

Mains PYQs - GS-I (2026) (Q. 13 - 15)

13. The model of planned economy was adopted in India to address the regional imbalances left behind by colonial rule. Comment. (250 words, 15 marks)

Directions: Intro----- Regional imbalances left by colonial rule + How planning addressed the imbalances + Limitation-----Conclusion.

Introduction:

Start by describing the planned economy (or) regional imbalance.

Main Body

Regional imbalances left by colonial rule

- Presidency-based development - Concentrated mostly in Madras, Bombay and Kolkata to facilitate trade with Britain.
- Neglected Hinterland - Coastal regions saw development, whereas interior and princely states were left largely agrarian and disconnected.
- Targeted infrastructure - Rail network and irrigation projects were built specifically to export commercial cash crops, raw materials, etc.
- Agrarian Distress - Because of the Zamindari, Ryotwari and Mahalwari systems, etc.

How did planning address regional imbalances?

- State-Led Industrial planning - Guided by the Mahalanobis Strategy and the Industrial Policy Resolution of 1956 for more industries.
- Industrial dispersal - Establishing more industries in relatively backward areas created employment and economic linkages. Eg: Steel plants at Bhilai (Chhattisgarh), Rourkela (Odisha), etc.
- Balanced regional development - Targeted planning & public investment directed towards backward regions, the state's population and financial backwardness.
- Infrastructure creation - Investments in dams, power, railways, roads and irrigation in infrastructure deficit region.
- Agricultural development - Irrigation, rural credit and agricultural programmes to raise productivity.

Limitations

- Green Revolution - Initially benefited regions with better irrigation and infrastructure, particularly parts of Punjab, Haryana and western Uttar Pradesh.

- Industrial licensing - Licensing policies and public investment often concentrated in certain areas, not always ensuring efficient or equitable regional development.
- Regional disparities - Inter-state disparities persisted, especially between industrialised western/southern states and several eastern and central states.
- Issues with centralisation - Excessive centralisation sometimes weakened state-level initiative and local participation.

Conclusion:

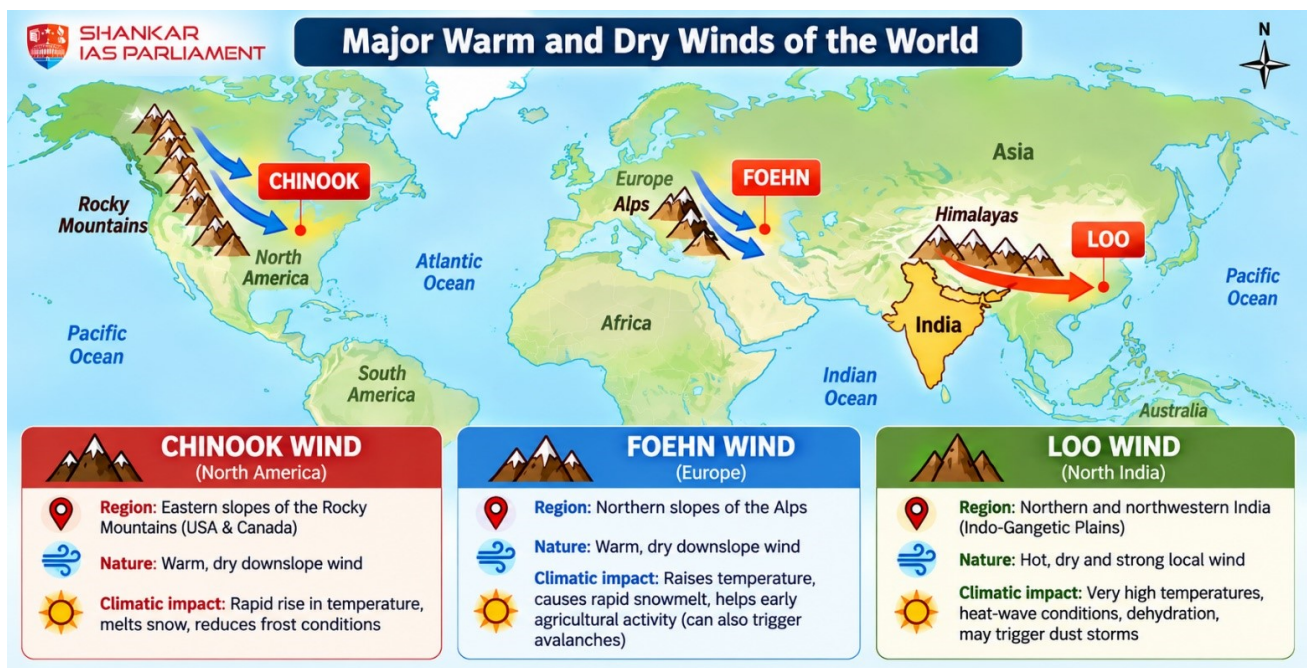
Give a balanced conclusion.

14. Compare the Loo, Chinook and Foehn winds with respect to their regions of prevalence, their nature and climatic impacts. (250 words, 15 marks)

Direction: Intro----Compare Loo, Chinook and Foehn-----Conclusion.

Introduction:

Loo, Chinook and Foehn winds are local winds. So, give the introduction by describing local winds.



Main Body

Features	Loo	Chinook	Foehn
Regions of prevalence	Northern & northwestern India, especially the Indo-Gangetic Plains	Rocky Mountains, especially eastern slopes in the USA and Canada	Alps of Europe, particularly northern Alpine valleys

Nature	Hot, dry, dusty and strong local wind; Occurs during peak summer afternoon hours.	Warm, dry and rapid; occurs mainly in winter/spring as a downslope wind.	Warm, dry and gusty. Occurs year-round as a downslope wind.
Climatic impacts	Causes very high temperatures, dehydration and heat-wave conditions; may trigger dust storms; crop damage	Rapidly raises temperature, melts snow and can reduce frost conditions. Also known as snow eater.	Raises winter temperature, rapidly melts snow, making land suitable for early agricultural activity,

Conclusion:

Give a balanced conclusion by linking all three.

All three can produce dry and warm conditions, significantly shaping regional climate, agriculture and livelihoods.

15. Analyse the role of satellite-based technologies in achieving climate-smart agriculture and food security in India. (250 words, 15 marks)

Direction: Intro---- role of satellite-based technologies-----Conclusion.

Introduction:

Describe climate-smart agriculture (or) food security (or) link both.

Main Body

Role of satellite-based technologies in climate-smart agriculture

- Weather forecasting - rainfall, cyclone and temperature forecasts
- Early warnings - Drought, floods
- Climate monitoring
- Disaster response - Rapid assessment of flood, cyclone and drought damage
- Pest & disease control
- Crop monitoring - Track crop health and growth.
- Water management
- Acreage and yield estimation
- Land-use planning - Maps soil, cropping patterns, degraded land and irrigation coverage.

Indian applications

- ISRO's Earth-observation satellites
- FASAL (Forecasting Agricultural output using Space, Agro-meteorology and Land-

based observations).

- National Agricultural Drought Assessment and Monitoring System
- Integration of satellite imagery with AI, GIS, drones and IoT-based sensors

Role in Food Security

- Food Availability – better yield forecasting and productivity lead to more available food grains.
- Accessibility – Reduced losses and better targeting of interventions lead to better supply chain enhance nutrition security.
- Income stability for farmers & stability in food supply.

Challenges

- Small and fragmented landholdings.
- Farmers may lack digital literacy and access.
- Cloud cover can limit the usefulness of optical imagery.
- High-resolution data and associated analytics are costly.
- Concerns regarding data ownership, privacy and interoperability need attention.

Conclusion:

Give a balanced conclusion and suggest some measures.