 - Persians, W. Asia, Turks, Afghans architecture Islamization

Migration in modern period.

- Sea route Christianity
- Commercial Westernization
- Political interests Modernization
- Portuguese, Dutch, British, French, Danish

Post-independence

- Partition (from Pak & B'desh) food daughter (Marital)
- Nepal (political & diplomatic relation) → roti - beti relation
- 1980s → Tamil refugees from Sri Lanka (part of shashibhram)
- 1971 → B'desh Liberation refugees into WB.
- Iran-Iraq war, Idr Amin → 1970s → remigration of Indians from Africa.
- Illegal migrants from Myanmar & B'desh.

Post-liberalisation

- Govt policies of students from Africa into India.
- Attracting NRI population to India.
- Opening up the economy → FDI → foreign investors

EMMIGRATION

Ancient, ~~Medieval period~~:

- No emigration, since it was considered SIN to cross the sea. (Religious motto had a great control)
- Occasional invasions to SE, East Asia, China.
Esp. S. Indian kings \Rightarrow Cholas.

→ Ashoka.

Modern Colonial

- Indentured labourers \rightarrow Indonesia, S. Africa, Caribbean, (sugarcane, coffee plantations). N. America, Fiji.

Post-independence

- Semi-skilled labour \rightarrow drivers, construction workers, cooks, waiters.
 \downarrow to West Asia (esp. due to oil boom).

Post-liberalisation

- Skilled labour \rightarrow Aus, Europe, N. America.
- For higher education \rightarrow US (USA, Canada),
MS in automobile, mechanical (Europe);
MBA (England).
- Frequent movement \rightarrow well devd. air transport,
fast connectivity;
visa regime
- Protectionism \rightarrow Middle East (Iran, Iraq)
US (H-1B visa fee hike)
UK \rightarrow admission to foreign students on London Univ.

Nursing
Professors, scientists, economists
Software
employees

Internal Migration

Traditional

- Mode of transport: ~~foot~~
- Only - intra-regional ~~inter~~ migration (max - 100 km)
 - Chola region to ~~the~~ Chola region.
 - Kongu nadodam to Pandya region.

British rule

- Roads & railways.
- Rural to ~~the~~ Chennai, Mumbai (^{administrative, service to} British, industrial centre).

Post-Independence

1950s

- S-India → N-Indian urban centres.
- Mainly doctors, engineers → skilled labour.

1960s, 70s

- Continental - → coastal
Vidarbha to Mumbai.
- dryland to coastal.
- interiorland to coastal.

1990s, 2000

- Skilled labour → south India to N-India.
- semi-skilled → north to south India.

In India, internal migration is due to **PUSH FACTORS**.

↓
for Urban Employment

(NOT for Urban Environment)

∴ PURA (Providing Urban Amenities in Rural Areas)

↓
Model kalem

- To arrest migration
- Prevent regional disparity.

Other factors

Internal migration in India → trends

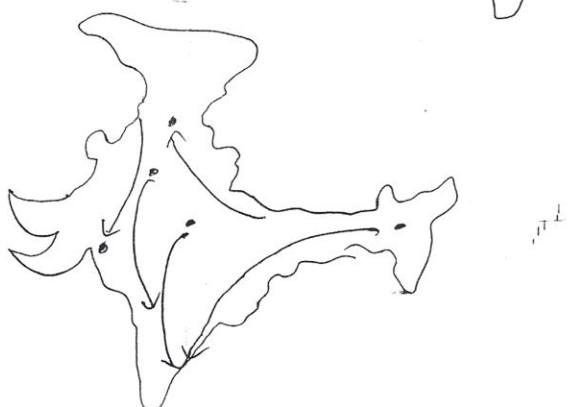
Traditional



1960, 70'



Post 1980s



World migration

(19)

i) Ethnic violence.

1994 → Hutus vs. Tutsi \Rightarrow DR Congo \rightarrow Rwanda;
 SL refugees;

Tibetan refugees to India;

Myanmar to B'desh;

~~NEP~~

ii) War

WW I, II;

Iran-Iraq war; Syrian war \rightarrow Syria to ~~Turkey~~ Turkey

Palestine war \rightarrow Jordan, Lebanon

Mali \rightarrow civil war

Afghan \rightarrow civil war; Sudan vs. S. Sudan civil war

iii) Employment:

India, China to Europe, Australia.

iv) Education

1940s, 50s \rightarrow England (cap. law). eg- SL Nehru, MK Gandhi

Now

Med -> Europe

~~Med~~ M.S. \rightarrow US

Medicine \rightarrow Aus, Russia

Economics \rightarrow UK, US

v) Religious

(religious revivalism & fundamentalism is on the rise.)

Arab-Israeli conflict;

Thailand \rightarrow Mirando revolution \Rightarrow More Muslim vs. Catholic

Nigeria \rightarrow Christians vs. Muslims

Egypt \rightarrow Coptic Christians vs. Muslim

vi) Racial

- Jewish presence in Germany.

vii) Climatic refugees:

- Small rain states
- Increase in sea level
- Drought, floods

viii) Slave trade:

Africa to N. America
Africa to Caribbean

ix) Gold rush

- Discovery of sea route
- Europe → N. America
Asia

x) Liberalisation

- Easing of visa procedure
- Schengen zone in EU

WTO

Mode 1

Mode 2

Mode 3 } opening up markets
(to companies)

Mode 4

} opening up of border
for professionals
(to individuals)

xi) Better std. of living

- from Developing countries to America
- The American dream

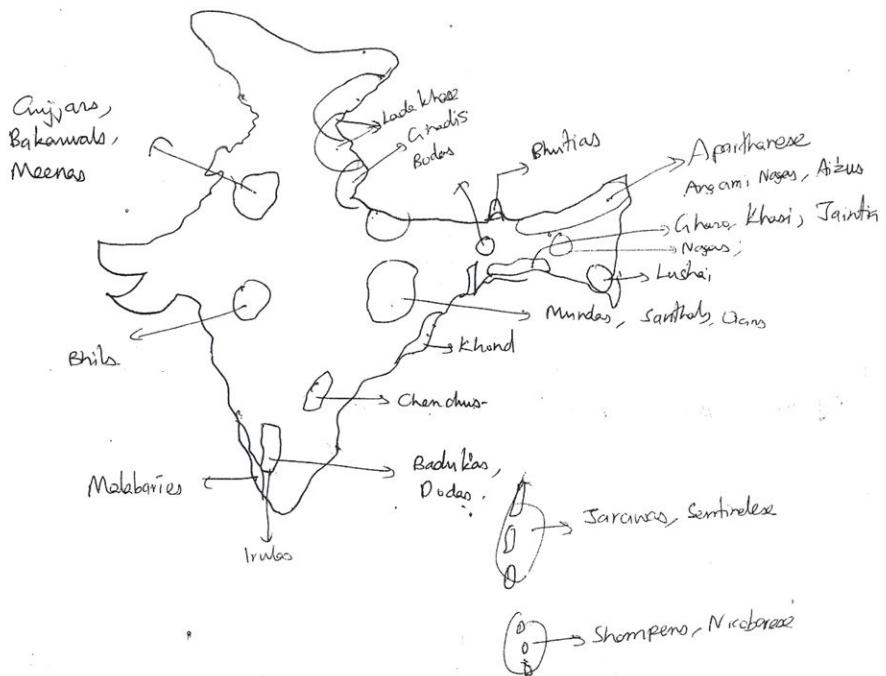
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TRIBAL POPULATION

(11)

Tribes

A tribe is a group of ppl living in relative isolation, having their unique culture and way of life.



In India, Tribes form 8% of total population.

390 absolute tribes (distinct tribes) in India.

Tribal areas compose 59% of the total forest cover of India, though the total tribal area is just about 3%.

Problems of tribes

1. Geographical Isolation
2. Illiteracy (just 40% literacy; women → 20% literacy)
3. Epidemics (no vaccination facilities)
4. Land alienation (Alienation from original habitat due to industry)
5. Market exploitation (no benefit for their forest produce)

6. Sexual exploitation of tribal women (see tourism).

7. Commoditisation of tribes (tribe tourism in Jarawas)

8. Conflict between modern laws & traditional customs.
(banning of sacrifices)

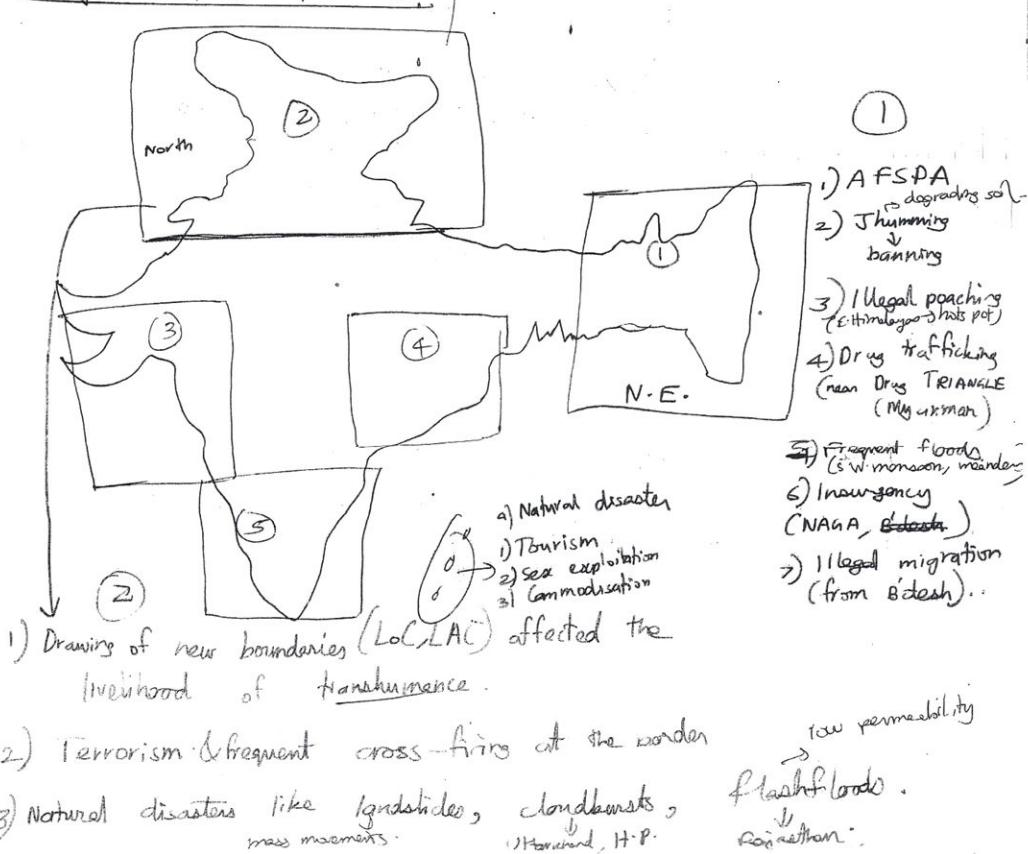
9. Cultural erosion → loss of identity.

10. Vulnerable to terrorist insurgency groups (eg:-LWE)

11. Declaring their habitats as reserved forests affects their livelihood.

12. Poor health indicators / ~~high~~ MMR, ~~high~~ IMR

Region specific problems



- (3)
1. Submergence of huge amount of tribal land, due to dams (Narmada)
 2. Urbanisation & encroachment into tribal habitats.
 3. Desertification.
 4. Drying of water sources inside the forest

(4)

1. Mining → has removed land elevation.
2. Heavy deforestation → loss of livelihood.
3. frequent forest fire (dry deciduous forests).
4. Left wing Extremism.
5. Almost NO market for tribal produce.

(5)

1. Modernisation & Urbanisation.
2. Tourism (esp. in Kerala) has exploited tribal women very heavily.
3. Industrialisation & urbanisation in Andhra, Kerala forced the tribes to move to urban slums.

Govt. measures

Constitutional provisions

Art. 15, 16 → 8% reservation for STs.

Art. ~~24~~ 23 → Protection from exploitation.

Art. 29, 30 → Protection of culture & script.

Separate National Commission for STs. (1993)

National Comm. Officer for Linguistic Minorities

Schedule IV → STs

Schedule VI → STs in Assam, Tripura, Meghalaya, Mizoram.

Tribal Font

- Separate Min. for Tribal Affairs.
- Separate Tribal Sub-plan in every dist. plans
- BIOSPHERE RESERVES → including tribals in the forest conservation.
(Man is a part of the ecosystem)
- PESA → Panchayat Extension to Scheduled Areas → local participation
Management of non-timber forest resources i) supervision of money exchange ii) Protection of customs & traditions
iii) Autonomy acts → may Panchayats;
- " Tribes belong to the fourth world. Though these people belong to the land, the land does NOT belong to the people "

Demographic attributes

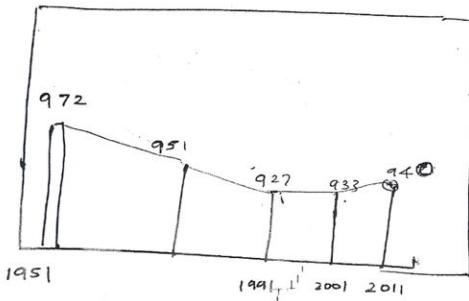
Sex Ratio → an important social indicator denoting the equality of women in a society.

No. of females per 1000 males

Temporal

Post-liberalisation → increase in sex-ratio.

(due to emp. opp. for women).



Though sex ratio is on the rise, child sex ratio is at an all time low ($914/1000$)

Reasons for low sex ratio in India:

1) Preference for male child (in the Patriarchal society)

Female infanticide

Female foeticide

2) Low MMR

• Lack of institutional health care

• Early marriage

• Frequent childbirth

- Religion promoted more children & discouraged contraception.

3) Domestic violence

4) Dowry → main reason for preference of male child.

5) Malnutrition

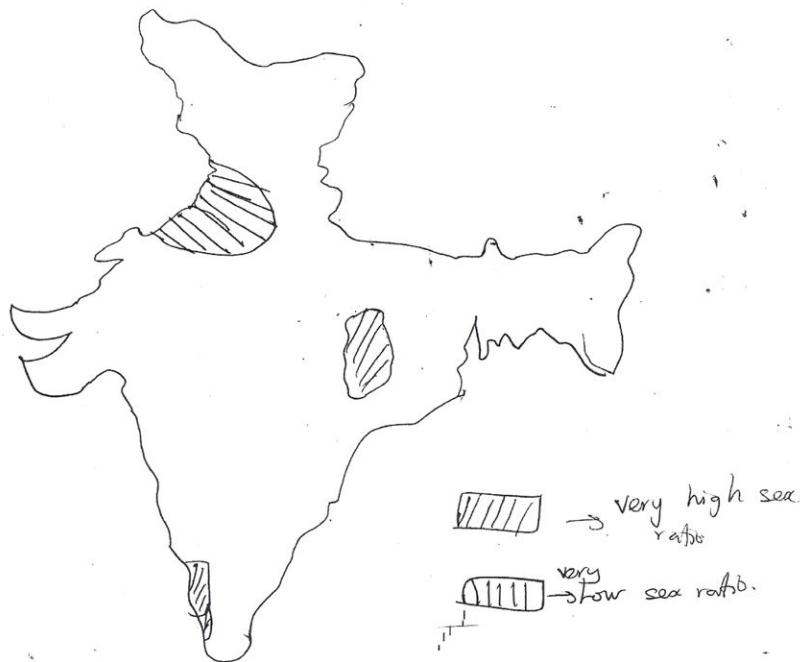
Discrimination: Better feeding of boy & inadequate feeding of girl child, in poor families.

⇒ lack of economic activity; ⇒ lack of financial education.

6) Poor literacy among women.

7) Rise in crime against women
rape, molestation.

Spatial distribution



Why High Sex ratio in Kerala.

1. Matriarchial society
2. High literacy
3. Christian missionaries
4. High outmigration of men (to Gulf, other states)

Low sex ratio in TN, Karnataka, Andhra?

- 1) Dowry problem.

But post-liberalisation, the sex ratio in these regions is increasing due to better employment opportunities for women, esp. in the services sector.

Why very ~~too~~ high sex ratio in Chhattisgarh?

- 1) No dowry problem.
- 2) Heavy outmigration of men.
- 3) Tribal society → no means of prenatal sex determination.

(17)

from

Why very low sex ratio in Punjab, Haryana?

- 1) Masculine nature of work (military, drivers). So, male child is preferred.

2) High dowry (Highest dowry regions → Bihar, Andhra, Punjab).

3) Patriarchal & Patrilineal society

Khaps Panchayat
politicisation of caste They do NOT want the property
to go to unrelated persons (husbands of their daughters)

Impact of low sex ratio.

- 1) Increase in Crime against women.
- 2) Increase in unmarried men.
- 3) Collapse in family institution → social unrest.
- 4) Women are traditional labourers in agri & cottage industry. Decline in sex ratio causes huge labour shortage in these industries & agri.
- 5) Decrease in sex ratio → Decrease in no. of women
Decrease in birth
↓
Decrease in birth rate
→ ve demography

6) High skew in sex ratio may lead to UNNATURAL SEXUAL INTERCOURSE - e.g.: Gay, homosexual.

Social

- Breakdown of family norm
- Unmarried men — crime against women
- Unnatural sexual intercourse e.g. Gay, Homosexual

Economic

- Shortage of agri. labour, labour for cottage industry.
- Low sex ratio → indicator of lack of equality & participation of women
- Low HDI, No participation in economic activities, Low G.D.P.

Demographic

- ve demographic dividend;
- More unmarried males.

Temporary

Govt. measures

1) Incentives for families with girl children.

2) Ban on pre-natal diagnostics \rightarrow to prevent female foeticide.

3) Gender sensitive budgeting.

4) Spl. laws for protection of women in work places against sex exploitation.

Min. of women & child dept.

5) Dowry prohibition Act, 1961.

6) Improving health care facilities to women.

7) Janani Suraksha Yojna \rightarrow institutional delivery.
decrease MMR & MMR

8) Sabla \rightarrow empowerment of adolescent girls ; Sakshi \rightarrow teaching adolescent

9) Kavawat \rightarrow rehabilitation of trafficked women
basis on empowerment of women to respect the other gender.

10) Dhanabakshini scheme \rightarrow for having girl child

(i) Swadhan Greh
rehabilitation of destitute women

constitutional.

- SOCIAL
- Dowry prohibition.
- women importance awareness pgm.
- Kasturbba Balika Education

- ECONOMIC
- reservation in public employment
- MNREGA
- Indira Awaas Yojna
- Dhanabakshini scheme

- POLITICAL
- 33% reservation in PRI

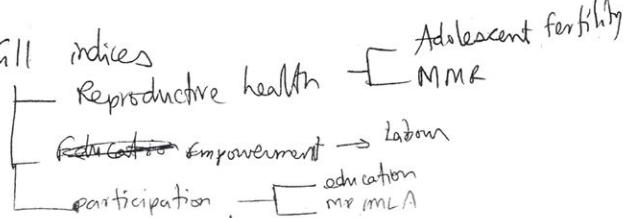
1) Article 15(3) \rightarrow spl. provisions to women

2) Article 23 \rightarrow Protection from exploitation

3) Art. 39~~(d)~~ \rightarrow Equal pay ; equal work.

4) 23rd & 24th Amend \rightarrow 33% ¹ reservation in local self bodies for women

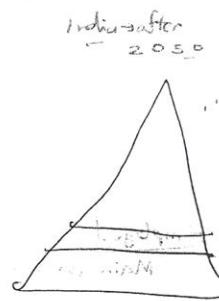
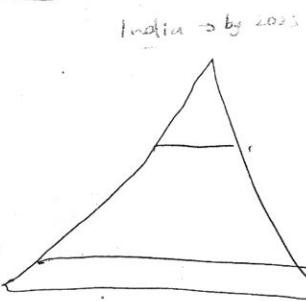
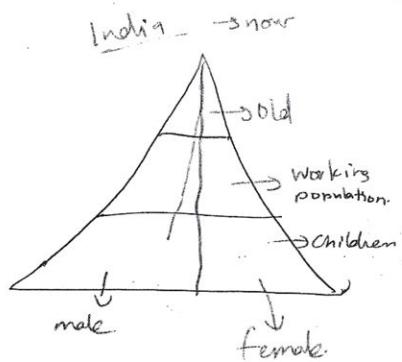
GDI, GII indices



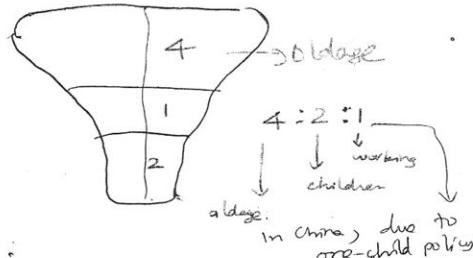
In spite of the govt. efforts, there should be (19)
 a change in the perception of society towards women.
 However, post-liberalisation, the social, economic & political
 freedom of women has increased. Still, ~~there is~~ woman's mind is
 not without fear.

only when a woman walks with her head held high and her mind
 free from fear, our country will be fully developed.

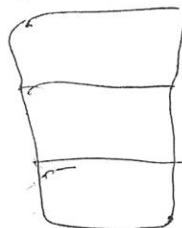
AGE STRUCTURE



Developed countries (esp. Europe)



U.S., Swiss



India

Older \Rightarrow above 60 yrs $\rightarrow 8\%$

Children \Rightarrow 0-16 yrs $\rightarrow 39.1\%$

Adult \Rightarrow 16-60 yrs $\rightarrow 52.9\%$
~~(labour force)~~

Men \downarrow
 Women \Rightarrow only 30% of women are involved in
 commercial economic activity
 \downarrow
 dependent population.

} Dependent population

39% \rightarrow workers ; 61% \rightarrow dependent

1 : 2 ratio

1 person \downarrow needs to feed 2 persons .

Life expectancy \Rightarrow 65 & decreases fertility rate

\rightarrow With the increasing longevity, the proportion of old age people will surely increase in the future.

\rightarrow So, in order to feed this increasing dependent population, we need to educate & train the young population (6-14 yrs) and the women population

Employed

Main worker \rightarrow Any one who works for more than 183 days more than half the year in a year.

Marginal worker \rightarrow A person who works for less than 183 days in a year.

Longevity

Life expectancy @ birth.

The avg. no. of years a person is expected to live at the time of his birth, in a given society.

source: Census of India; Registrar-General

Longevity	Workforce 37.5% to 39.1%	Literacy 52%; 26%	Dependency ratio 734 to 596
1991 to 2001 Male-female states (high, avg, low) OBC, SC, ST Rural-urban religious groups			

→ Kerala, Mizoram

→ Bihar, Jharkhand

* Prepare this table; (for India) ⇒

→ Discuss the geographical basis of federalism.

→ Discuss the

FEDERALISM

Association of more than two sub-units under a central unit with shared objectives-

Shared objectives → defence, Communication,

Unitary features

- 1) Single Constitution
- 2) Single citizenship
- 3) Indestructible union with destructible states
- 4) Residuary powers with the Centre.
- 5) Universal applicability of FR & DPSP leads to uniformity of law.
- 6) Appointment of Governor by the Centre.
- 7) Higher powers to Centre in concurrent list.
- 8) Integrated judiciary.
- 9) Emergency provisions.
- 10) CAG → Audits & Accounts the states.
- 11) Removal of President.

Federal features

- 1) Rajya Sabha → state council.
- 2) Supremacy of Constitution.
- 3) Election of president.
- 4) Zonal councils.
- 5) Inter-state councils.
- 6) Independent judiciary.
- 7) Panchayati Raj.
- 8) Rigid amendment procedure for items regarding federation.

Geographical perspective of federalism

(2B)

Why Unitary spirit?

- 1) A geographical structure with Himalayas in the north and sea on all other sides gives rise to a separate subcontinent \Rightarrow Indian subcontinent.
- 2) Absence of physical barriers within the India has allowed easy movement of ppl and with them the culture & tradition. Thus, a unitary set of values (mostly Vedic culture Hinduism).
- 3) A single climate \rightarrow Monsoon climate. Thus, the fate of Assam ppl depends on winds originating near Andaman.
- 4) British administration united India through modern transport — Roads & railways — allowed inter-linking of ppl.
- 5) A unitary representation of sporting teams (Indian Cricket team, Hockey Team) consolidated the unitary form of govt.
- 6) Spread of English language & Hindi (in north).
- 7) To deal with centrifugal forces (separatism), a strong centre was envisaged. (Art. 2, 355, 365)
(huge east-west separation)
- 8) Huge variation in rainfall may cause social unrest in certain areas in particular areas. (Art. 243S)

Why federal structure?

9) Huge disparity because of varied rainfall & resources.

To remove the disparities, Finance Commission & Planning Commission to distribute these resources.

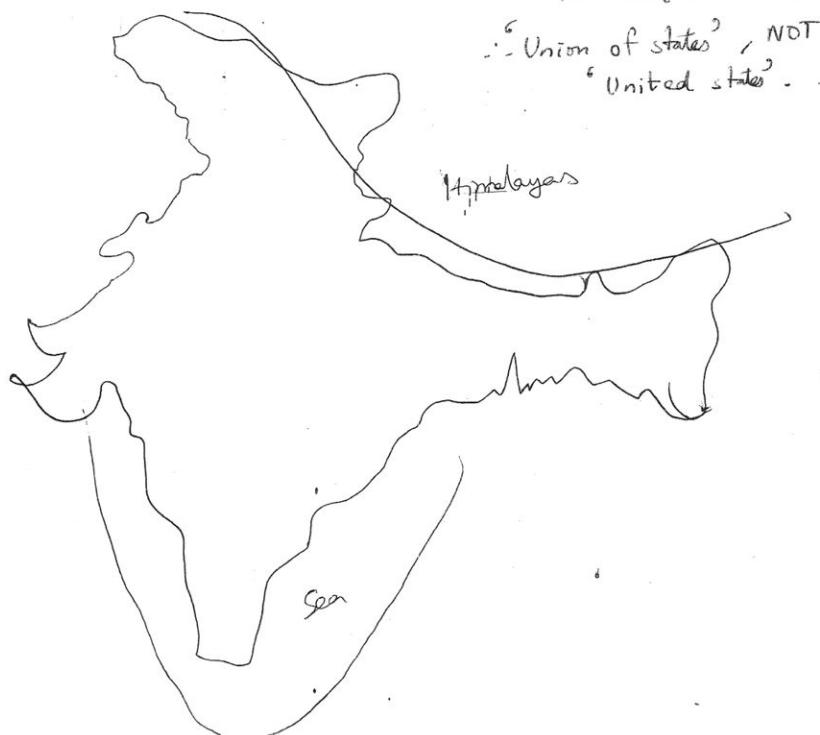
10) Two rivers united the states lying on the basin of the river, due to huge interdependences.

Indira Gandhi Canal → Rajasthan, Punjab, Haryana.

Kaveri → Kerala, Karnataka, TN.

11) To consolidate the unity of admin as reqd. by these geographical factors, Election Commission, All India Services & Integrated judiciary were formed.

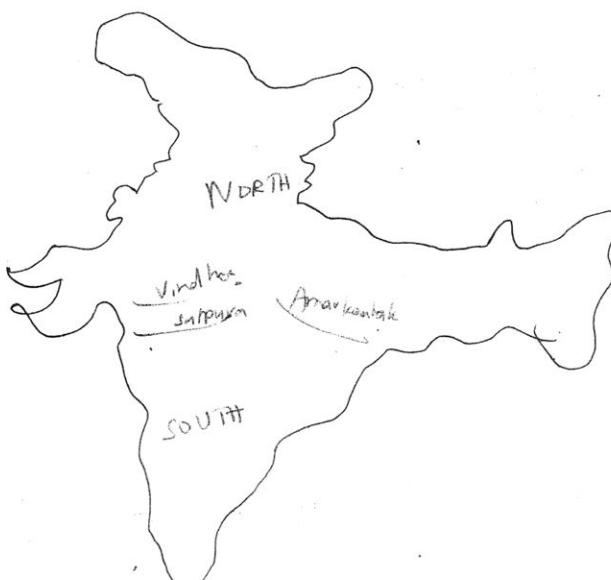
12) Unique, united geography → evolved history → evolved Constitution
(a single, united, strong freedom struggle)
INC
No need for an agreement



Federal structure → why?

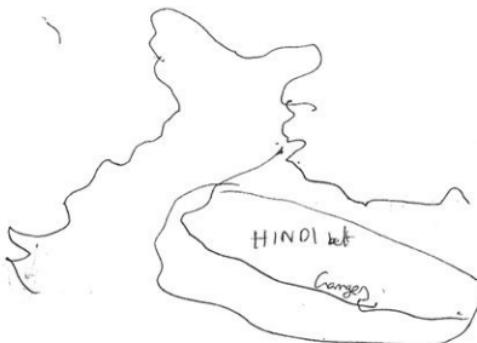


- 1) Undulating terrain in NE has placed the tribes (Nagao, Angami Nagao - Apotheosis) in relative geographic isolation. So, a separate Schedule VI.
- 2) Vindhya & Satpura has relatively restricted the easy movement from North India to South India, resulting in distinct North & South culture.
- 3) Western Ghats has resulted in creation of new states & languages (Malayalam, Konkani) Konkani → Maharashtra
Malayalam → Kerala
- 4) Eastern Ghats has prevented inter-linking of TN with Karnataka & Andhra. Telugu → Tulu Nadu
hills of Orissa, Brahmapur, (Ghats) → STN
- 5) Undulating terrain of Telangana & Rayalseema has separated Andhra from Karnataka.

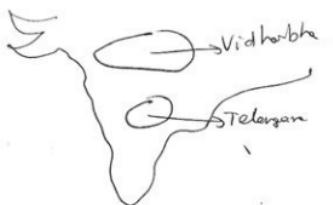


6) Thick forest cover in M.P., east Maharashtra, Chhattisgarh, North Andhra, Jharkhand \Rightarrow ethnic tribes.

7) Ganges river \Rightarrow Northern Plain \Rightarrow easy navigation
intermingling
spread of Hindi.



8) Low rainfall has resulted in social unrest & evolution of distinct culture in those dry areas.
 \Rightarrow Vidarbha, Telangana.



9) Presence of Khyber pass & Bolan pass allowed the waves of migration into India.
This has resulted in cultural, racial, ethnic, religious mosaic -
Art. 29, 30 \Rightarrow to protect cultural identity.



10) Religious diversity due to migration in diff. points in time -

Ancient → Hinduism (Aryans (Indus))

Medieval → Islam (Turks, Persians, Afghans)

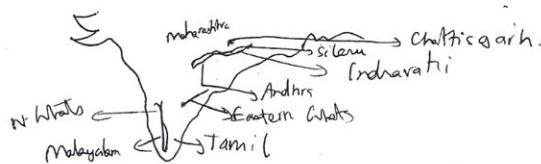
Modern → Christianity (British)

Indigenous → Buddhism, Jainism, Sikhism.

Articles 25 - 28 → Protection to religion

Secularism → Prevalent

11) Diff. languages ⇒ due to geographical factors.



Thus, linguistic reorganisation of states is primarily based on geographical divisions.

12) Diff. regions → diff. agro-climatic conditions

So, region-specific planning.

(Agriculture → a state subject
Land → state subject)

13) Avoid friction b/w states.

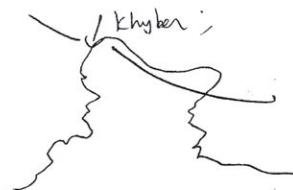
Zonal council, Inter-state councils.

Thus, Constitution is a re-orientation & reflection of geography of India.

14) Huge area. To prevent centrifugal forces,
diff. states,

Diversity → religious diversity

1) Presence of Khyber & Balak pass.



2) Location at the junction of diff. races (a cultural hotspot)



3) Geographical isolation → separate substrates

↓
poverty
↓
social unrest
↓
evolution of religions (Buddhism, Jainism)

Linguistic diversity



Topography



Cultural regions

Culture \Rightarrow an accepted way of life (behaviour) that has evolved over a period of time.

Problems of Urbanisation.

- 1) Very dense, congested settlements.
- 2) High cost of living.
- 3) High ~~population~~ pollution: (traffic, industry \rightarrow air & noise).
↳ bad Air & Water quality.
- 4) Lack of personal relationship.
- 5) Traffic congestion.
- 6) Water pollution (lack of proper drainage facilities)
- 7) Scarcity of water \rightarrow lack of sanitation

- 8) High crime rate, juvenile delinquency
↓ slums ↓ increased population
- 9) Urban Heat island effect of emissions, tar roads.

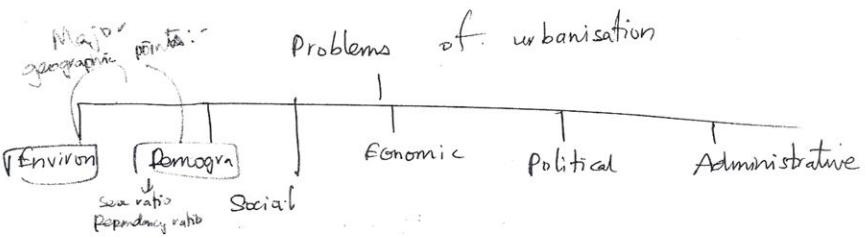
- (i) Low sex ratio → due to high migration.
 → Low Attention to marginalized ppl.
 → lack of sanitable dept -
- (ii) Waste disposal sites → improper waste disposal
 → Flawed land policy.
- (iii) Spread of ^{communicable} epidemics更为 rapid
 Ceg:- Malaria, ^{super spreading} Dengue, TB
 (due to congestion,
- (iv) Urban expansion has led to heavy encroachments.
 → Lack of social housing.
- (v) Regional disparity (Rural-urban divide)
 Induced migration → urban explores.
- (vi) Cultural erosion → increased exposure
- (vii) Huge rich-poor divide in cities is higher.
- (viii) Urban lifestyle diseases → obesity, diabetes, hypertension
 25% of adolescents in Chennai are obese; high risk of Type 2 diabetes.
- (ix) Disintegration of joint family system...
 Anomie → lack of norms & social regulation
- (x) Increase in accidents.
- (xi) Huge loss of property & life, in case of natural disasters → cyclone, flood.
- (xii) Inability to provide basic amenities due to urban sprawl.

- 2) Generation of e-wastes, bio wastes, medical & sanitary wastes
3) Increase in water table (risk of percolation).

Positives of urbanisation

1. Hold of caste system is weakened.
2. An opportunity for cultural amalgamation.
3. Acts as a growth pole.
4. Accumulation of capital → further industrial pr.
5. Enhancement of opportunities for employment.
6. Increased standard of living.
7. Better health facilities & adm. facilities.
8. Social mobility
9. cosmopolitan interaction b/w cultures

Despite these positives, an unplanned urbanisation ~~is~~ is a bane for India.



To write in a geographical manner,
take specific case studies → UN-Habitat's ^{most} prosperous cities

India

Chennai → pollution (conum)

Kolkata → political

Mumbai → slums

Bangalore traffic congestion

→ Delhi → crime (widely, arson)
 ↓
 destroying agri-reserves; SPM (suspended particle matter)
 ↓
 pollution (Yamuna river);

Same similar answers for

- i) Problems of urban slums.
- ii) Problems of Rural-urban fringe.

→ Search
 i) Demographic prob. in ~~Mumbai~~ Mumbai ii) Pollution problems in Delhi.

→ Compare the problems of urbanization in India & Brazil.

→ Compare the urbanization problems of Delhi & Kolkata.

Urbanization problems in

- i) New York ii) London iii) Tokyo iv) Rotterdam v) Bangkok vi) Paris vii) Sao Paulo
- ... n h) ... R... ... B... ... B... ... B... ... B... ... Addis Ababa

Indicator

2001

2011

Leading

lagging

35

IMR

58/1000 44/1000

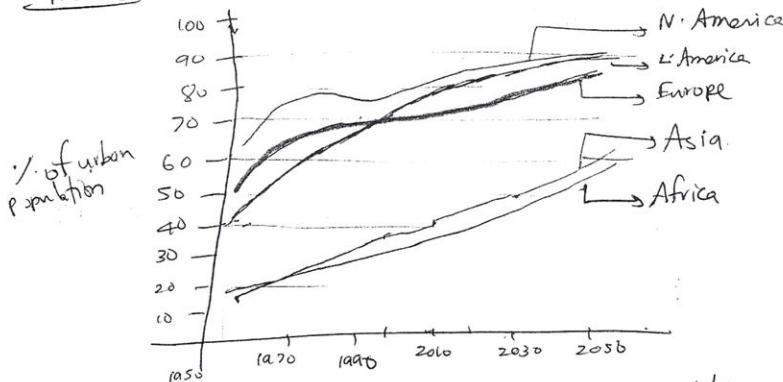
WISHT

10
15
20
25
30
35

Urbanization

Percentage of population residing in urban areas

Trends



Source: UN Population division.

Problems with urbanisation in Brazil \Rightarrow (Rio-Sao Paulo growth centre)

Brazil \rightarrow a large & populous developing country that is widely considered to have completed an early urban transition.

of Brazil has over the last 5 decades become a fully urbanized country. Cities have become the core of economic activity. (90% of GDP) \Rightarrow World Bank 2006.
Brazil \rightarrow 82% urban population.

Major Problems

1. Historically rooted and enduring structure of social inequality -

Inequality came with the highly stratified social system of the Portuguese colonies. It was then fortified by huge land grants. That spawned a feudal landholding system & adoption of slavery.

2 - lack of proper definition of 'URBAN'.

Sao Paulo \rightarrow urbanism stretching out into rural areas to such an extent that rural-urban dichotomy has meaninglessness, leading to conurbation, metropolization & expansion of non-agri. activities in rural areas.

Relegation of rural world to an insignificant status
- saich's identification of morality with backwardness & degradation.

3) Slave labour & immigrant labour
Internal & int'l. migrant laborers to the coffee plantations of São Paulo.

- 4) Intense migration → housing shortages, public sanitation problems
Sex Ratio
• MASCULINIZATION of rural areas (declined sex ratio in rural areas)
• due to heavy female out-migration from rural to urban areas.

5) Declined fertility rate

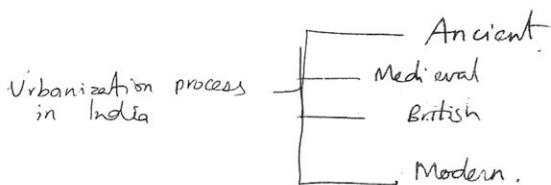
TFR dropping to 1.8 (below replacement level) in urban areas

24/11/12

Urbanization process in India.

Urbanization

Increasing ~~per~~ proportion of a country's population living in urban areas.



Ancient

India is known for urbanization right from the ancient times e.g.: Harappa, Mohenjodaro, Chanhudaro, Lothal in IVC (3000-1500 BC).

It still stands a testimony to scientific methods of urbanization with well laid roads, drainages.

In the ~~Mauryan~~ Mauryan period (300-200 BC) and Gupta period (300 AD - 500 AD), urbanization peaked in India.
e.g.: Pataliputra. S-India

Post Mauryan (Sangam) Madurai, Puhar, Kanchi, admin. town port town admin. town.

After the Gupta period, urbanization declined in N-India, whereas urbanization continued to grow in S-India.

Medieval

With the arrival of Mughals, Delhi Sultanate, Delhi became a major urban centre.

e.g.: Delhi, Fatehpur Sikri, Agra, Jaunpur, Allahabad
↓
Feroz Shah Tughlaq, Akbar, I: Lodi, Shah Jahan
Hyderabad
↓
Nizam ul-Mulk, Nizamates

In this period, urbanization was linked with the seat of power (capital)

1005 - 185

British period

With the arrival of British, the urbanisation process took a massive turn.

But, the urbanization percentage remained constant at 10% from 1800 to 1900. This period is considered as a ~~BLACK~~ DARK AGE in Indian urbanisation.

This was due to i) decline of native industries ii) unemployment
iii) destruction of rural economy & growth iv) destruction of native kingdoms

But the nature and character of urbanisation changed. Most of the urbanisation was in the 3 port towns,

1. Bombay 2. Kolkate 3. Chennai

→ A new pattern of transport towns emerged in the country

Railway towns → Warangal, Mysore, Tolapet

→ Urbanization crept into the hill station for the first time

eg: Shimla, Ooty, Mussoorie, Dharamshala

Modern

1901-1941 ⇒ Low growth in urbanisation;

1901-21 → Influenza

1924-31 → Great economic depression

1931-41 → WW II

1941-51 → increased rate of urbanisation

due to refugee towns (partition) in urban centres.

1951-81 → Increasing rate of growth of urbanization

1981-2001 → Decreasing rate of growth of urbanization.

General characteristics of urbanization in India

1. Ancient & Medieval

→ Urbanization associated with Kingdoms & capitals.

2. British

→ Urbanization associated with Port towns, cantonment (military) towns, railway towns.

3. Post-independence

→ Rapid, uneven, unplanned urbanization.

Post 1981

4. Modern

2001 → 27% urbanisation
2011 → 31% urbanisation

(percentage of pop in living areas $\times 100\%$)
total pop

but rate of growth of urbanisation is declined.

↓
51 million plus towns

5. Indian urbanization is due to urban employment

NOT urban environment

e.g. UN Habitat report
Mumbai, Delhi → 53rd best in prosperity (Most Prosperous cities)

6. Indian urbanization is multi nodal urbanization

↓
Delhi, Mumbai, Kolkata, Chennai

↓
Multiple places of attraction

7. Emergence of secondary metropolitan cities & Tier-I cities
~~Due to~~ - Due to state reorganisation & emergence of regional parties in power, there is a rapid urbanisation of state capitals.

e.g. - Bangalore, Bhubaneswar, Allahabad.

8. Southern states are more urbanized than northern states

e.g. - TN, Goa (more than 50% urbanisation)

9. Indian urbanisation is characterised by slums & squatter settlements.

10. Indian cities are characterised by congested roads and increased pollution, resulting in haphazard growth.

Thus, Indian urbanisation, unless handled carefully, poses a great threat to the administration.

Metropolitan cities \Rightarrow ~~>10~~ >5 million population.

2001 census \Rightarrow 6 metro cities in India \Rightarrow Delhi, Mumbai, ~~Chennai~~ Mumbai, Delhi, Kolkata, Chennai

Town planning

1. ~~Segregation~~ relocation of industries

Segregation of industrial & residential segments.

2. Creation of satellite towns to meet the increasing needs of growing population.

Eg.: Ghaziabad, Faridabad, Noida, Gurgaon

satellite towns of Delhi.

3. Rehabilitation of slum dwellers.

MOP 7: Rehabilitate 200 m urban slum dwellers by 2020.

4. Urban Renewal - since it is impossible to rebuild the city.

Eg: building parking, transport systems

JNNURM.

5. Building outer Ring roads → to bypass the traffic and avoid congestion in the city.

6. Promote MRTS → Mass Rapid Transit system.

Distinguishes to private transport.

7. Creation of townships

8. Urbanization management is NOT complete without effective development of rural areas.

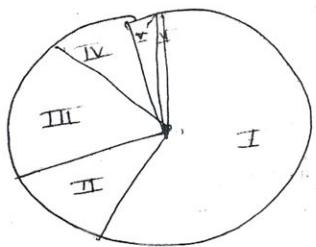
Eg: PURA → Providing Urban Amenities in Rural Areas.

9. Promotion of green buildings, to
↓
low power consumption,
less waste production
ensure sustainability.

10. Creation of green belts around urban centres -

- To prevent urban sprawl
- To compensate for emissions of cities (trees in green belt segregate the carbon).

Distribution of urban population in India



Population size

I → cities with more than 1 lakh population

II → 50,000 - 1 lakh

III → 20k - 50k

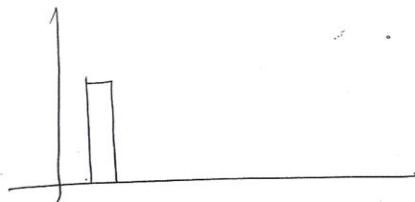
IV → 10k - 20k

V → 5k - 10k

VI → < 5k

<u>% of total urban population</u>
61%
12%
15%
8%
2%
0.3%

Statewise distribution of urbanisation % in India



FUNCTIONAL CLASSIFICATION OF CITIES

Admin. towns → Delhi, Chandigarh, Srinagar, Chennai

Transport → Kandla, Kochi, Visag, Kozhikode, Agra, Mughal Sarai

Industrial → Jamshedpur, Bhilai, Hazira, Coimbatore, Salem

Commercial → Kolkata, Saharanpur

Mining → Jharia, Bokaro, Raniganj, Awar

Garrison Cantonment

→ Mhow, Ambala, Jalandhar

→ Canberra, Washington, Islamabad, London, Plymouth, Portsmouth, New York

→ Liverpool, Detroit, Manchester,

→ Plymouth, Portsmouth, New York

Pittsburg, Johannesburg

Plymouth, Portsmouth,

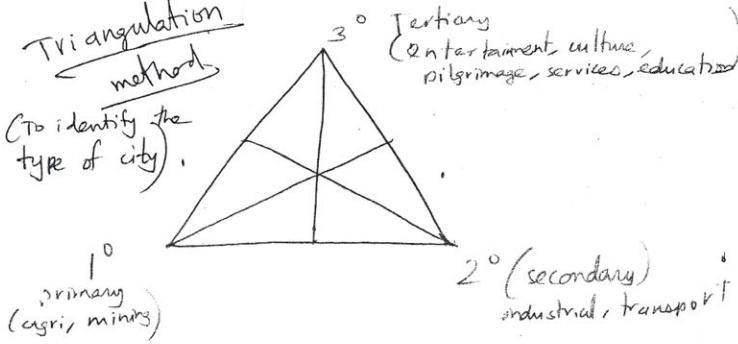
Urban sprawl (or) Rural-urban fringe (or) Limitations in the application of functional classification of towns.

(or) Sphere of Urban influence

Functional classification → how to do?

→ How is Chennai influencing its neighbouring areas?

Triangulation method
(To identify the type of city).



How to identify if a town has primary, secondary or tertiary; How to identify if an area is rural or urban or a rural-urban fringe

Methods.

Quantitative
1

- (No. of ppt engaged in a sector;
- Income generated from a sector;
- Literacy level;
- Density of population;
- Transport system;
- Modern recreation;
- Communication facilities;
- Hospitals & schools

Qualitative
1

- Dressing pattern;
- Food habit;
- Type of recreation;
- Spending nature;
- Health-seeking behaviour;

Limitations of functional classification.

1. In modern ~~city~~ times, most cities have multiple functions.
2. The functions of a city are very dynamic (^{rapidly changing}):
3. In cities with huge population, collecting data (for quantitative classification) consumes a lot of money, material & time.
4. Lack of skilled personnel to analyse the data collected.
(or, only basic classification & analysis is available; critical & subtle analysis necessary for research & planning is NOT available).
5. The functions of smaller towns are subsumed by the neighbouring larger cities, esp. in post liberalisation era.

World urbanization pattern



No. of ppl in urban areas
Total population

→ High urbanisation. (75% - 100%)

→ moderate urbanisation (30% - 75%)

→ low urbanisation (0 - 30%)

Highest urbanisation (>90%) → Qatar, ^{99%} Kuwait, ^{98%} Belgium, Argentina, Venezuela, Uruguay, ^{94%} Israel, Japan, Abu Dhabi.

Lowest urbanization (<30%) → Burundi, ~~Sri Lanka~~, Uganda, Ethiopia, Nepal, ^{10%} ^{15%} India, ^{8% - 28%} (31.3%)

Continent wise

Continent \rightarrow % of world urban population

S. America \rightarrow 22%

Europe \rightarrow 59%

N. America \rightarrow 79%

Oceania \rightarrow 58%

Asia \rightarrow 51.2%

Africa \rightarrow 15%

Source:- UNFPA report, 2010

India - Urbanization



Source:- 2001 census data -

National average $\rightarrow 28\%$ -

||||| \rightarrow High urbanization ($>35\%$)

|||| \rightarrow moderate high urbanization ($25-35\%$)

||| \rightarrow moderately low ($15-25\%$)

|| \rightarrow very low urbanization ($<15\%$)

Highest urbanization \rightarrow TN, MH, GJ, Mizoram

Lowest urbanization \rightarrow Orissa, Bihar, Assam, ~~Uttarakhand~~ Himachal.

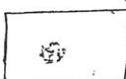
Types & Patterns of rural settlements

Type → refers to origin & development

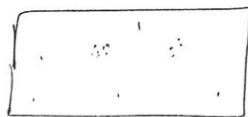
Pattern → spatial arrangement of settlement -

Types of rural settlement

1. Compact → e.g.: Muzaffarnagar, U.P.

highly productive alluvial plains; primitive man → co-op to fight nature → compact settlements.
Ganga plain, Humsar Ho, Nili plains
 hunting & fishing communities → along Brahmaputra
Red Indians, USA;
Naga → to protect against invading head hunters

2. Semi-dispersed → e.g.: Khadar village, Hardwar, Uttarakhand
transitional stage in the growth of a compact settlement.

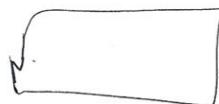


Semi-arid areas.
Aravallis, hills of MP, Shimwarki;

3. Dispersed → e.g.: Bikaner & Jalore districts, Rajasthan.

extreme climate, hills, thick forests, poor agri. land → extensive farming
Jalk
 along Khadar (new alluvium)
prairies of N. America
pampas of Argentina
steppes of Russia
velds of S. Africa
Downs of Eng.

4. Hamlet



Hamlet → 5-6 houses

very small no. of households

Why compact settlement?

- 1. Security & protection. \Rightarrow in ancient days, compact settle
to defend from animals.
~~etc.,~~ [unclear]
- 2. Concentrated & scarce resources
- 3. Rich, concentrated resource. \rightarrow around an oasis
- 4. Hunting & fishing communities
- 5. Intensive farmers
- 6. Hill top (Naga) settlements \rightarrow protect & defend against invaders.

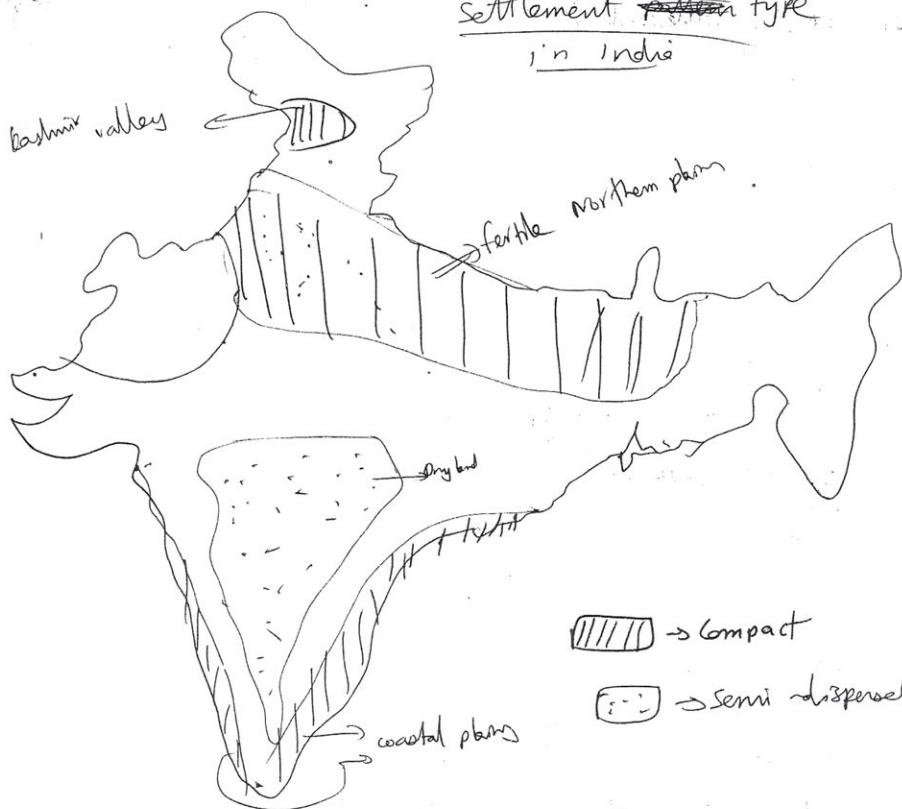
Why dispersed settlement?

- 1. Rich & ~~large~~ large resource \rightarrow extensive cultivation.
e.g.: Great Plains of N. America.
- 2. Poor, infertile land \rightarrow large land area reqd. for sustenance.
- 3. Rugged topography.
- 4. Extreme climate

Geographical factors determining settlement pattern

- 1. Rainfall
- 2. Terrain
- 3. Nature of agri-activity
- 4. Landholding size
- 5. Stage of economic devt
- 6. Soil fertility
- 7. Socio-economic conditions

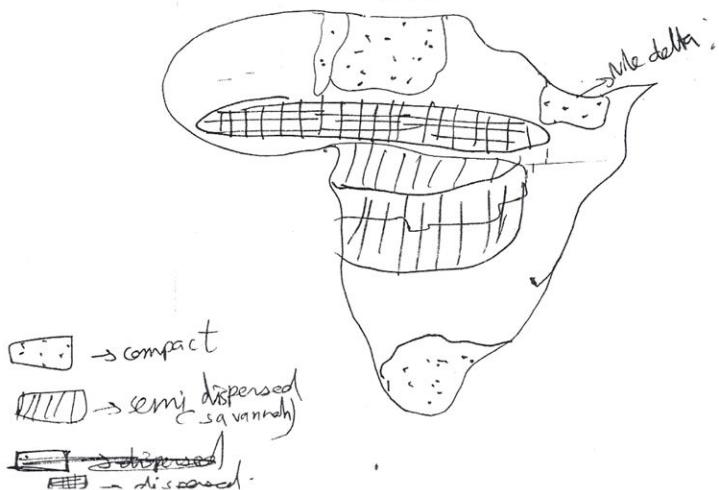
Settlement pattern type
in India



N. plains → compact

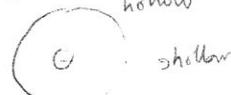
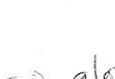
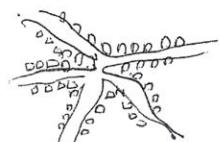
↓
fertile plains → heavy immigration

Settlement pattern in Africa



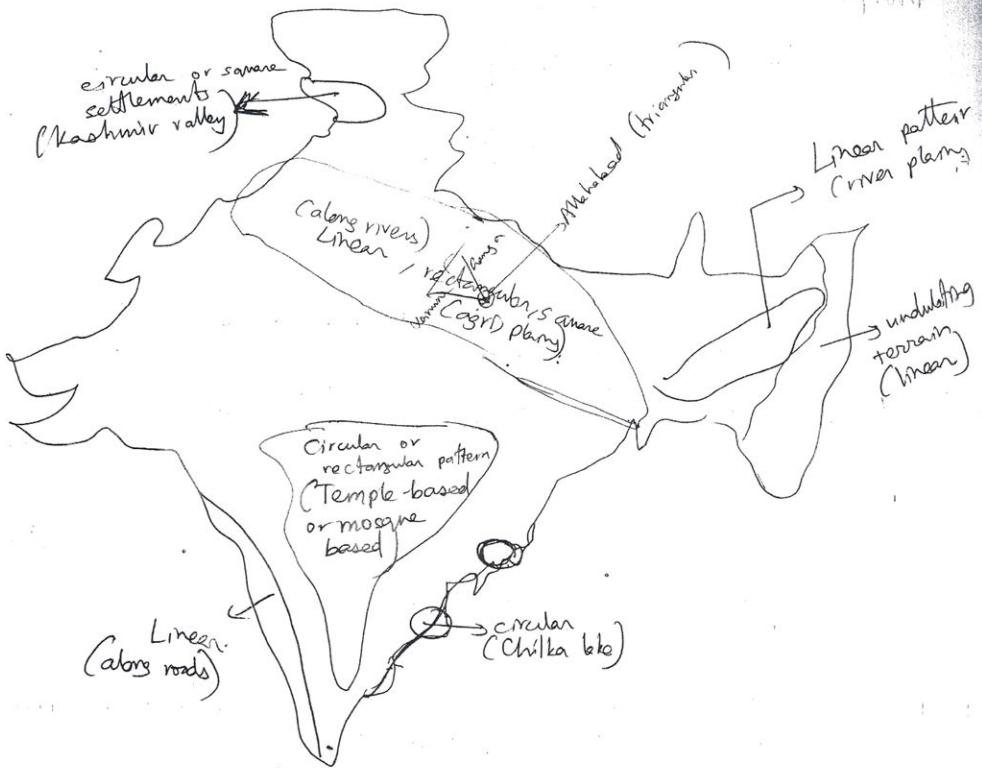
Settlement type pattern of the world

Patterns of settlement

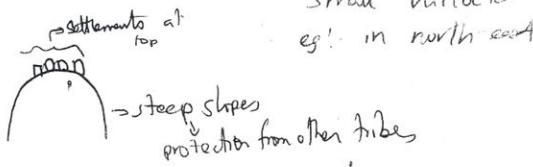
1.  → at confluence of rivers,
eg: Allahabad.
 2.  → lakes
oases.
 3. 
 4. 
 5. 
 6. horse-shoe
 7. circle with a hollow
 8. Linear pattern
 9. T
 10. semi-circular
- 
 agricultural plains
 alluvial plain
 plain topography; no impediment to settlement
(e.g. well planned settlements of Germany, Russia, Israel, setting large dams so a uniform settlement)
- 
 villages around a lake
(e.g. Mylapore)
- 
 along roadways, rail, riverbed, edge of valleys.
(e.g. Kerala, Alps, Rockies, Andes, Pyrenees, Shivalik, Ganga-Yamuna delta)
- 
 junction of roads
 or junction of rails.

- 
 around a bay
(e.g. Kaliya bay)
- also the meanders of
 Hindon river in UP
 

Pattern of rural settlement in India.

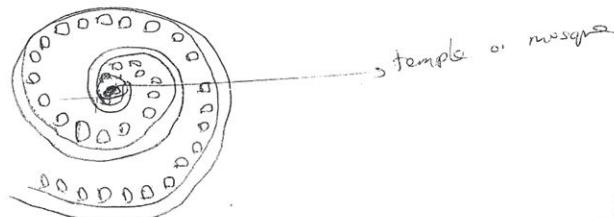
(53)



ii) Hilltop settlement \rightarrow a hamlet on the top of a small hillock
eg: in north east



iii) Nucleus pattern \rightarrow arrangement of roads is circular which ends at the central location or the nucleus of the settlement.
main landlords house, temple, mosque or church.



Morphology of settlement

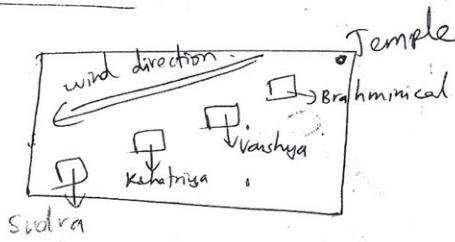
Internal structure & arrangement of any settlement

Morphology of Indian ^{rural} settlements

Religio-ritual
model

Socio-economic
model

Religio-ritual model:-



↳ Sudra settlements mostly on periphery of the village.

Varna system ~~decline~~ weakening

↳ more closeness among various settlements \Rightarrow distance b/w settlements decreases

Population in Sudra community increases.

more compact



Sudra settlement extends towards village interior

↳ The mosque or temple or church is the centre of attraction, around which the settlement develops.

Problems of rural settlement

(55)

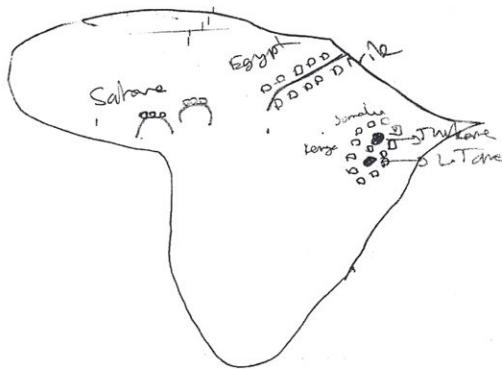
1. Poor intra & connectivity.
2. Open defecation → lack of toilets;
3. Poor housing → affected by rainfall
4. Animals & human in same settlement → interchange of diseases.
5. Long distance to fetch drinking water
6. Water borne diseases - cholera, malaria
7. Prone to flood & drought
8. Lack of economic security - drought agri.

Africa

& compact
Linear settlement → Nile in Egypt

Circular → around, Tana, Turkana

Hilltop settlements → on mounds in deserts.



Metropolitton regions

population > 5 million \rightarrow 6 cities
 51 cities with population > 1 million.



○ → primary metropolis
 ○ → secondary (upcoming)
 metropolis

Conurbation



Two physically isolated cities grow and merge with each other.

Mumbai-Pune

Hyderabad-Secunderabad

Bangalore-Hosur

Lucknow-Kanpur

Why conurbation in these places?

problems of conurbation Management same as for urbanization
 management

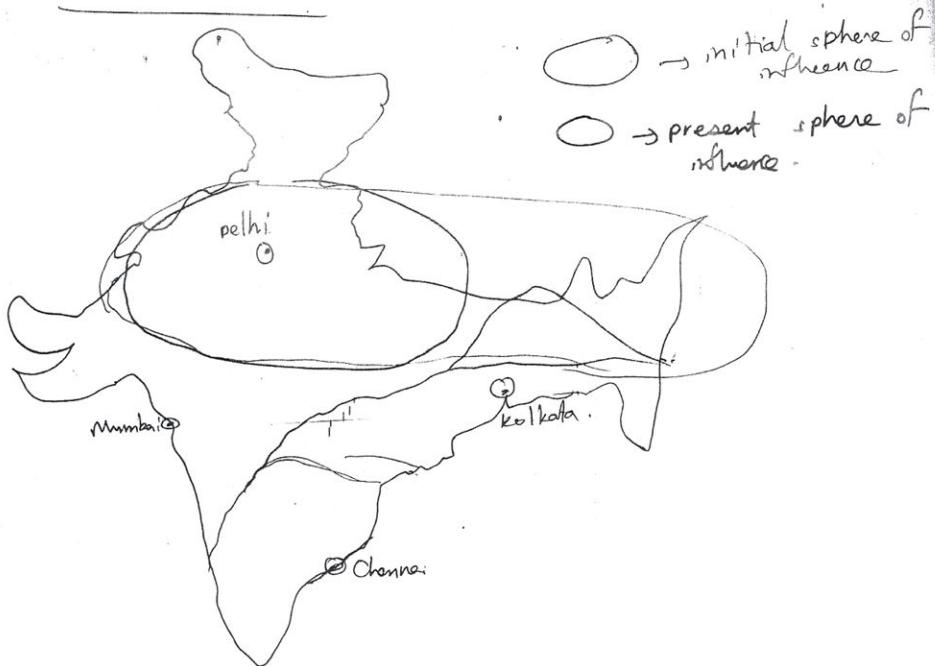
- Task of urban management becomes more voluminous

Sphere of influence

(57)

Range of a central place → The amount of distance a person is willing to travel, to migrate to that city.
 (The distance which an average migrant covers to reach this city)

Spheres of influence



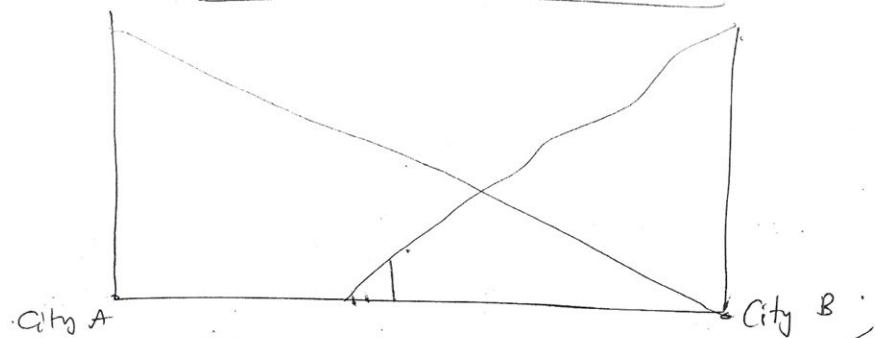
Quantitative

1. How much distance an institution of a city is known?
2. How many ppl migrate?
3. How frequent of migrate?
4. Permanent (or) one-time settlement?
5. Range of goods & services
6. P.

Analytic

1. Purpose of migration.
2. Culture & lifestyle of ppl. before & after migration

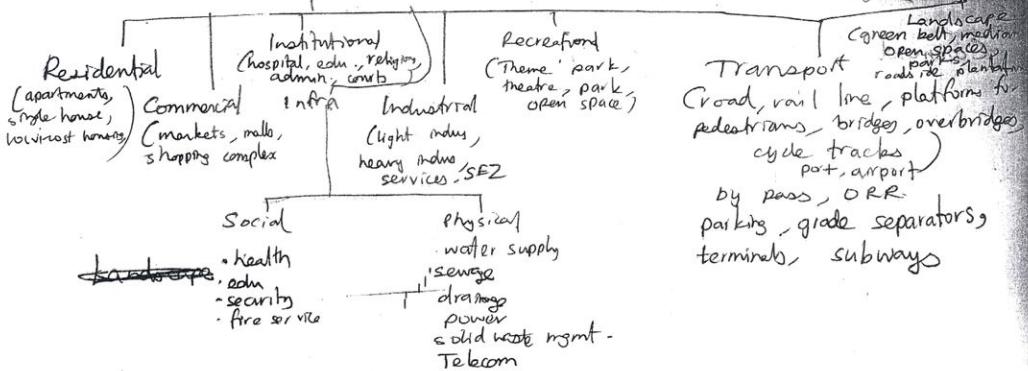
Sphere of influence of A & B



Trend Analysis of sphere of influence -

1. Before 1911 \rightarrow Kolkata had greater sphere of influence.
2. 1911-1960 \rightarrow Delhi's sphere of influence grows;
Kolkata's sphere of influence decreases.
3. 1991-2011 \rightarrow Sphere of influence of northern cities decreasingly
" " southern " increasing
Sept 11 " " Tier-11 " increasing

Ideal land use in a city



BASIS FOR SELECTING LAND FOR PLANNED URBANISATION

1. Proximity to linkage → distance from transport corridors
2. Proximity to existing settlements → to what extent Resettlement
3. Ground water availability → support the new population
4. Soil type & bearing capacity → infiltration rate, fertility, geology
 - ↳ for drainage, infiltration, hard pan, suitable for settlement
5. Drainage pattern → channels - slope, rivers, surface water bodies
6. Proximity to ecologically sensitive areas → any nearby forest or protected area.

25/11/12

Regional Development & Planning

Command Area Development Pgm.

Agri. Land available \Rightarrow 140 m hectares

Potential created for irrigation \Rightarrow 110 m hectares.

Actual area used for irrigation \Rightarrow 98 m hectares

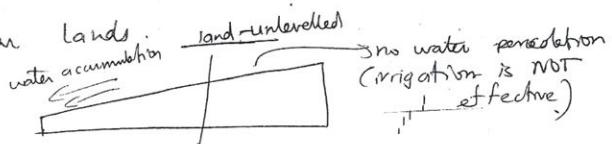
Why this gap
in usage of
available facilities?

1. Debris blockage of canals
2. Leakage & seepage losses in canals.
3. Grassed waterways

Command area devpt. pgm. is started to plug the gap
b/w potential created (110 m hectares) and actual utilisation (98 m hectare)

Concerns in utilisation

1. Ineffective water delivery system.
2. Seepage, percolation & evaporation losses.
3. Absence of rotational (warabhandi) irrigation system.
4. Irregular lands. (land-unlevelled)
water accumulation no water percolation
(irrigation is NOT effective)



Warabhandhi system



Measures taken

- 1 - Cemented water delivery system
- 2 - Loans for land levelling.
- 3 - Intro. of Warabandi system.

→ Discuss the CAD^{pgm} in Gauvery delta.

→ What are the drawbacks of CAD^{pgm} in Indira Gandhi canal.

→ Measures for Command Area deptt - in Narmada's command area -
or Damodar Valley

Identify the problems, govt. measures & suggest your suggestions for deptt. of
Backward Area development

→ N.E.

→ Malwa.

Desert

→ Rajasthan

Drought

→ Vidarbha → Telangana.

→ dry areas of North T.N.

Hill Area

→ U.P.; → H.P.; → Jharkhand region;

→

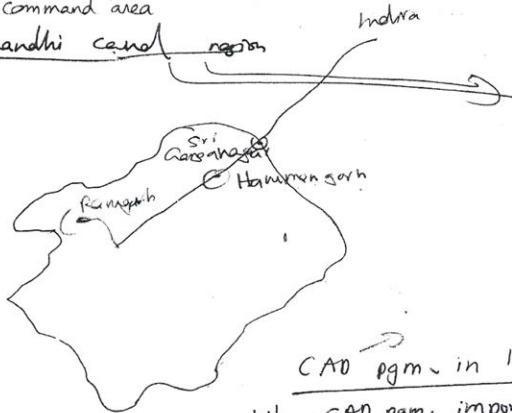
Tribal Area

→ Jharkhand

→ Chhattisgarh

Dvpt. - of command area

Indira Gandhi canal



(NIT canal improvement
pgm; overall dpt.
pgm -

CAD pgm. in Indira Gandhi canal → 1974

Why CAD pgm. important here?

(regional)

- i) Conveyance loss of water high in sandy soils.
- ii) It is a newly settled area, devoid of basic amenities.
- iii) Wind erosion & desertification cause siltation in canals.
- iv)

Problems

Irrigation

→ Evaporation loss.

→ Siltation.

→ Salination of soil.

Industry

→ No investment.

Transport

→ Sand ⇒ difficult to build roads

Salient features

- 1) On farm dpt. → surveying, land levelling, land reclamation.
- 2) Afforestation & pasture dpt., sand-dune stabilisation.
- 3) Providing communication & civic amenities, markets and drinking water.
- 4) Modern Agri inputs → HYV seeds, fertilizers, extension
- 5) Water efficiency → sprinklers, drip.
- 6) prevent conveyance loss → segmented waterways

Disaster

→ Drought

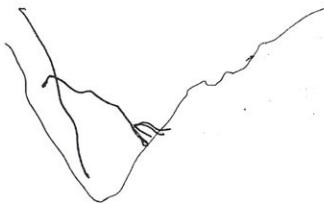
Ill-effects

- i) Waterlogging and soil salinity;
- ii) Rapid decline in coarse cereal production

Advantages

- i) Increase in productivity.
- ii) All season cultivation → no seasonal unemp.
- iii) New crops → wheat, cotton, mustard, groundnut.

Command area dpt of Cannery region



Aspects to be looked into before
implementing CWD.

- 1) Topography & soils
- 2) Existing land use
- 3) Cropping practice
- 4) Present source of irrigation
- 5) Groundwater resources
- 6) Population & major occupations
- 7) Land holding size
- 8) Land tenure
- 9) Household income
- 10) Availability of agri-labour
- 11) Transport available

problems

Agriculture

- Monocropping → rice, rice
- Seepage & percolation loss in lower command area.
- Seasonal nature of river.

Resource

5th FYP (1974-80)

MAJOR COMPONENTS OF ANY COMMAND AREA DPT. P.M.

- 1) Reclamation of waterlogged areas.
- 2) Construction of Field Irrigation Channels (FIC)
- 3) Construction of field drains
- 4) On-farm dpt. (OFD)
- 5) Adaptation of WARABANDI system for distribution of water.
- 6) Adaptation & enforcement of suitable cropping pattern.
- 7) Conjunctive use of surface and ground water.
- 8) Extension, demonstration & training pgms.
- 9) Implementing Participatory Irrigation mgmt.
- 10) Overall dpt. of agri.
- 11) Road linkage to farms
- 12) Credit

→ Command area map
Dpt. of Ladakh region



- subsidence of air mass \Rightarrow cold desert \Rightarrow no agri. land
- inadequate transport \rightarrow due to highly undulating
- slow industry growth \Rightarrow lack of investment.
- Regional dispute \rightarrow India - China
- Disasters \rightarrow landslides, avalanche
- Low population density
- Low productivity \rightarrow cold climate
- Secessionism
- Lack of employment for youth

→ Bench terracing → apple, plum

→ Resource

↳ walnut, chinar

Kashmiri handicraft → cottage industry.

→ Industry

Tourism → Leh;

Cottage → handicraft → Buddhist goods → Market in India, Nepal, China.

↳ Pashmina shawl

Incentives for investment in Ladakh.

→ Transport

→ only one road → BRO's Leh to Kargil.

→ ~~tunnels~~ → Zoji La tunnel

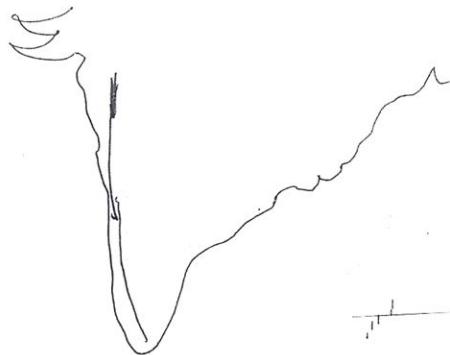
→ Integration with mainstream

→ Employment

→ Universities

→ Self-employ

Regional deptt. of Western Ghats



Problems

- ⇒ 1. Expanding urbanisation on Maharashtra side.
- 2. Konkan railways → disturbed
- 3. Poaching of animals → Resources
- 4. Disaster → Landslides
- 5. Fertilization of tea estates → eutrophication → algal bloom in lakes.
- 6. Forest fire in summer → deciduous forest; isocyanate gas
- 7. Reforestation → for timber
- 8. Tourism → pollution
- 9. Leaching → laterite soil (due to so)
- 10. Mining
- 11. Undulating terrain → lack of agri-

Solution

- ⇒ 1. Eco tourism.
- 2. Promote road & connectivity, communication (with phone)
- 3. Bench terracing, check dams

ESAs → Ecologically Significant Areas

All devt. activities will be regulated under EPA, 1986.
to protect ongoing significant biological processes
declaration as UNESCO heritage site [use its natural habitat for in-situ conserva]

• Western Ghats → birthplace of all peninsular rivers

Strategy for agro-based industry dptt. in N.Bihar

1. Lichi
- 2 - Jute
- 3 - Pear
- 4 - Sugarcane
- 5 - Mango.

→ fruit juices, collaboration with MNCs - stroffy.

→ Paper industry → molasses of sugarcane

→ Jute → jute bags ;

* Key words for regional dptt.
problem & suggestions for

- ① Agri .
- ② Resource
- ③ Transport
- ④ Industry
- ⑤ Disaster

Integrated Rural Development programme (IRDP 1978):

Integrated devpt. pgm. \Rightarrow a holistic development for all particular village areas in India.
 providing credit; irrigation; infra; transport; communication; education; health; employment.

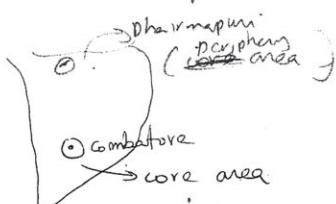
Regional devpt. \Rightarrow diff. & specific pgm. for specific region (area).

Balanced growth \rightarrow To concentrate uniformly on the devt. of all areas simultaneously by allocating equal funds & equal no. of projects.

Unbalanced growth \rightarrow

To select a particular place and make it a growth pole, expecting it to bring trickle down growth to ~~no~~ other areas through forward & backward linkage.

Core periphery model



By developing a periphery area, it acts as BACKWARDING. an effective supplement to core area by

Growth pole & growth centre

- Section-wise planning (To conc. on a specific section of PPD)
- Women → Sable, Swadhar Greh, JSSY
 - Child → ICDS, JSSY
 - OBC → 27% reservation
 - Muslims → Sachar Committee
 - SC / ST →

Sector-wise planning (To select a key sector and conc. on its growth)

Specific dept. strategies for

- Agri. sector
- ITES (BPO) sector
- IT sector
- Manufacturing sector
-

By adopting these various strategies of planning,
India it is expected to become

→ Study growth pole theory

India's experience in regional planning

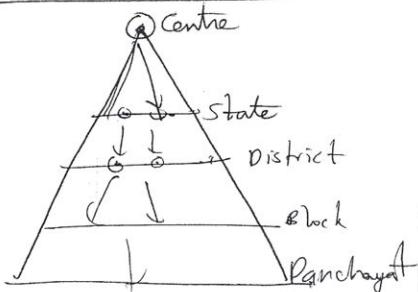
Criticism of Growth pole & growth centre theory.

1. Lack of trickle down.
2. ~~Bad~~ Red tapism.
3. Corruption.
4. Urban explosion.
- 5.

MULTI-LEVEL PLANNING

Planning at various levels of government
(Central planning, state planning, district, block, panchayat planning).

Top-down approach

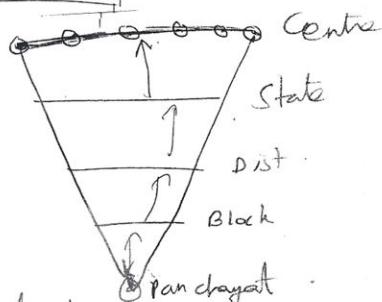


Centralised planning.

→ To bring about uniform dept.

. Needs to the scheme. till 1970's

Bottom-up approach



- Decentralised planning.
- Region-specific (grass-root) level planning.
- Need based, resource based strategy.
- Promotes people participation in planning.
- Takes huge time lag for implementation of plans.
- Decentralised planning → corruption has penetrated to lower levels.
- Lack of trained, responsible panchayat leaders
- Benami leadership → male relatives of the ~~orachal~~ woman panchayat leaders are ~~are~~ running the Panchayat
- Lack of self-sustaining village economy.

Neopolitics vs. Geo-strategy

political alliance (or)
adversaries or virtue of
geographical reasons

eg: Indo-Pak = Kashmir issue,
Sri Lanka

Indo-ST = cult of manmar
fishermen problem.

Indo-Bhutan - friendship;

India's Look East policy

Strategic advantage or disadvantage due
to geographic (or) location factors

eg: - Rimland (Indian Ocean Rim)

Himalayas \Rightarrow isochinal \Rightarrow steep slope on
Indian side

\downarrow
strategic disadvantage.
Siachen glacier \Rightarrow upland
strategic ad.

ECOLOGICAL ISSUES

Environmental hazards

1. Land slides
2. Earthquakes
3. Tsunami & floods
4. Drought

6. Epidemics

Diseases

- Epidemic → spreads ~~too~~ rapidly throughout an area in a small time.
- Endemic → localized to a particular area and has been associated with that area for a long period in history.
- Pandemic → prevalent throughout the world.

Contemporary

→ Discuss the epidemiological map, geographical reasons for the spread, measures to check Dengue (or) avian flu (or) conjunctivitis (or) chikungunya

Disaster management

pre-disaster mngt (awareness)

During

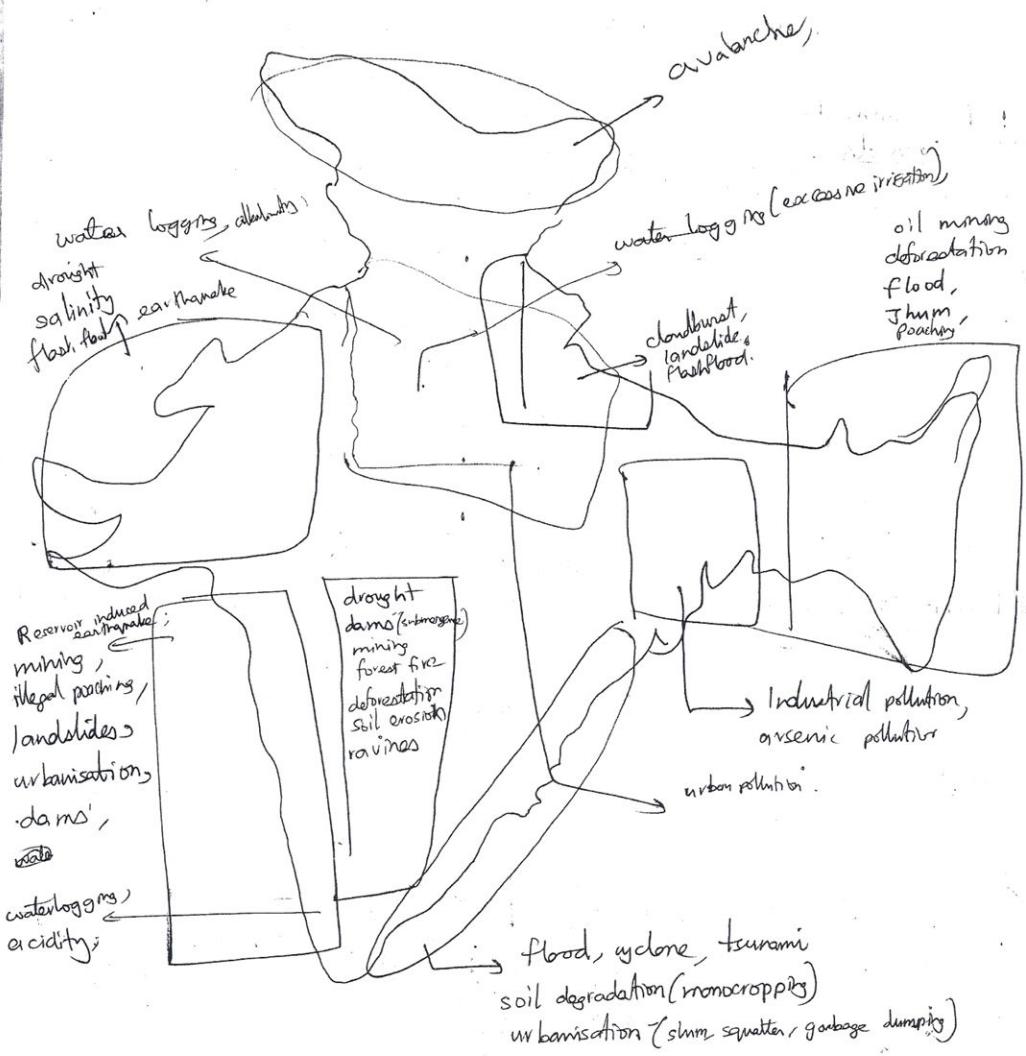
post-disaster (rehabilitation, resettlement)

Disaster → sudden & intensive impact
earthquake, tsunami, flood, drought

Hazard → slow & gradual impact;
arsenic pollution, deforestation, air pollution

Disasters also create hazards.

Bhopal gas disaster creates envt. hazards.
(polluted water)



Island regions → deforestation, unsustainable tourism,
 rising sea level, coral bleaching, tsunami
 tropical & equatorial epidemics (malaria) ⇒ since closer to equator.

Endemic diseases

Kala azar disease → N Bihar → Leishmania donovale → Sandfly

→

Bird flu → N.E.

Dengue → T.N.

~~Hypothyroidism~~ Iodine deficiency → hilly areas
(goitre, hypothyroidism) (Himachal, J&K, Uttarakhand)

PEM (Protein Energy Malnutrition) → Central India → lack of protein

Kwashiorkor, Marasmus

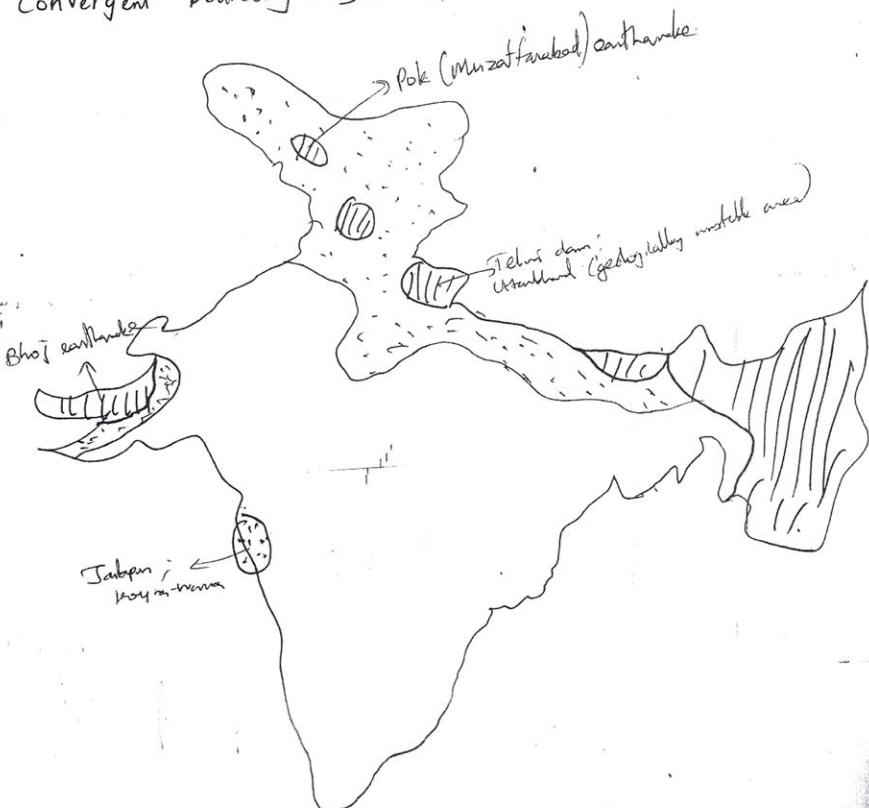
Japanese encephalitis → S. India & E. India

Earthquakes - F

Convergent boundary → b/w Indo-Arabs plate & Eurasian plate -

Convergent boundary

Convergent Divergent conservative (shearing)



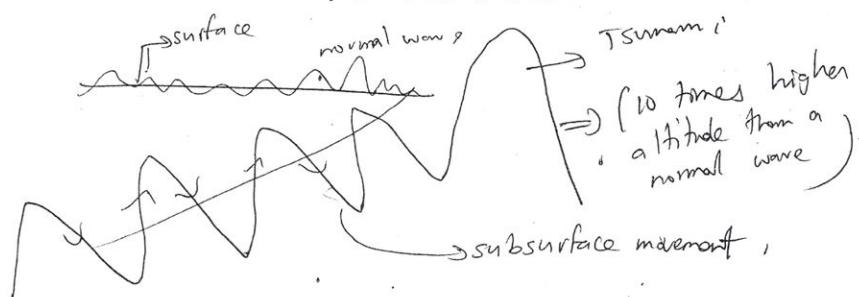
Anthropogenic activities \rightarrow Koyra - Warra

RIS \rightarrow Reservoir induced seismicity
Tehri dam \rightarrow accelerated the impact of earthquake.

Tsunami \rightarrow harbour wave

Subsurface wave movement

not felt in mid-ocean, but only in the shore.



Reasons for Tsunami

Under-ocean

1. Earthquake

high wavelength

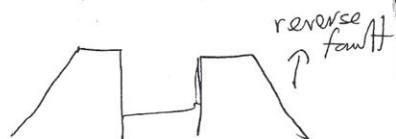
Tsunami has a very high wavelength, that it appears more like a tide than a wave.

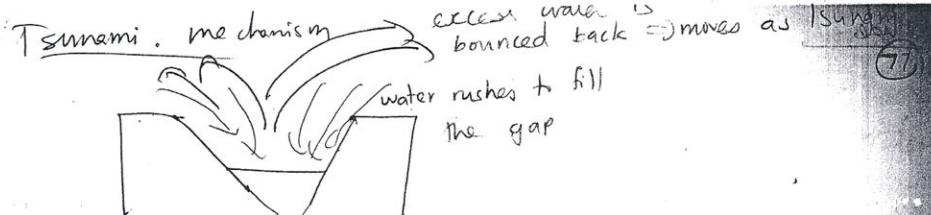
Not all oceanic earthquakes create Tsunami.

Tsunami is caused only in dip-slip movement earthquakes

(normal or reverse fault)

due to divergent earthquake

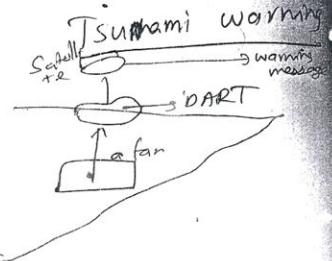




2. Volcanic eruption in ocean.

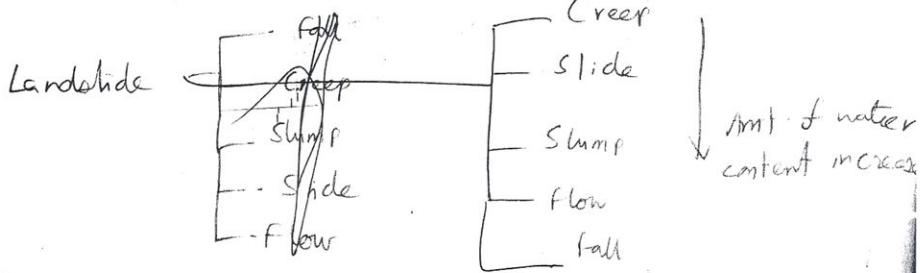
3. Landslide in coast.

4. Meteoritic fall in ocean.



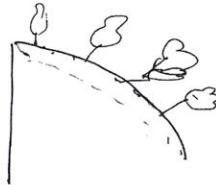
LANDSLIDE

- Fall of large pieces of rocks, esp. due to action of gravitational force (Mass wasting).

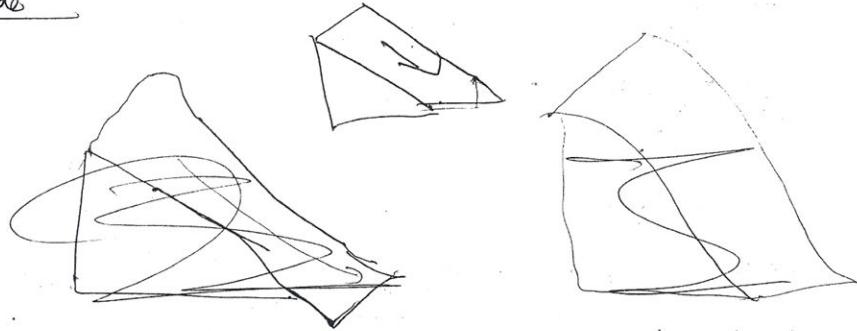


Creep

Slow movement of surface earth material
 (soil, debris, vegetation).

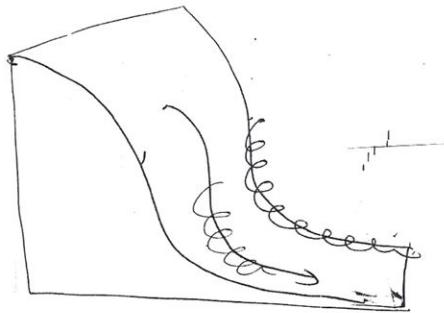


Slide



Slippage of rock or earthen material without backward rotation.

Shump



With backward rotation

flow

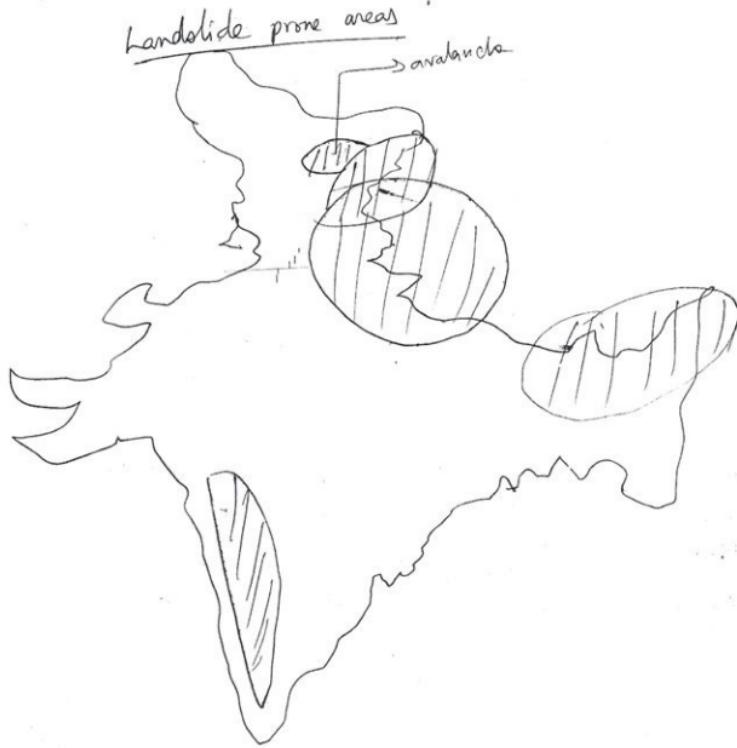
Movement of surface earthen material in a slurry form (due to presence of large amount of water).
eg:- Mudslide floods like accompanying showing

Fall

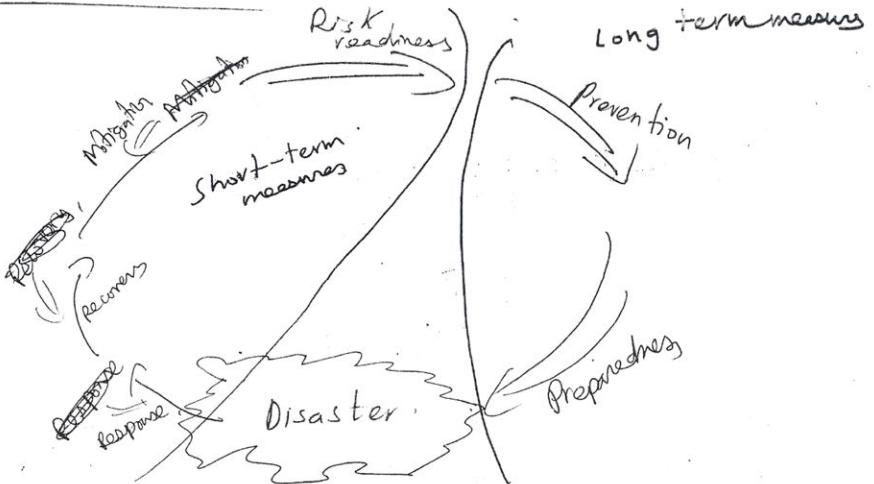
free fall of a broken or unfragmented rock
under gravity

Avalanche

Sudden, large, quick movement of
huge mass of earthen material or glacial material



Disaster management



pre

- Mock drill
- Awareness
- Training
- Dissemination of information

{ preparedness }

disaster

- prone areas (vulnerability mapping)
- forecasting - dissemination of info.
- NGOs, doctors, fire personnel, donors, students for
- Make an emergency no. available.
(e.g. helpline during Uttarakhand flood)

{ preparedness }

Post-disaster

- Rescue operations
- Providing food / medicine
- Airlifting of supplies
- Temporary camps

{ response }

post
recovery

- Remove debris

Est. essential infra → schools, hospitals, ration shops, dwellings:-

Mitigation (sociologically, psychologically, economically)
communities by
- Counselling
- Relievers → cultural
- Alternative employment
compensation (relief fund)

ft

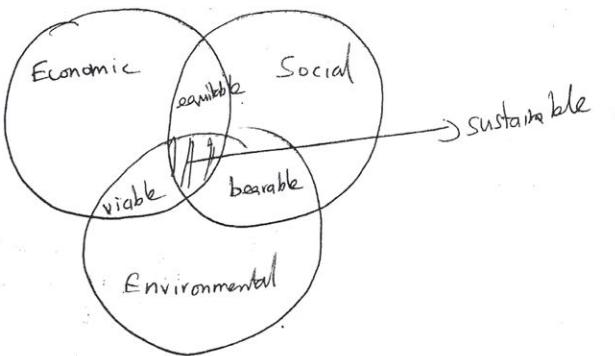
Response, recovery, mitigation \Rightarrow similar for all disasters;

prevention, preparedness \rightarrow varies from disaster to disaster

Sustainable development

Meeting the needs & aspiration of the present generation without compromising the needs ^{& aspirations} of future generations.

Sustainable development \rightarrow coined by Brundtland (former Norway President)



Limits to sustainable devt

1. Resource (fossil fuels, land)
fridge gas controversy
Montreal protocol
2. Lack of technology (prohibitive cost, entered by developing countries - HFCs)
3. Lack of infra
4. Pollution \rightarrow coal, diesel fumes
5. Lack of awareness \rightarrow about imp. of environment
6. High population \rightarrow increasing food demands
7. Regional disparity [inter-regional, intra-regional]

→ Bring out a strategy for the sustainable devt. of India.

Strategy

Macro

1. Resource analysis forecast;
2. Non-renewable resources (R&D);
3. Binding policies (integrated into mainstream policy);
4. Awareness of importance of sustainable devt.;
5. Efficient use of available resources.
6. Conservation of resources.
7. Better technology (forward-looking)

Micro

- Land based
- Water based
- Air based.
- Vegetation based

Land-based

- Organic manure → Allowing land to remain fallow for some time.
Organic manures-vermicompost,
- Land reclamation → rainfed, prevent soil erosion → store, cropping, mulching
- Evergreen farming (IPM, INM) rather than green revolution.
- Do NOT dump non-biodegradable wastes.
- Crop rotation
- Social forestry → P's; E SAs → reduce in deforestation, mining
Regulated dust in geologically vulnerable areas → Himalayas (HP, Uttarakhand)
Regulated tourism in buffer areas -

Water based

- Rain water harvesting; watersheds
Prevent water pollution.
- Increase percolation & prevent run-off through checkdams.
- Aquifer recharge.
- Desalination.
- Effluent treatment, before letting off into river.
- Bioremediation of water → using oil-eating bacteria to treat oil slicks
- Prevent over-fishing.

Air Based

- Reduce fossil fuel -
more carbon sinks → forests, oceans.
- Carbon sequestration.
- More non-conventional fuel.
- Reduce demand - mass transport;
Int'l. binding protocols → Kyoto, Montreal.
- Electrostatic precipitators in chimneys.

Vegetation based

- Selection of suitable crops
- coarse cereals for drylands.
- Crop rotation
- Native varieties → to preserve gene pool, conserve biodiversity
- Agro-forestry.
- Natural vegetation conservation → no monoculture.
- R&D - R&D +.
- Public trusteeship → Nagoya → IAS clause.

Brahmaputra

Source :- Mansarovar lake, Tibet

In China (Tibet), it is called Yarkung Tsangpo.

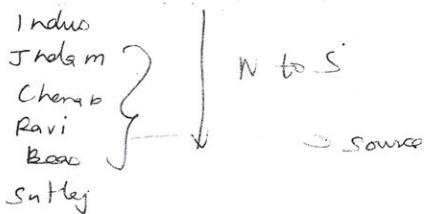
Brahmaputra \Rightarrow called Dihang (in Arunachal), Brahmaputra (Assam)

Jamuna (B'desh), Padma (after joining with Assam), Meghna (near delta)

Left hand tributaries Debang, Lohit, Dibang

Right hand " \rightarrow Subansiri, Manas, Teesta, Sun Kosi; Assam (TASMA)

Indus river system



Only Indus & Sutlej originate outside India (in China)

Power projects across Indus:-

- Nartha Jhakri \Rightarrow across Sutlej in H.P.
proposed largest HEP
- Dulpul navigation project
- Kishenganga

09/02/12

Morphology of Urban settlements

Internal structure & arrangement of an urban area.

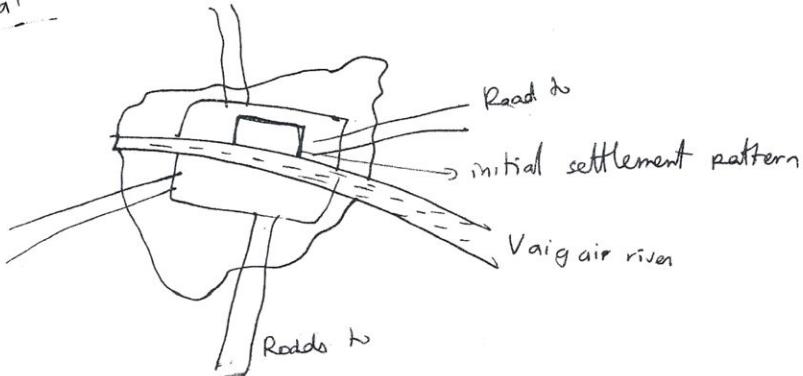
Morphology of Indian urban settlements

- 1) Hindu town → developed through TEMPLE or FORT;
eg:- Madurai, Panna
- 2) Islamic → Allahabad, Agra
- 3) British → Kolkata, Mumbai, Chennai
- 4) Modern planned town: → Chandigarh, Noida, Jaipur.

Hindu town

- devd. through temple or fort.
- Wooden structures → eg: patra
- Bazaar based, ⇒ (but there is segregation of bazaar & residential areas)
- Clear cut settlement division based on Varna system.
- Disturbed by new development. Mixing of industrial & residential areas.

Madurai



Islamic town

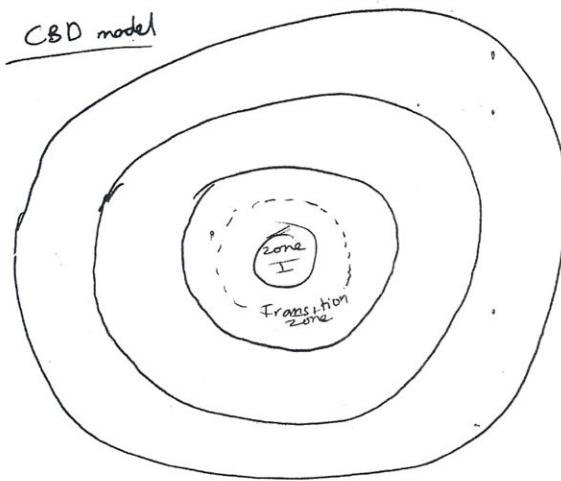
- Develops with either palace or fort as the centre.
- There is no segregation of bazaar & residential areas.
- The entire town is fortified \Rightarrow (enclosed by big walls).
- Modern devt. takes place outside the fort in an
 - planned manner.
eg:- Golconda fort & Hyderabad;

British towns

based on concentric or Zonal theory given by E.W.Briggs

started ~~in~~ in Chicago.

It is called a CBD (Central Business District) model.



Zone I

- Central Business district.
- Very busy in day-time, but nobody in night-time.
- Heavy congestion in day-time.
- Centre for all business activities.

Zone II (Transition zone)

- Low class working ppl. → blue collar jobs.
- They reside here, very close to CBD, to reduce transport cost.
- called China town → smuggling, underworld, rummages, illicit drug

Zone III (Working men's zone)

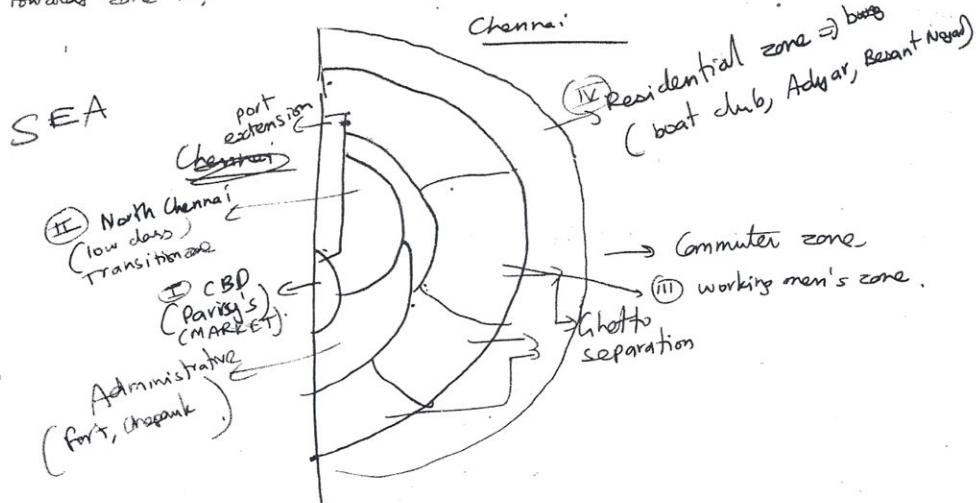
- Clerks, white collar employees.
- So, in Chennai, Brahmins who assisted British in white collar jobs, developed a working men's zone.
eg:- Triplicane, Mylapore.
- Second-generation migrants

Earlier, they were in zone II, but now have outmigrated to zone III.

Transition

Zone I → Zone II → Zone III → Zone IV

- CBD enlarges and expands.
- ppl in zone II are pushed towards zone III, ppl in zone III are pushed towards zone IV; zone IV are shifted along roadways.



Ghetto → a settlement consists of a similar class or
of people.

eg:- Sowcarpet → Jam ghetto.

Zone I

Residential zone ⇒ high class
↓
Large, individual houses.

- Very far from CBD, but these rich ppl
- Single family dwellings.

Drawbacks of CBD model

- No space for roads.
- No sol. zone for ^{heavy} industry. (only market & CBD & light industries)

Applicability

- Chennai, Kolkata, Mumbai.
- Chicago CBD model is completely replicated in all European & US cities.

Relevance

- One concentrated market ⇒ 1 CBD → In Europe, ppl do bulk purchase. And, they can also reach the CBD in a short time.

- India ⇒ no bulk purchase

High congestion → very long time to reach CBD -

∴ CBD is dispersed in India \Rightarrow more than CBDs in a single city.

CBD 1 \rightarrow Parry's

CBD 2 \rightarrow T. Nagar

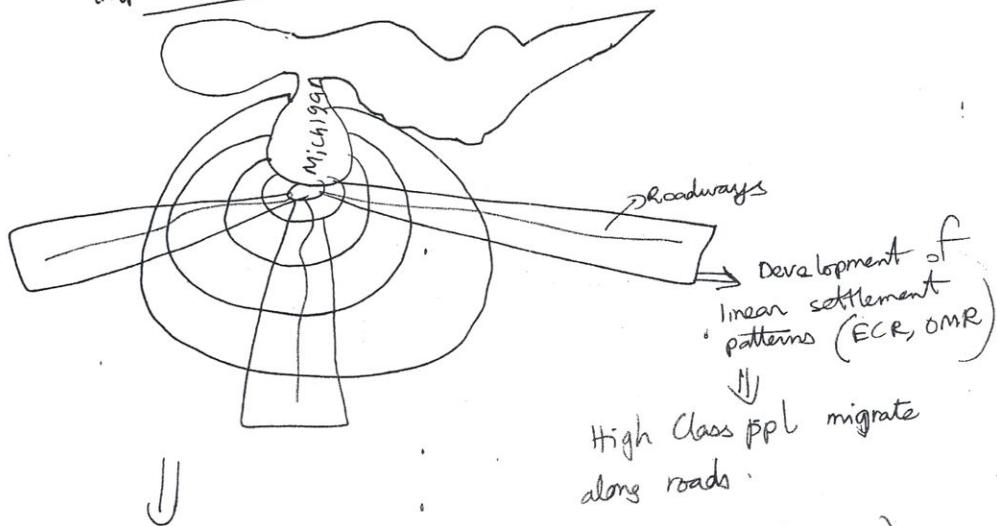
CBD 3 \rightarrow Velachery

Bike Culture in Indian urban areas

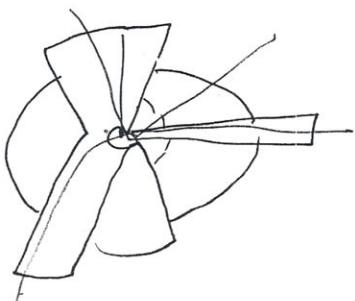
\Downarrow
due to absence of proper MRTS;

modifications of CBD \rightarrow Sector Theory

Impact of roadways

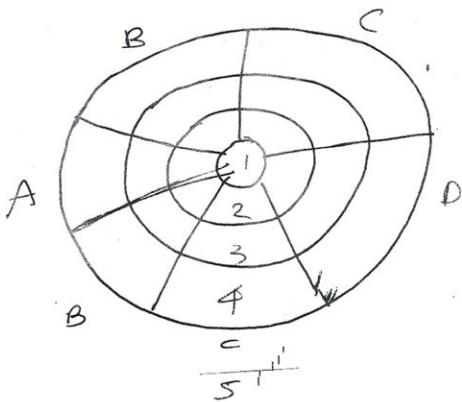


Sector theory \Rightarrow (new evolution of CBD)

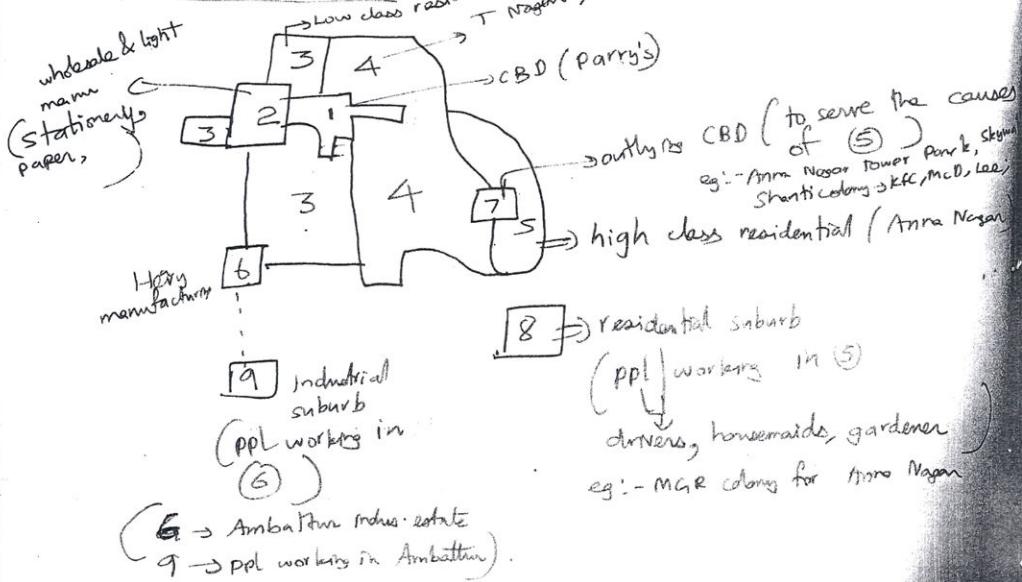


Petermann model

(modification of CBP;
hypothetical;
NOT applicable anywhere).



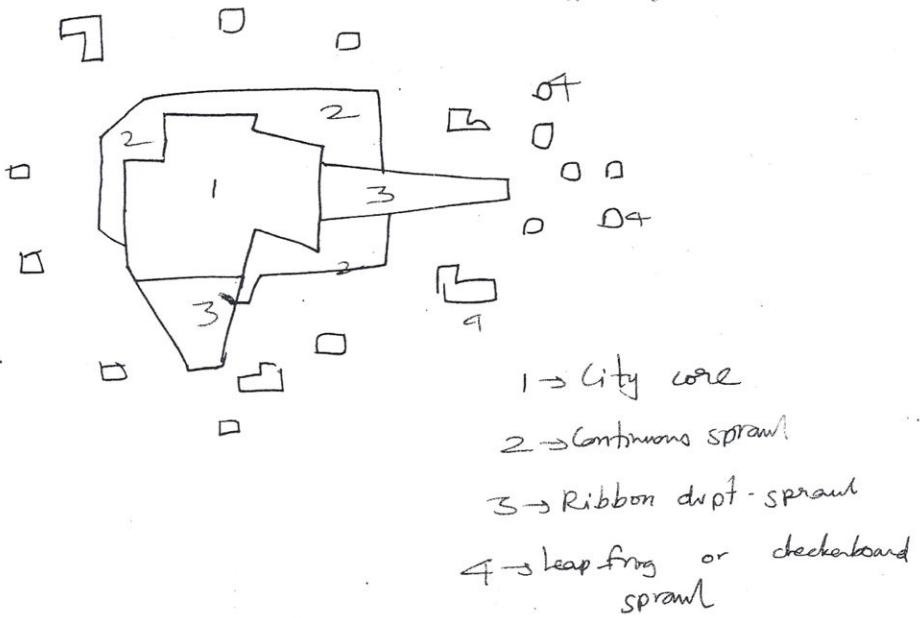
Multiple CBD (here ① & ⑦ are CBPs).
Multiple nuclei theory.



Explosion city model (a speculation model)

↓
the real-estate speculation

(an ORR to come,
a cottage to come up here)



Applicability of various models

CBD → Chicago, UK

Sector → UK

India

Initially CBD (concentric or zonal model)
(before independence)



Sector ~~model~~ model (post-independence)



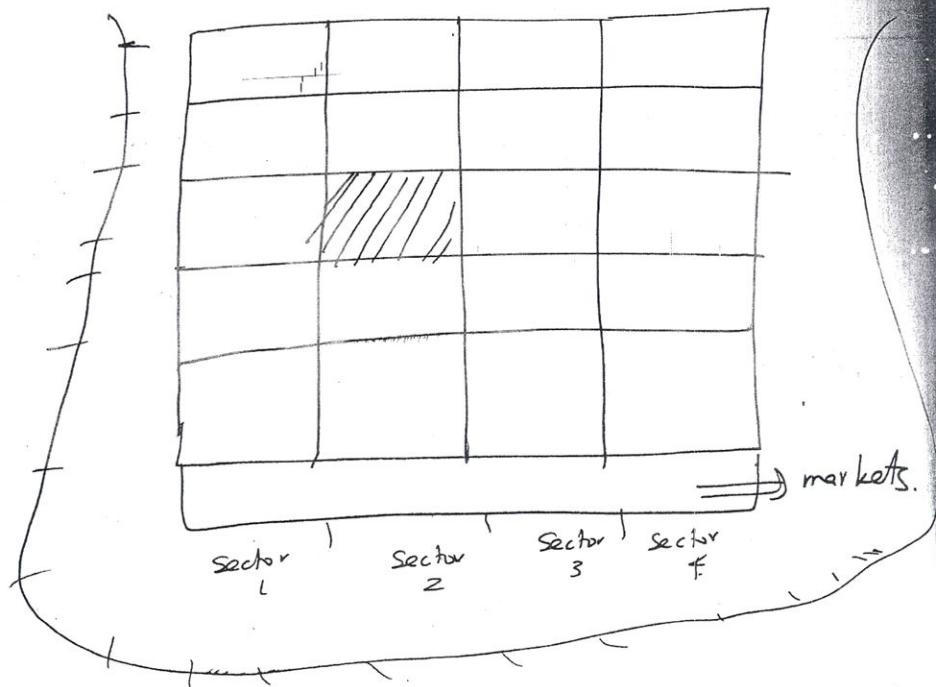
multiple nuclei (1980s-2000s)



Explosion city model (real estate boom)
After 2000s'

Grid pattern

(eg:- Chandigarh)



- Sector-wise division

- Disadv :- of Chandigarh (see Corbusier)

- 1. Markets in one corner (not in centre)

2. Takes huge time to reach
day to day purchase of Indians

3. Widely spaced houses (no shadow of one building on another),
so, high heat felt in roads.

Deterioration

3. Hence in east-west direction

↳ sunrays enter @ 6 - am; heating up).

Study these models (search in net)
Y B D

Ahmedabad

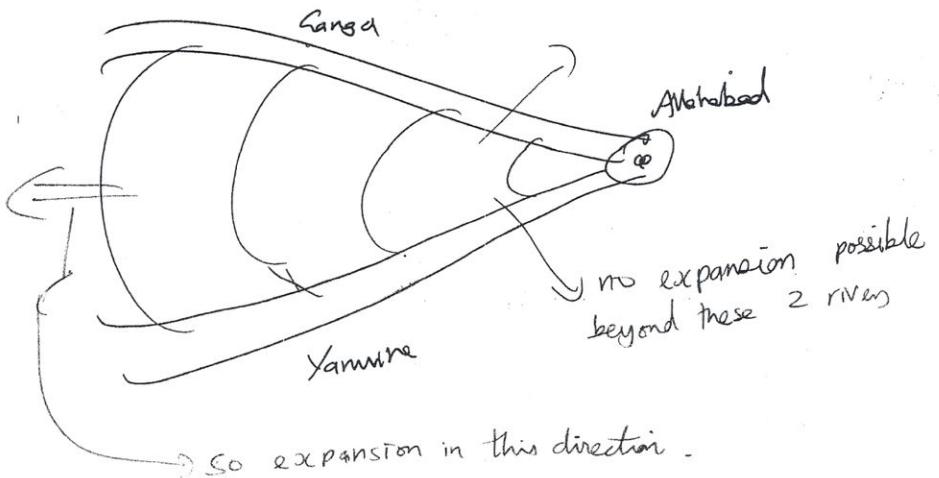
Jaipur, Noida

Delhi

Patna, Bhubaneshwar, Mumbai, Kolkata

relevance of grid
(Chandigarh model) has been
modified & adopted successfully
in Noida, Jaipur

Allahabad - a collapsed model.



→ Compare the Indian urban morphological pattern with
~~the~~ European morphological pattern.

→ How has the grid pattern of Chandigarh modified & successfully adopted in Noida?

→ Explain how Howard's ~~bridge~~ ~~bridge~~ has modified the urban morphology of Kolkata?

03/12/12

Food Security \rightarrow MDG
To eradicate extreme poverty & hunger.



AAA of food with sufficient nutrition.

Evergreen agriculture

(con't in next)

1. Food security
2. Sustainable devt
3. Energy crisis
4. Regional disparity

~~AAA~~. Availability \rightarrow to increase the production of grains:

- Green revolution.
- Fertilizer subsidy \rightarrow non-plan revenue expenditure.
- = Minimum Support Price.

Accessibility

- PDS.
- Mid-day meal scheme.

Affordability (to increase the purchasing power) to give away food grains at cheap price

Antodaya Anna Yojna \Rightarrow T PDS.

Employment generation \rightarrow MNREGA (earlier Food for work scheme).

MSSRF \rightarrow food insecurity map.



Schemes

1975 → ICDS \Rightarrow nutritional supplement

Janani Shishu Suraksha Yojna.

PDS

Direct cash transfer for ration.

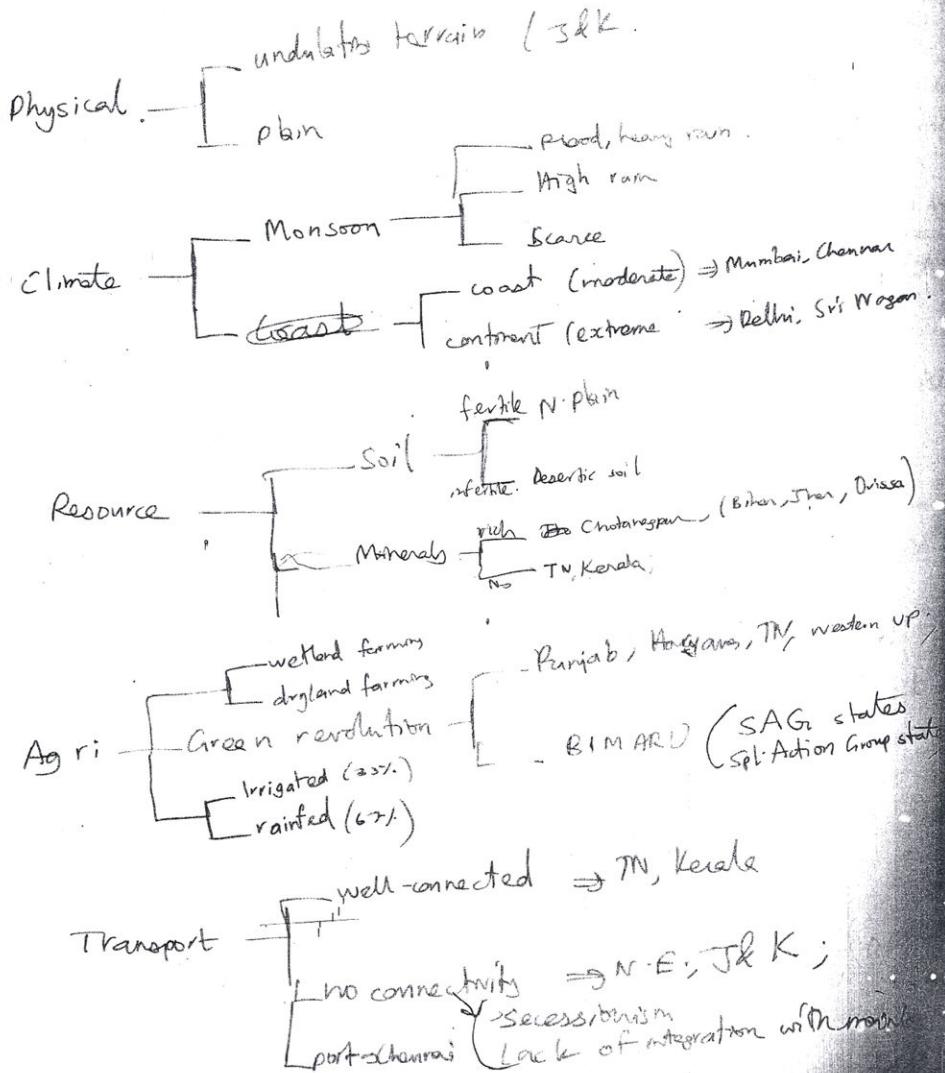
FSA (Food Security Act)

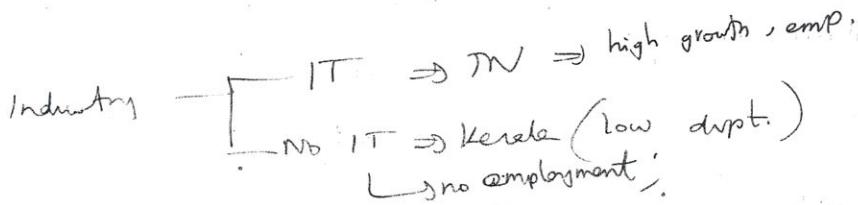
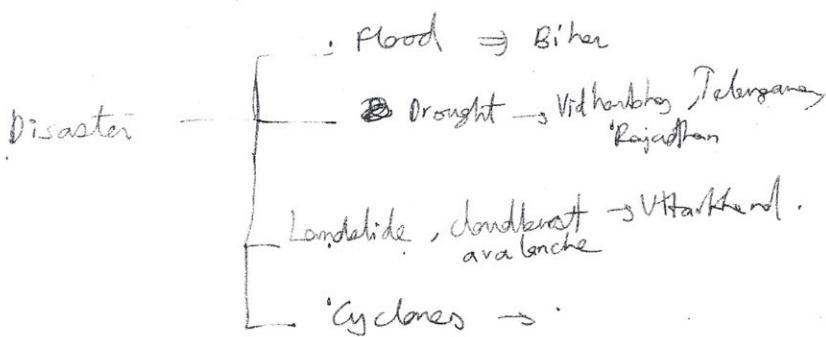
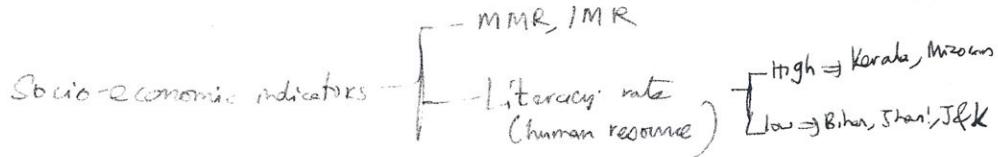
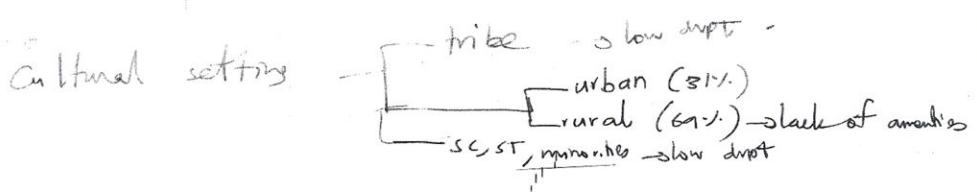
Food coupons (WIC scheme of U.S.)
Women
Infant children

Regional disparity in India

(Touch all the chapters in paper 11)

- 1) Physical 2) Climate 3) Resource
- 4) Agr. 5) Industry 6) Transport 7) Disaster
- 8) Socio-economic indicators.





How to remove regional disparities.

- 1) PURA
- 2) Literacy
- 3) Growth pole, growth centre, core-periphery model,
section wise, sector wise
- 4) Robust growth → inclusive growth

EIA (Environmental Impact Assessment)

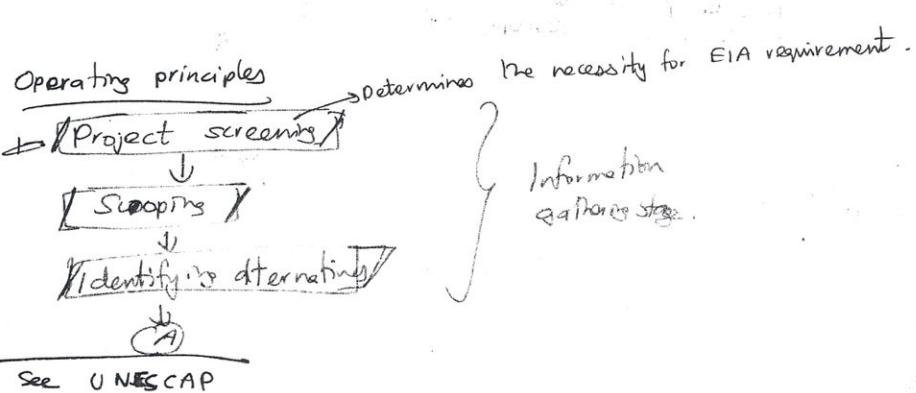
Process of Anticipating or predicting the social, economic environmental impact of a project, even before its implementation.

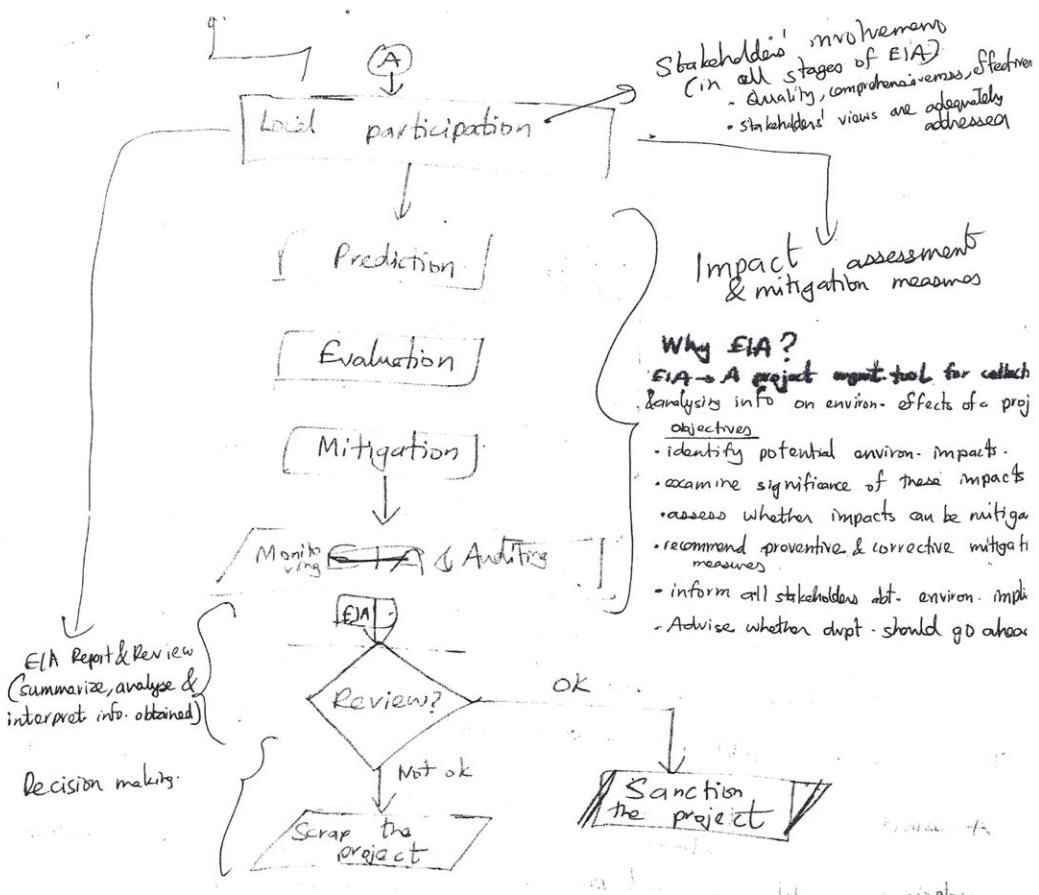
Basic principles (8 guiding principles)

1. Participation → local community participation in every stage of the project, right from initiation. An appropriate & timely access to the process for all interested parties.
2. Transparency → info detail awareness about investment, procedure, All assessment decisions & their basis must be open & accessible.
3. Certainty → certainty about deadline & completion of project to prevent Process & timeline of assessment should be agreed in cost over-run.
4. Accountability → responsibility on the stakeholders for any collateral damage & allowed by all participants at all stages (initiation, running, post-completion) → to all the parties.
5. Credibility → trustworthiness of the EIA report. Assessment undertaken with professionalism & Objectivity.
6. Cost effectiveness → profitability To assure environmental protection & minimum cost to the society.
7. Flexibility → to be able to adapt to future dynamic developments Assessment process must be able to adapt to deal with any situation.
8. Practicality → feasibility of a project in the given area. Info. & decisions provided by assessment processes should be readily useable in real-time decision making & planning.

Participation

local community to be consulted for traditional knowledge, to know the psychological & social orientation





Scoping

- provides project
- identifies project's potential impact
- provides project alternatives
- provides basis for developing TOR

Identifying alternatives

- Evolving multiple alternatives

Location
scale of projects
process
Layout
operating conditions

Public participation

- Public hearings → to gather opinion

Individuals are not forthcoming in this fast, individualistic world

The minds of people is changing in nature

... - Indian context

Prediction of impact

prediction of impacts (quantitative impacts)
magnitude → extent (area) → duration
of an impact.

Evaluation of impact

Significance & importance of a particular impact will be analysed.

Mitigation of

How to reduce the impact?

To design systems/processes to avoid
reduce & minimize adverse impacts
To enhance beneficial outcomes.

Monitoring & Auditing

Identifying impacts that require i) monitoring, ii) auditing.

EIA

NOT technical report
Put in the public domain (e.g. - WRI EEP report
in MoEF website)

summary
methodologies used
results
interpretations
conclusions

Easy for anyone to understand.

Review

- Assesses adequacy of issues addressed.
- Facilitate decision making process.

Loo PS → a loop given to the first stage, at every stage, to review & propose alternatives

In every stage, a loop is given to the previous stages (to analyse the alternatives right from the first stage).

EIA in India.

very four organisations in India are equipped to create EIA:
NEERI → National Env't. Engg. Research Instt.

TISS → Tata Instt. of Social Sciences

A separate govt. body should be estd. to prepare EIA report. Today prvt. cos. are entrusted with this job.

⇒ The power to review EIA should be given to an independent body rather than MoEF.
(MoEF does NOT have sufficient technical expertise)

→ Plagiarism in preparing EIA, due to ICT

How to improve EIA as:- Lawless

- More education & training for preparation of EIA
- An independent EIA authority for govt
- More awareness among ppl for the importance to involve in EIA
- Improving credibility of EIA reports (by addressing the issue of Plagiarism)

Agrarian & industrial unrest

since all problems of labour are addressed
post-liberalisation, communism has declined; industrial
unrest scarce - (ex: - Marcas plant);
sporadic protests.

Agrarian unrest is more in India rather than
industrial unrest. ↓ since many of the land reforms have NOT been
implemented properly

(Tinkarukkunnu dam, Jan Satyagraha
(landless labourers

Small farmers (Kisan) → disparity b/w small & rich farmers widened due to
the resource-intensive Green Revolution.

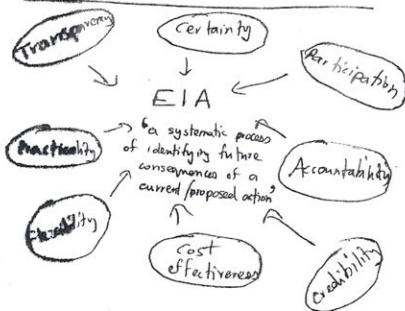
Agrarian unrest [Peasants (Mazdoor) → land reforms have NOT been implemented properly
eg:- Naxalbari movement; Bhagat Singh movement
violent]

World economic devpt.

- Various stages of economic devpt.
1. Primitive Africa
 2. Pre-condition to take off India
 3. Take off China, Brazil
 4. Drive to Maturity US

5. Age of Mass consumption Europe

EIA → GUIDING PRINCIPLES



World agri

		British market gardeners, fruits, vegetables	
		Orchards	wheat, maize, corn, soya
Benefits	Monoculture	Monoculture (rice)	Monoculture (rice)

Benefits

EIA-Benefits & flaws

Flaws

1. Provides systematic methods for impact assess. The methods are time-consuming.
 2. Estimates cost/benefit trade-off of alternative actions sometimes, alternative actions are too costly.
 3. Facilitates public participation. Little public participation in actual implementation
 4. Provides an effective mechanism for coordination, environ. integration 3) negotiation 4) feedback.
 5. Provides an INSTITUTIONALIZED APPROACH.
 6. Achieve "balance b/w devt. & environ. protection".
 7. Integrates conservation as a part of the project.
- Too scientific ⇒ uncomprehensible, bulky report.
Lack of reliable data ; Plagiarism.
- EIA's spirit & recommendations are seldom followed, once project takes on.
- More education & training on i.e. necessarism ; it is still found want.

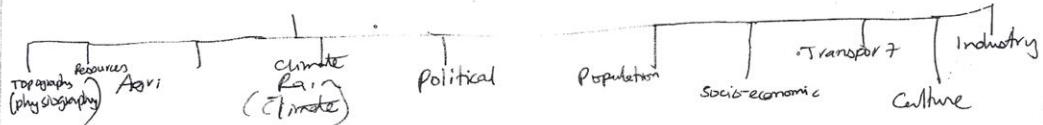
Famine

~~so~~ famine exist only in Africa. (Senegal, central Mali, Niger, Chad, central Sudan, Eritrea).
 SAHEL region \rightarrow part of Sub-Saharan Africa.
 transition region b/w Sahara & Savanna

→ Causes, impact & measures to tackle famine in Africa.

→ Impact of climate change on food production.

→ Regional disparity in the world.



first choice

Paper I

3 questions from first 5 chapters

Models & theories

Population \Rightarrow basics (growth, migration, distribution)
(concept)

last choice (sphere of urban influence,
urban sprawl)

Paper II

Map

3 questions from first 5 chapters

Contemporary issues

→ Population as social capital.

Social Capital

"What we cannot do alone, we can together."

Creating a 'we' feeling among the people to synergise their energy and achieve common aspirations & goals.

eg:- successful stories of social capital

- 1) AMUL → co-operative → White revolution.
- 2) Apico, Charkhi.
- 3) Self Help Groups
- 4) Grameen Bank (MFIs) in Bangladesh.
- 5) Sugarcane & wine co-op in Maharashtra.
- 6) NGOs
- 7) IAC (India Against Corruption)
- 8) Arab Spring
- 9) Community forestry.

Similarities b/w Primitive & mo-

Primitive

Modern

Consumerism → no savings

no rigid work time

reduces dress

Living together concept

Social ~~in~~ interaction
(Arab Spring) IAC

i. No savings

2. no rigid work time

3. Naked ; half naked

4. No institution of marriage.

5. Community life.

Self help group

- A small group of women save small amount of money \rightarrow start a bank account.
- Bank gives cheap credit to the SHG to develop an enterprise.
- Enterprise - women empowerment, rural devt.
- Accountability \rightarrow since the entire group is accountable to the bank, no one woman can stop payback.

Disadv.

Instead of starting an enterprise, SHGs have become moneylenders. Though this is undesirable, it has also helped rural ppl to find a credit at a lesser rate than moneylenders.

REGIONS

Region

A region is an area having some homogeneity w.r.t either culture, geographical.

Geographical

Indo-Gangetic region

Peninsula

Prairies

Religious

W Asia \rightarrow Islamic

West \rightarrow Christian

India \rightarrow Hindu

S E Asia \rightarrow Buddhist

Economic divts-

- First world \rightarrow West & N America & Europe
- Second world \rightarrow Communist
- Third world \rightarrow Developing countries.

Caste-wise regions

- Kongu belt (TN)
- Lingayat (Karnataka)
- Patel belt (Gujarat)

Cultural regions

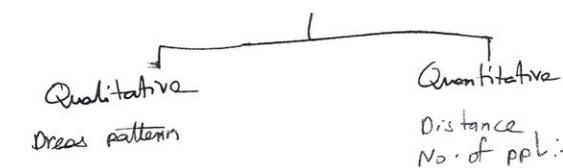
- Saurashtra
- Tulu

Industrial regions

- Detroit
- Chotanagpur
- Shanghai - Beijing
- Japan
- Ural

Depending on the nature & objective of study, any one of the above classification can be adopted -
 for any classification, qualitative & quantitative parameters can be considered.

Methodology



Agri \rightarrow nature of agri
 commercial or subsistence
 mixed or p
 f

Agri \rightarrow Productivity
 Σ Intensity.

Culture -

- living habit
- Food habit
- dress
- lifestyle

Culture → Language
Religion

Climate → seasonal variation
→ pleasant/extreme.

Climate → rainfall variation
→ temp.

Economy -

- well off
- poor
- boom/recession

Economy -

- per capita income
- sector involved
- G.D.P.

tomorrow's topics

- Nittel's classification
principles of regionalisation.

polity

General studies

(25 m) (10)

→ The fathers of Constitution wished the UPSC to be an independent body immune from the changing political dynamics in India. How did they ensure this in the Constitution? What are the additional functions & advisory role of UPSC, NOT mentioned in Art. 320?

→ Do you think that PRIs (Panchayati Raj Institutions) will provide a decentralised planning process, able to address 2 major issues of rural devt. in India - (i) increasing rich-poor divide & (ii) ecological disasters?

→ What do you mean by identity politics in Indian context? Briefly explain the impact of identity politics on gender equality.

→ History

→ As per some critics, the real father of Pakistan was NOT Jinnah or Rahimullah, but Lord Minto. Analyse the statement.

Current Affairs

→ As a food surplus and grain exporting nation, India can and must address malnutrition, which is caused by structural neglect and systematic failure, with resolute govt. and alternative interventions. Do you agree with this? What are the major observations by Hungama Report?

2 m

- Key findings of Annual Health Survey.
- Briefly explain the 'National Map Policy' of India, with a spcl. mention on defence series map & open series map. Which map projection is employed in the preparation of Indian physical map?
- Citizen's right to grievances redressal bill, 2011
- 36th Int'l. Geological Congress

25m

Polity

- Who are the citizens of India and explain the concept of biological citizenship, in the context of Aadhar initiative of GoI?
- Explain the effects & implication of coalition govt. and the political scenario in India. Do you agree with the statement most of the coalitions are engaged in conflictual behaviour, rather than cooperative behaviour.
Justify your answers.

→ It is true that Article 17 does NOT create any spcl. privilege for anyone. But, it is a great PR. a charter of delivery to $\frac{1}{6}$ th of the Indian population from perpetual subjugation & despair, from perpetual humiliation & disgrace. Critically analyse the statement.

- Elaborate the statement "Constitution is what the judges say it is". Do you think this idea holds true in the case of Indian Constitution?
- Briefly explain sex ratio problem indicated by 2011 census of India. Do you think that the sick culture of preferring sons is the main factor attributed to this observation?
- Discuss the roles of public private partnership in India and briefly comment on the draft National PPP policy 2012.
- Recently, WHO formally issued their recommendations asking for ban on junk foods. In this context, what does a junk food refer to and what are the current issues associated with junk food in India. Write a note on junk food market and its regulations in India.

- 10m
- Criminal law amendment bill, 2012
- 6th economic census of India.
- Chemical weapons convention amend. bill 2012.

(12 m)

→ Key findings of Annual Health Survey.

→ Citizens' Right to Grievances Redress Bill, 2017.

→ 32th Int'l. Geological Congress.

25 m

→ Who is a bureaucrat? (A bureaucrat's aim is to emphasise results rather than procedures, teamwork rather than hierarchian status, flexibility & decentralisation rather than control & authority). Analyse the statement, considering yourself as an Indian bureaucrat.

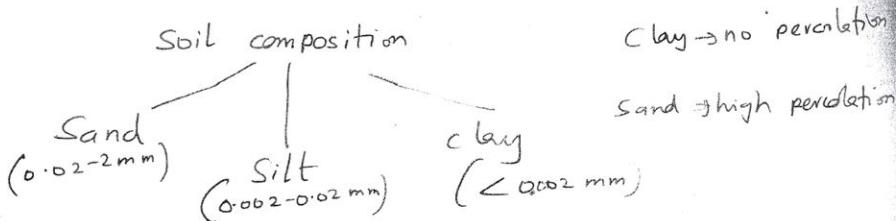
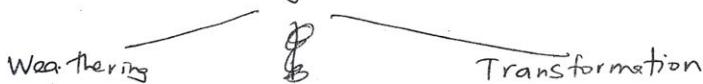
→ What are pressure groups in Indian politics? The role of pressure groups in India is marked by a number of remarkable features distinct to Indian political system.

→ If the PM wants to use Planning Commission as the pivot of economic planning & drpt., it will acquire a lot of importance. If he does NOT want to use it, the Commission becomes useless. Critically evaluate the statement with a focus on structure & functions of Planning Commission.

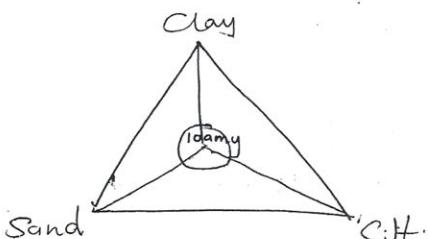
→ Analyse the concept, purposes, functioning and prospects of the notions of judicial review & judicial activism in India.

02/12/12

SOILS \Rightarrow disintegrated (weathered) parent rock material
Soil genesis \Rightarrow Pedology \rightarrow Study of soil (11)



Soil triangulation (soil texture classes):



Loamy \rightarrow most suited for cultivation

Soil texture \rightarrow relative size of the individual particles (sand, silt, clay) of the soil. Texture determines the water-retention.

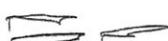
soil structure \rightarrow Aggregation of the individual particles (clumps, pods)

to form various structures. The aggregation is due to cementing action of ions in the soil.

soil structure \rightarrow Structure of aggregation

(horizontal layers)

Platy



(columnar)
Prismatic



Blocky (clay)



Crumb (humus)



Crumb \rightarrow good tilth (arable).
best for seed germination.
most suited for cultivation.

Texture \Rightarrow composition of various particles (sand, silt, clay) in the soil.

Texture can NOT be changed.

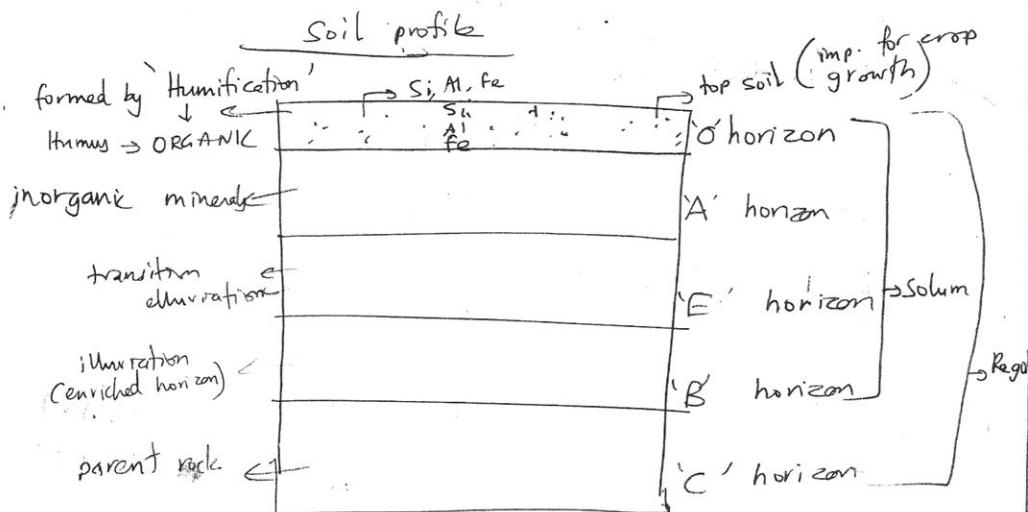
Structure \rightarrow Structure of the soil can **NOT** be changed by i) Wetting or ii) Drying.
raking; forking (in gardens); ploughing, harrowing (in farms)

Soil column

MUNSELL chart \rightarrow to identify the type of nutrients in a soil, just by observing the colour of the soil.
black \Rightarrow humus; brown or grey \Rightarrow less humus; Red \Rightarrow Fe^{3+} ($Fe_2O_3, Fe(OH)_3$); Blue or grey \Rightarrow Fe^{2+} ($Fe(OH)_2$)
 \downarrow cool-humid; acid, semi-acid; well-drained (poorly drained)

Soil Profile

The vertical arrangement of soil horizons is called soil profile.



O horizon

↓
organics → humification → humus :-

on heavy rain, the organic matter in 'O' horizon is either leached and washed away or the organic matter in 'O' & inorganic matter in ~~A'~~ 'A' form a colloid and reaches B layer.

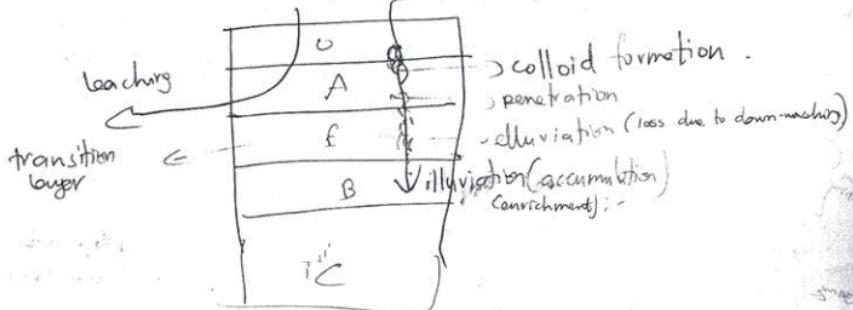
'E' layer horizon is a transition layer b/w ~~A'~~ & 'B' horizons.

E horizon (eluviated)

B horizon (illuviated)
↓ accumulation from A

C horizon → parent material
↓

Before towards rain



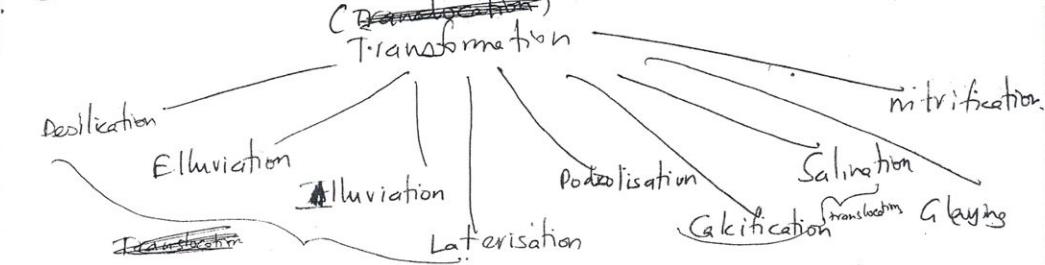
Weathering \rightarrow disintegration (detachment) of parent rock material into unconsolidated matter.

Physical \rightarrow freezing ~~thawing~~, expansion, contraction, Thawing, plucking

Chemical - ~~attrition~~, hydrolysis, carbonation, solution

Biological \rightarrow plant root, earthworms - rodent \downarrow burrows

Transformation \rightarrow creation of the various layers of the soil.
~~transformation~~
Due to rainfall, humification, illuviation, eluviation, the unconsolidated weathered parent material arrange into diff. layers, to form a soil profile. This is called soil transformation.



- trans location
1. Eluviation
2. Illuviation
3. Laterisation
4. Podzolisation
5. Calcification
6. Salinisation
trans location
7. Gleying
organic
8. Nitrification
9. Desilication

Translocation \Rightarrow main agent \rightarrow water:-

humid \Rightarrow downward movement of water.
Leaching \Rightarrow downward movement of material in solution or colloidal suspension.

Eluviation \Rightarrow physical downward washes of clay and finer particles.
Illuviation \Rightarrow redeposition of eluviated particles, in the lower zones of soil profile.

Arid \Rightarrow upward movement of water (Capillary action)
Potential Evapotranspiration (PET) $>$ Precipitation (PE)

- Ineffective leaching
- ~~podzolisation~~; salinisation / alkalinisation
- calcification

Laterisation (Desilication)

humid soils
Top soil \rightarrow Si; Al, Fe

↓
Sesque-oxides

Laterisation -> In high rainfall areas (cavator, W. Ghats), silica is washed (leached) out but sesque oxides (Al, Fe) are left behind in the top layer.

Laterite soil \rightarrow slow organic content in humid, warm tropics.



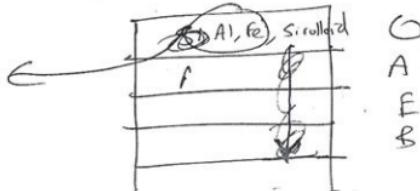
Podzolization \rightarrow (or Chelivation) \rightarrow chelating agents \Rightarrow organic compounds capable of leaching

in acidic soils eg: - Polar regions. (Coniferous areas)

In coniferous areas, there is daily leaf fall & humification. So, Si forms a colloid with Al & Fe.

So, on rainfall, the sesque oxides are washed away, but the colloids of Si are penetrated & accumulated in the F layer.

ash-grey colour, amethyst-like sand;



Calcification

- evapotranspiration \rightarrow leaching
- Occurs in arid & semi-arid areas.
 - In dry seasons, due to capillary action (since the soil becomes dry, water from underground rises to the surface) upward.
of water, the water moving up the layers (horizons) of the soil, it evaporates and dissolved salts \rightarrow due to inefficient leaching
 - (Sodium & Calcium are accumulated in the 'A' layer. In grasslands (savannah, steppes) fibrous rooted grass absorbs Ca and when it dies Calcium is deposited on the soil. This is called calcification.

Salinisation/alkalisation
In desertic regions, there is NO grass (vegetation). So, Ca & Na in 'B' layer is left behind in 'B' and it forms a sub-surface salt pan
eg:- due to over-irrigation in Punjab/Haryana.

This salt pan prevents percolation of water and this results in flash floods in deserts.

Rann of Kutch \rightarrow Long time acc. of Na & Ca in sub-surface. Over a period of time, the salt pan appears on the surface.

Ephemeral

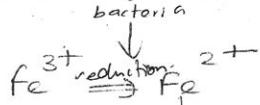
downwashing
Accumulation of salts resulting
Removal of minerals by downwashing.

Illuviation

Accumulation of minerals.

Gleying

wet or Water logging \Rightarrow anaerobic condition



results in bluish grey colour (bleached look) :-

Nitrification

The transformation of an nitrogen compound to

another absorbable nitrogen comp by plant is called nitrification.

With transformation involving all these processes the soil gets transformed into distinct horizons - C, A, E, B, C - each with a diff. colour & nutrient composition.

It is necessary to preserve the soil and use it sustainably without over-exploitation,

* Soil profile - open ended

- Refn:-
 - How formed \Rightarrow 2 to 3 lines
 - Diff. layers
 - How form
- Brief explanation of layers.

~~Need for~~

→ Need for soil profiling

- 1) Crop selection
- 2) Application of fertilizer
- 3) Soil classification
- 4) Soil drainage
- 5) Method of irrigation
- 6) Disaster mitigation. (e.g.- flash flood prediction)
- 7) Agro-climatic classification.
- 8) To predict the future of that soil in a region, depending on its profile & processes.

Soil genesis

→ Soil - defn.

- Types of soil particles ~~— sand, silt, clay~~
- soil texture; structure
- weathering, transformation
 - ↓ unconsolidated matter
 - soil

→ Translocation

- - Deflooding
 - Erosion
 - Irrigation
 - Calcareous
 - Salinisation

Need for soil profiling

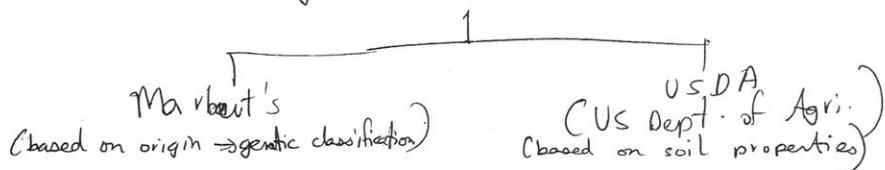
(119)

1) Fertilizer application-

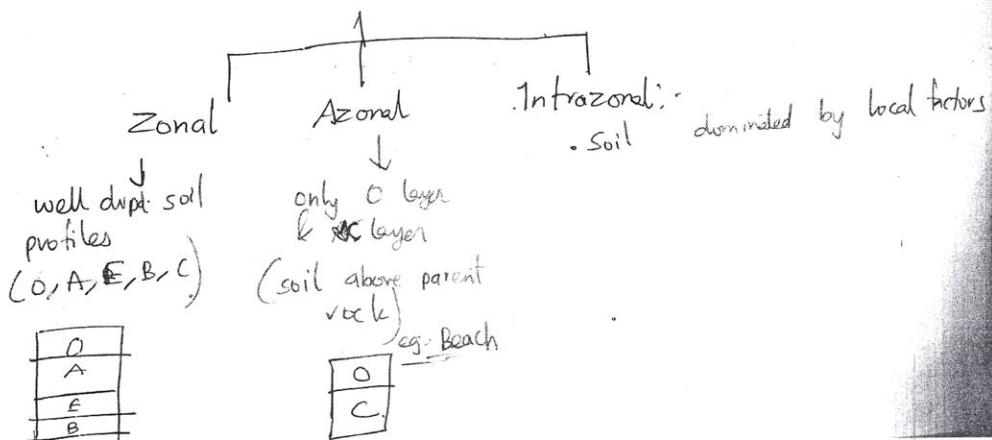
The ^{80%} of fertilizers (P & K) forms a complex with the soil. These complexes, if leached, result in eutropication & a bacterial bloom.

2) Crop selection

Types of soil classification



Marbut's system of soil classification



Soils in India

Podzol \rightarrow Spodosols

- Tundra coniferous acidic \Rightarrow humic (organic) acids \Rightarrow chelating agents
 - Podzolization dominates
 - ash grey (Si colloids)
 - bleached & humus-enriched B;
- ↓ chelation (or) podzolisation.
form colloids with 'Si'.

Brown earth \rightarrow Inceptisols

- Deciduous forests \Rightarrow less acidic than podzols
- No downward leaching of sesami oxides \Rightarrow sesami oxide distributed on upper surface
brown colour :-

\rightarrow Histosols

Tundra

- cold climate \rightarrow slow rate of decomposition \rightarrow peaty layer (bog); -
humus.

Mollisols

varieties of Chernozem

Chernozem, chestnut & prairies

steppes

low grass steppes

(STEPPE)

~~Similar to black soil material~~

- Dark colour \rightarrow due to mineral rich matter

- Light rainfall \rightarrow incomplete leaching \Rightarrow calcification (in B profile),

- Less humus content \rightarrow $< 10\%$

Crumbly structure \rightarrow chernozem

Parent - Lados

e.g.: N. America (prairie), Russia (steppe)

below chernozem & sicrozem
Chernozem \rightarrow grid side of Chernozem.
illuminated carbonated layer is closer to surface.

Prairies \rightarrow transition b/w chernozem & brown earth.

- Crumosel ~~more~~ (more close to black soil) (SAVANNAH) (121)
- Dark clayey soil.
 - Warm climate with wet & dry seasons = Savannah or grass lands.
 - Solum (O, A, E, B) rich in base minerals \Rightarrow black colour.
 - Calcification in 'B'.
 - Dry-season cracking (self-ploughing).

Sicrözams ~~soiloids~~
extreme form of chestnut (DESERT)
Desertic & semi desertic.

- 'Ca' comes more upward (upper than 'B' layer) due to capillary action. \rightarrow salinisation - Alkalisation
Lime ($\text{Ca(O}_3\text{)}$) Gypsum ($\text{CaSO}_4\cdot\text{H}_2\text{O}$)
- No vegetation \rightarrow no humification \rightarrow no organic matter
- ~~High~~ High base mineral (minerals are NOT used, since no vegetation).
 \downarrow on irrigation, it may become very fertile. AVOID

Ferrals ~~soiloids~~ (Lateritic soil)
rich in Fe_2O_3 ; Red yellow soil \Rightarrow colour due to sesquioxides (Fe, Al)

- Top soil washed away \rightarrow slow humus \downarrow \rightarrow low fertility.
- . no 'O' horizon; Top layer is A [horizon (made of Fe, Al)]
 $\text{Mg}, \text{Ca}^{2+}$ leached away;

Intrazonal → local factors.

Calcimorphic (Terra rossa)

• Calcareous (Ca) parent material

Terra rossa → mineral soil - Mediterranean region
Rendzinas → organic rich chalk soil - Britain.

⇒ Karst topography

X Yugoslavia

HYDROMORPHIC → waterlogged wetlands → marshes, swamps poorly drained upland

↓
GLEYING - [ground-water gleying.
surface-water gleying.]

Halomorphic (saline) soil → deserts:

halide → Na

- Deserts

3 types

Solonchak

White alkali soil
(white salt crusts)

Solonetz

(black alkali
Na₂O₃ soil)

due to intense alkalinization

Sodic

↓ Leaching M
Local factor: presence of excess

Na - bleached, eluviated, sandy loam, similar to podzolic

AZONAL

No soil profile due to lack of time for drift

Active flood plains → sedimentation → burial of old soil

e.g.: Alluvial soil of Northern plains.

Regosols → dry & loose sand dunes or LOESS

Lithosols → steep slopes → erosion rate high ⇒ erosion removes soil as soon as it is formed.

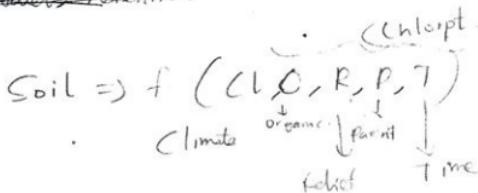
↓
imperfectly weathered rock fragments

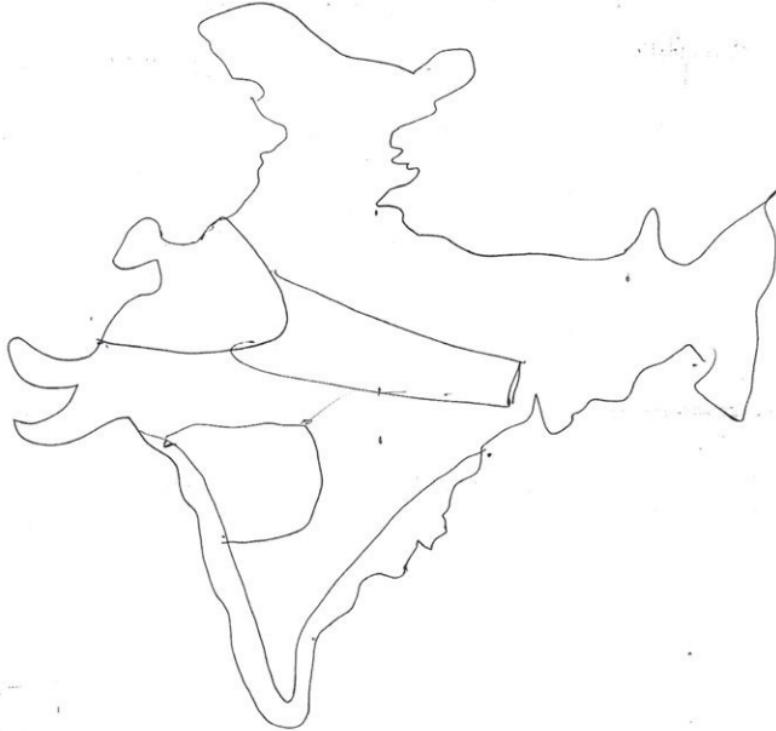
Tundra (Bog soils)	
Podzolic	
Brown earth	
Calcarous	Prairie Chernozems (black type)
	Grunsesches chechens
Silicic comes	Grunsesches Varved
Lateritic (ferricrete)	

Basis of soil classification

(123)

Quantitative	1	Qualitative
Soil productivity		Soil colour
Mineral content		Water retention
Nature of parent material		Organism
Soil profile		Time
Soil texture		Soil fertility
Soil structure		
Soil depth		





Soil degradation
Water erosion

sheet, gully, ravine, rill,

Wind erosion

How to conserve soil?
mulching, shelter belt, sand dune stabilisation.

Major gene pool centres

Potato → birth place of potato is S. America.
Andes

Groundnut

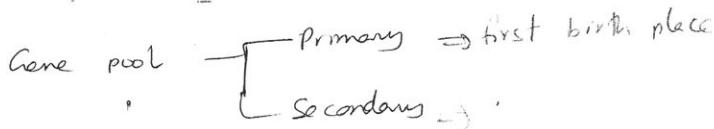
Citrus → China

Sugarcane → India (*Saccharum officinarum indica*)

Rubber → Brazil (*Hevea brasiliensis*)

Mango → India (*Mangifera indica*)

Gene pool ⇒ a place abundant with in a particular species



→ Mention the gene pool centres of the world & examine the need for gene pool conservation. What can be the steps in this regard?

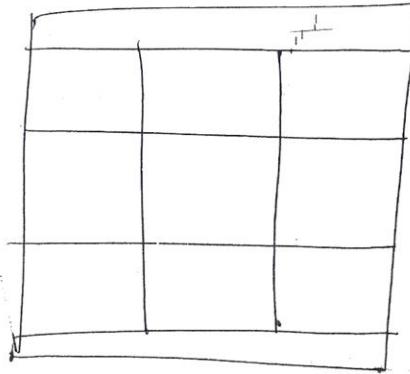
Environmental geography

Factor

Environment's influence on man.

Human ecological adaptation

} (A spatial concept)



Environment dictates

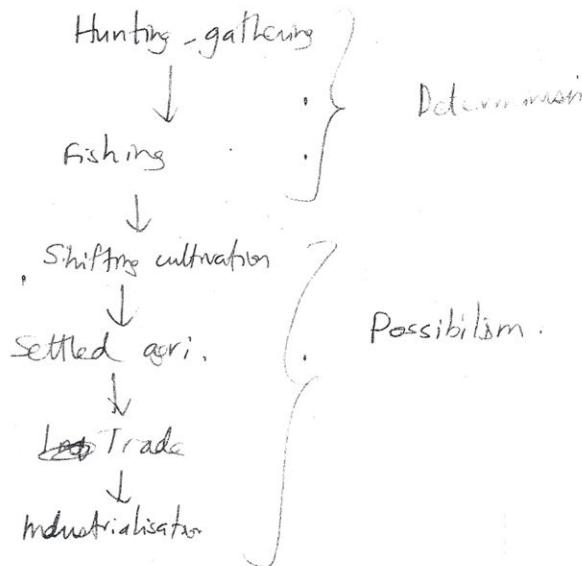
- 1) Occupation
- 2) Food habit
- 3) Culture
- 4) Festival
- 5) Dress

Take the extreme climatic conditions & explain

e.g. Desert, savanna, Tundra

Man's influence on ecology.

Temporal phenomenon



Complex food web \Rightarrow primitive man
(fish, millet, ragi, chick pea, mutton,

\downarrow
Simplified food web \Rightarrow modern man
(rice, rice, rice) \Rightarrow India
 \downarrow world - rice, wheat & potato
 \downarrow
If these 3 crops are destroyed, humans
being will be adversely affected.

Man's influence on ecology \rightarrow 1. Land 2. Air 3. Water 4. Vegetation

~~While explaining pollution or man's influence on ecology,
discuss with specific case studies~~ Great Lake region;
Agra-Delhi region;

Great Lake Region.

Principles of ecology

3 types of ecological pyramid -

1. Number pyramid
2. Biomass pyramid
3. Energy pyramid

Energy pyramid can NOT be inverted ...

↓
as, there is loss in energy @ every stage
(respiration, ...)

Primary consumers are also called secondary producers.

All herbivores are primary consumers. But
NOT all primary consumers are herbivores.

eg : - A herbivore is a primary consumer.

Principles

1. Any ecosystem can be studied by subdividing it into several sub-systems. Indian ecosystem → lake ecosystem & coastal delta ecosystem

2. Uniformitarianism → All physical & biological processes that operated today have operated in the past and will operate in the future, but with varying

~~intensity & direction~~

Ecosystem follows uniformitarianism

3. All ~~things in the ecosystem~~ — whether (biotic) living or (abiotic) non-living —

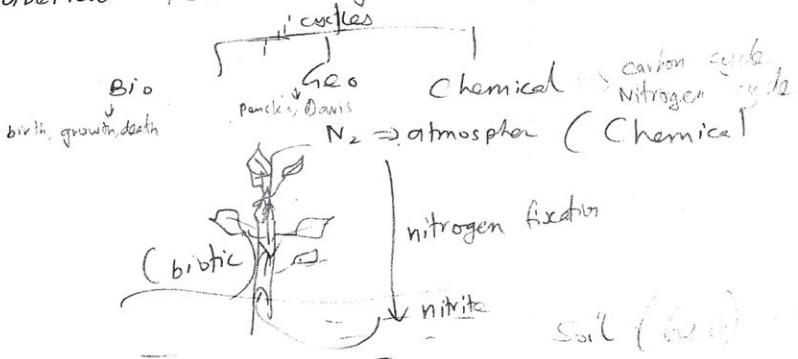
are mutually interactive in nature -

Before 1940s, the biotic & abiotic components were considered as separate entities and the influence

of abiotic components on man was NOT revised
(25)

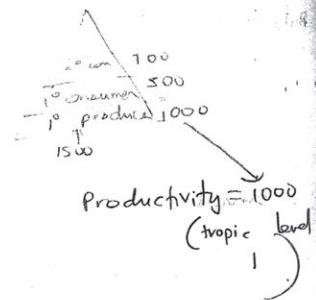
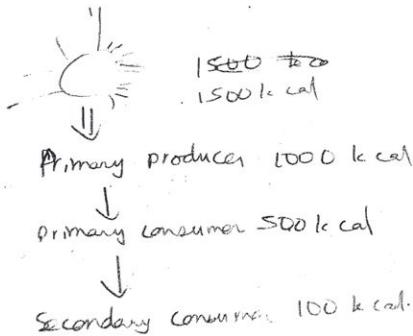
- d. 4. Ecosystem functions through the input of solar energy. This energy is unidirectional in nature.
∴ Energy pyramid can NEVER be inverted

5. Material flow is cyclic in nature -



6. Ecological productivity

This productivity refers to production made by autotrophs at the primary level.



Productivity = $\frac{1000}{100 + 500 + 100} \times 100\% = 100\%$

Only primary production should be considered.

Ecological productivity → rate of growth of organic matter per unit time per unit area by autotrophs at trophic level 1, through photosynthesis.

1. Ecological productivity →

High → savanna
Low → desert, poles, ~~deep~~ ocean.

Higher the sunlight, higher the ecological productivity
e.g.: deep ocean, pole → low productivity

7. Ecosystem has an inbuilt regulatory system. It is in a state of Homeostasis.
↓
constant internal equilibrium.

But, if any external factor affects the system, it is difficult for the system to regulate.
e.g.: a stable ecosystem can recover over a period of time, after a devastating flood.
But, if man destroys (cut down) a tropical rainforest, it can NOT recover easily.

8. The ecosystem continues to evolve through

1. Natural selection 2. Mutation.
survival of the fittest.

↓
sudden, inheritable change.

When ecosystem evolves, more no. of species are added to the ecosystem.

NUMBERS

- Nu Nudate T¹ eg:- in a previously uninhabited ecosystem, a plant grows :-
- M Migrate → plant growth invites other organisms
- E Ectasis → a species cat. its own ecosystem.
(adaptation with environment)
- C Competition
- R Reaction → reaction of one species to the intro. of another species P

S Stabilisation → a stabilised ecosystem, where all species learn to adapt with each other and with environment.

Chimax
Evolution reaches a Climate.

Monoclimactic evolution

- ~~all~~ Man is the climax of all evolution.
- Man is the peak species. There is no evolution after man.

Polyclimactic climate

- There are diff. climactic species for each ecosystem. climactic sp. ecosystem

Tiger → Steppe

Lion → Savannah

Man → urban ecosystem

A climatic

— There is NO climatic sp.

↓
No Evolution never stops

↓
even, man will evolve.

q. Man is an integral part of the environment
and is a potential threat to the environment

Quantitative revolution

Introduction of statistical, methodological
research into geography. e.g.: - Koppen's \Rightarrow amt. of rain,
temp, etc.

Objectives of quantitative revolution:

1. To change the descriptive character of geography
and make it a scientific discipline.

2. To explain & interpret spatial pattern of geographical
phenomena in a rational & objective manner.

Use of mathematical language, rather than
literary language, to universalise geo. in all languages

e.g. Af climate \rightarrow equatorial.

Fr climate \rightarrow desert

e.g.: Webber's Industrial location theory, Jefferson's primate
city, Zipf's rank size rule, etc.

Assumptions

— Man is a rational person, always trying to optimize the profit.

Man has infinite knowledge of his space

Space is an isotropic surface.

There is NO space for normative questions.
+ normative

eg:- Von Thunen's, Crystaller, Weber's Industrial location.

Drawbacks

1. There is NO isotropic surface.

2. Normative questions (social) play an important role. (human psychology, his values, norms)

Hunger → less efficiency

materialistic → more efficiency

Spiritualism

Even man's economic behavior is sometimes determined by the social values & customs.

3. Man is NOT an optimiser, he is a maximiser.

4. Man does NOT have infinite knowledge of space.

5. Use of geometric & econometric language makes it difficult for MAN to understand.

6. Development of models & theories has made man a passive player (inhibited his lateral / creative thinking and individual decision making).

- Development is universally applicable model
- ↳ planned capitalism.
- ↳ e.g. KFC, Wal-Mart.

08/12/12

India - Map marking

Longitudinal Bifurcation of India \Rightarrow [Delhi] Bhopal, Agra, Bangalore, Kanyakumari

Horizontal \Rightarrow Bangalore, Mangalore, Hassan, Mysore, Kolhapur, Chittor, \odot Trivandrum, [Chennai]

Horizontal \Rightarrow [D.U.] Jalgaon, Amaravati, Nagpur, Durg, Raipur, Simbalpur, Balareshwar.

Horizontal \Rightarrow [Gulf of Kutch], Ahmedabad, Gandhinagar, Ujjain, Bhopal, Jabalpur, Shahdol, Ambikapur, Ranchi, Durgapur, Asansol, Aizawl.

Horizontal \Rightarrow Rajasthan - Gujarat border;
 \odot Palanpur, Udaipur, Guna, Panna, Rewa, Dumbka

- Use \odot for places - so that the outer circle gives a ~~chance of coincidence~~ chance of coincidence.
- Use \blacktriangle for peaks

▼ trench

$\square C \rightarrow$ pass

↳ but use the passes, in the same direction as given in map
 The pass should be parallel to the railway;

$\overleftarrow{\overrightarrow{C}}$ \Rightarrow Bolan pass

GIVE LEGENDS

$\odot \rightarrow$ places

$\blacktriangle \rightarrow$ peaks

$\square \rightarrow$ trench (deep)

$\square C \rightarrow$ pass

$\overleftarrow{\overrightarrow{C}} \Rightarrow$ Jelep La

\checkmark ^{direction} \Rightarrow Diphu pass

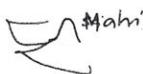
- \Rightarrow Roads



While drawing roadways, mark the important places located on the roadway.

- Cauvery river

\Downarrow
Show some critical bends



- In case of basin,

$\circ \circ \circ$ \Rightarrow Grasslands (eg: Sonamarg, Amarnath)

$\square \square \square$ \Rightarrow desert

\square \Rightarrow plateau

\nearrow waterfall

Dam \Rightarrow perpendicular to river flow.

$\sim \sim \sim$ \Rightarrow Range (Ajanta, Harishchandra,

For Lakes, draw the approximate shape

eg: - Pong \Rightarrow T or \square

Sambhar \Rightarrow \circ

Chilika \Rightarrow α

M A P

- Places \Rightarrow strategic importance; recent news; major city;
- Peak
- Lake
- Mountain
- Ranges
- Desert
- Plateau
- Biosphere reserves N.P., sanctuaries.
- Passes
- Waterfalls
- Dams

- Only 'Places' are Dynamic.
- \downarrow ~~Mark from every day's paper.~~ (without referring to map)
(without referring to map)
Trival & error
- ~~Make~~ Make a spiral binding of these maps.

How to write points for places?

PLACE

1. Industry associated with that place;
2. Functional classification \Rightarrow adminstr. town, pilgrimage,
3. Is it a million-plus city \Rightarrow (5) million-plus cities
in India
(Identify)

or sp. points of that place.

LAKE

- Geology (old stage)
- Wetland (Ramsar convention)
- Bird sanctuaries
- Fishing
- Tourism

DAMS

- HEP
- Irrigation
- Siltation
- On which river?

MOUNTAIN

~~Geology~~ \Rightarrow fold or block or residual or volcanic

based on slope \Rightarrow isohypse, monadnock, ...

Vegetation, \rightarrow

Biosphere reserve \rightarrow

Glaciation \Rightarrow

Deforestation; source of river;
mining; Disaster - landslides

Passes

- Strategic imp.
- Connectivity
- Economic importance

Waterfall

• Geology \Rightarrow youth stage of river

• HEP

• Tourism

River

- Source
- Mouth \Rightarrow delta or estuary?
- Pattern \Rightarrow mostly dendritic
- Irrigation
- Navigability
- Pollution
- Landforms \Rightarrow rapid, waterfall, meanders, river bend, lake, delta, estuary

Rainforest -
Soil - Laterite; basaltic; peninsular plateau → wind erosion
soil loss, Bancheng

- Issues → Aridity, shifting sand dunes; desertification
- Climate → Subtropical → aridity
- Flora & Fauna → drought →

Pitfalls

- Hazard?
- Dry or wet?
↓
erosion; bisection of land
- Landforms → Canyons, Mesas, buttes.
- Minerals?

Islands

- Stratigraphy
- Tourism
- Biosphere Reserve
- Climate

Place -
white island
geomorphology

Dehradun -
Vans → longi valley
(with horizontal & shoreline)

Kanpur -
plains
winter cold wave
100 cm - 150 cm
disaster → cold waves, 100

Climate

disaster = landslides

Productivity

H.R. training;
M.A., Forest Rain forest.

Rice, wheat

Agri

X

HAL, Hydrogen factory

Industry

connectivity to
Mysore via

Transport

Mangaluru
High rainfall, high MMR

Density high; high cost;
marshland of Nitidula
Town town of U.P.

Climate

Population

100+

Ongole	Jaffna
Physiography	near sea level
Climate	N.E. monsoon summer dry; winter rain; disaster DISASTER → tropical cyclone
Resource	Ong.
Agri	Ongole cattle breed
Industry	Tea m.
Transport	NHS
Culture	mixed

Suppose you get an unknown place

e.g.: Haflong



from name, deduce

- it may be in North East
 - Tribal pol.
 - mongoloid race;
 - 200 cm rain
 - Bamboo, rhododendron
 -  handicraft
 -  tourist site
- } Common points for North East

Dal Lake

- On Jhelum river; high altitude
- winter freezing; summer thawing
- pollution \Rightarrow application of fertiliser to apple plantation
 ↳
 biomagnification
 ↳
 eutrophication -
- tourist spot.

Chilka Lake

- Mahanadi delta -
- Tiger prawn, catla, rogn are caught here;
- Brackish water.

Population density

Major Tier I metros $\Rightarrow > 10,000 \text{ ppl/sq km}$;
for tier II cities \Rightarrow ppl density $\approx 2 \times$ ppl. density
of that state

Aravali

- residual mountain
 - ↓
erosion due to wind
- S.W. to N.E.
 - ↓
Udaipur ↓
Delhi
- Southern → granite
Northern → copper
- Tourism → Guru Sahibzada Phulwar
- Mining → deforestation
- Parallelism with SW monsoon.

Mizo Hills

- Part of eastern (Purvanchal) Himalayas;
- Intense compression → fold mountains.
- Earthquake prone zone → landslides
- Mizo tribes - shifting, gathering;
- Lower foothills → tropical forests → Jhum cultivation
- Middle 3. coniferous
- Upper 3. Salvinia
- Defores

Narmada

source W hills

- ~~Narmada~~ Vindhya - Satpura rift valley
- NBT meets many tributaries.
- Sardar Sarovar project \Rightarrow proposed for irrigation.
- Fateh opposed due to

Syok

- Right hand tributary of Indus
- Source: snow fed from glaciers in Transhimalaya
- Source: winter flows
- winter \Rightarrow glacial flow
crague, grotto, hanging waterfall

BIOSPHERE RESERVE

Identify the major species of a region.

N.E. \Rightarrow one horned rhino, elephant, red panda, tiger

S. India (Western Ghats) \Rightarrow Nilgiri Tahr, Lion tailed Macaque,
elephant $\stackrel{?}{\text{tiger}}$

Gujarat \Rightarrow Asiatic lion, wild Ass, Great Indian Bustard,

Identifying the climate & natural vegetation

(143) 80

N.E. \Rightarrow $> 200 \text{ cm rain} \Rightarrow$ tropical evergreen forest.

W. Ghats \Rightarrow $200 \text{ cm rain} \Rightarrow$ Shola forest,
tropical semi-evergreen

Kanha (M.P.) \Rightarrow $100-200 \text{ cm rain} \Rightarrow$

There may always be SURPRISE ELEMENTS. Do not panic!

Tough places \Rightarrow don't panic

They may ask

Instead of places, regions (rainfall, soil, slope, mineral regime)
(time zones)

No LATITUDE & LONGITUDE ~~will~~ be given.

08/12/12

EN-17-10-11-12

Environmental determinism

environmentalists ↓,

Strabo

Ratzel

Ritter

Semple \Rightarrow woman geographer

vs. Possibilism.

environmentalists

Laplace

Filmer

Determinism

- Determinists considered that man is a passive agent, on whom physical factors are constantly acting and determining his attitude and decision making process.

Man is a product of earth's surface. This does NOT only mean he is child of the earth, not out of the dust, but earth has also without fail set him his task, directed his thought, etc.

MAN \Rightarrow Reacts, NOT acts.

e.g.:-

① Pts. in steppes are good horsemen.

Dried made his search for pastures, this not only shaped his physical (good body strength), but also mental (persevering) character.

② Nilot tribes

(3) Those in cold climates areストレング
 fat for insulation from heat;
 fat for ease during winter
 for mobility.

(4) fishermen (in coastal climate) have
 strong arms → due to rowing;

(5) pygmies in Congo
 ... Big eyes → reduced sunlight / live in dense tropical evergreen forest).

Possibilism

→ Man is an active agent in the environment.
 The true and only geographical problem is the utilisation of possibilities! There are no necessities, but everywhere possibilities.

Man has immense potential to modify the environment to suit his needs. He constantly modifies & exploits the environment, and controls the environment. Possibilities → determinism (Transhumance)
 e.g.: Cusians transcended the desert to higher grasslands
 Meenches settled in desert itself → determinism

Criticism

Possibilism gave man the sense of damage the environment. Man makes an explosive exploitative revolution. Environment gave a silent evolutionary reply in the form of increased diseases & disasters and decreased productivity & predictability.

Neo determinism (stop-and-go determinism)

↳ by Griffith & Taylor.

In short-term ppl may dictate the answer. In the long term, nature's plan ensures that it prevails over humans and over a period of time, makes sure that ~~humans~~ it ~~survives~~ ^{but} ~~survives~~ ^{as} a compromise out of its human occupants.

"Man may win the battle; but, nature will win the war."

There is no limitless environ possibilities. For every choice, price has to be paid. Man has to choose within the choices given by the environment, NOT beyond it.

A wise man has to understand that he is a traffic controller in a large city, who can alter the rate ^{but} NOT the direction of the progress.

Radicalism.

↓
emerged after quantitative revolution &
Vietnam war. (after 1970).

- As an ~~an~~ counter-point to quantitative revolution
condemning the treatment of humans as mere
production agent.

Sources

- i) Vietnam war \Rightarrow Antipode
- ii) Discrimination of black race in USA.

major concepts of radicals

- 1) Vociferously opposed inequality, capitalism,
discrimination, environment degradation.
- 2) Wanted to bring out a cultural revolution to
eradicate sexism and ~~inequality~~ of females.
- 3) Opposed political centralisation & power concentration.
- 4) Opposed superiority of white.
- 5) Opposed regional disparities.

Theory

White domination over black

\Downarrow
Social discrimination
a persistent

deprivation of opportunities

↳ Capitalism

↳ Gender role socialization

↳ Oppression of women

↳ Quantitative resolution

↳ When men sit at core decision makes to

periphery

Fewer-only European geographers & Simple

Core & periphery

Capitalism

↳ Exploitation

Radicialism → Marxism →