

Detailed some of Agro Climatic Regions of India

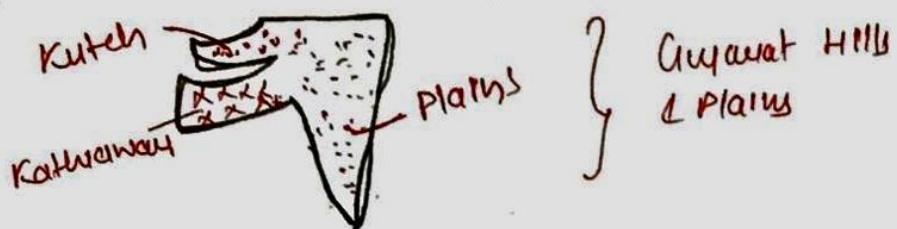
- 1] Location + Regional Map
- 2] Physiography
- 3] Type of Climate & Water
- 4] Soils
- 5] Suitable for which crops - actually grown
- to be grown

6] Challenges & Solution → Water shed management
rain water harvesting

* Can be done better once you have covered
Indian physiography

Q] Gujarat Hills & Plains -

- o Much of state of Gujarat, include Gujarat plains along mouth of Narmada & Tapi, Highlands of Kathiawar & part of Kutch plains



- o Gujarat Plain strip is a very narrow strip of coastal plains with alluvial soils, hard soils, lateritic soil in parts of Kathiawar & extensive salt flats of Kutch
- o Good parts of Gujarat have black cotton soil as a part of Deccan lava plateau

- o Gujarat is mostly dry region with avg rainfall < 60cm. parts of Gujarat plains can have rains of 70-100 cm along the coast
- o It has 4 fairly large rivers - Cen. Cen. Narmada, Tapi, Sabarmati, Mahi. So there is potential of damming of rivers

- Water dimension in dry regions of Gujarat
- Gujarat is not a major agri region of India.
- It has some of cotton growing region.
much of Gujarat Economy is based on Petrol, Petro chemicals, Refining & Heavy engineering

Prospects for Agri. -

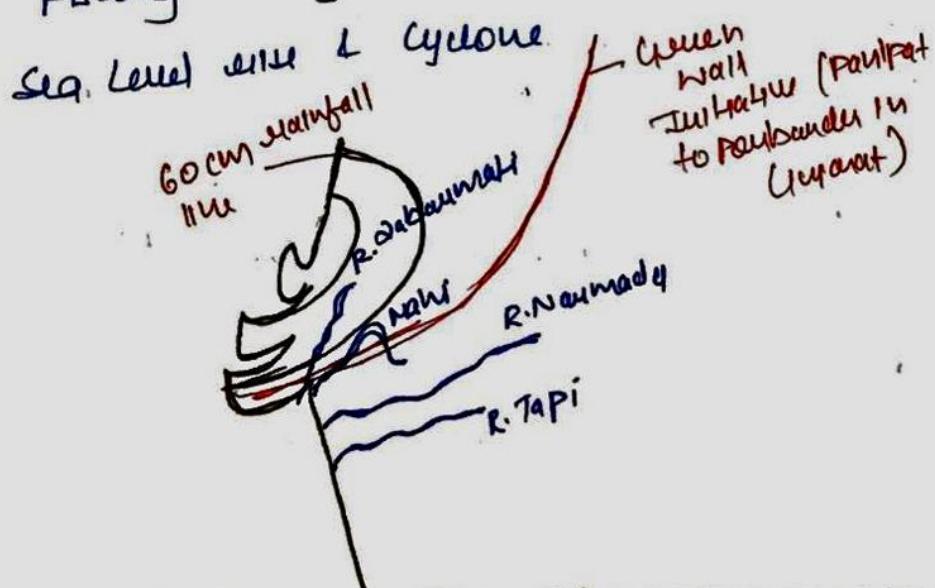
- a) Cotton cultivation along coast
- b) Some cotton & dry crops like millets in Kathiawar
- c) Livestock base milk industries and dairy farms like Anand & Kheda region & the hilly revolution

- State of Gujarat has a rich tradition in agri cottage industries supported through 2445 self help groups & women entrepreneurship that includes Pickle, Papad industries, spices like Chilli industries

- Because of dry conditions, Gujarat has problems of land fallowing, desertification & waterland. Kathiawar & Kutch region need watershed management along with Agro Industries
- Initiatives like Green Wall Initiatives - from Porbander to Panpat.

State of Gujarat has much prospect in
dryland agriculture, Livestock based agriculture, Horticulture, Agro forestry while also supporting
its heavy engineering & Petrochemical based
in

- Coast of Gujarat can submerge Towns, following along with coastal night against



2] Eastern Plains & Hills

- State of Jharkhand, CG + Dang Hill regions of N. Odisha
- Phylography - It includes CNP of Jharkhand - Ranchi, Hazaribagh, Rokand, Palamu district, Dhanbad + C.G - North Plains (Mahanadi Plains, C.G Basin + Highlands of Bastar + Hill areas of western + northern Odisha (Rourkela, Bolangir), KBK district (Koraput, Bolangir, Kalahandi).

- Climate - (CNP - Rainfall > 100cm. (WET))
 - Bastar Hills - Dense Forest (Wetter)
 - Northern Odisha - dry & less rainy areas
relatively " " relatively dry.
- Water Irrigation
 - It has hot summers & cool winters.
 - Does not have extensive irrigation system & not very effective water management. It has many large dams - Hirakud Dam on R. Mahanadi

- Panchet, Maithon Dam, Konark Project dam
- Bastar - Indravati Project
- The region has diverse tribal community & their dependence on Minor Forest Produce (MFP)
- The region grows dry rice, millets, some amount of oil seeds & pulses
- Some of poorest region of India with high tribal poverty but region has large mining economy which however has not contributed to substantial development of tribal population in rural areas & agri.

River areas

- River like Damodar & Hooghly are prone to floods with soil erosion & High Rate to Urban Outmigration.
- This region is vulnerable to conflicts due to local problems related to land alienation, Forest Rights issues & also problems of Timber exploitation

o Agri is a dominant economy but not much developed with low productivity & subsistence farming

o Region needs Dry land Agri, Water & Soil conservation along with Agro forestry Prog. in support of Forest Economy of Tribes, Region has highest slope of MAF (Majhi Forest produce) Mahua Industry, Tendu leaf, Tura leaf etc

unpublished

- Areal Programmes should have watershed development with focus on dryland components
- focus on tribal group (Marla, Bhilay tribes)
- + (Kantali, Koli, Gouda, Oraon tribes)
- # Reference Pg 20, 68 (Kannan)

Inter linking of Rivers

- Initiated by Arthur Cotton (British Engineer)
- They schemes came up by -

