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MAINS ANSWER WRITING APPROACH ANSWERS

Topic- GEOGRAPHY DAY 3



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Identify the characteristics of plantation agriculture and discuss its distribution in India. Also, explain its impact on ecosystem. (10 Marks) (150 words)

Plantations are defined as areas that are typically **monocropped with perennials**, **producing tropical or subtropical products** that commonly require prompt initial processing and for which there is an export market. As per State of Forests Report 2019, Plantation forests cover **64,839 sq.km or 8.45% of total forest area** in the country.

Plantation Agriculture characteristics

- In this type of farming, a single crop is grown on a large area. The plantation has an interface of agriculture and industry. It is a type of commercial farming.
- Plantations cover large tracts of land, using capital intensive inputs.
- In India, tea, coffee, rubber, sugarcane, banana, etc. are important plantation crops.
- All the produce is **used as raw material** in respective industries
- Since the production is **mainly for market**, a well developed network of transport and communication connecting the plantation areas, processing industries and markets plays an important role in the development of plantations.

Distribution

Sugarcane

• Cultivated all over the country from latitude 8 N to 33 N, except cold hilly areas like Kashmir valley, Himachal Pradesh and Arunachal Pradesh.

Tea

- It is grown in plains in North Eastern States, in South India.
- It is grown in hills ranging from 600 to 2200 m above mean sea level.
- Annual rainfall should be **125 to 150 cm**, which is well distributed over 8-9 months in a year. The **atmospheric humidity** should be always around **80%** during most of the time.

Coffee

- It's cultivation is confined mostly to the hilly tracts of Western and Eastern Ghats.
- A well distributed rainfall is preferable for coffee with dry months from December March.
- Summer showers are important for flowering and failure of blossom showers leads to crop loss.
- It requires a temperature ranging from 20 to 30 degree Celcius with a well distributed rainfall of 200-250cm over the year.
- It comes up in plains and also in slopes of mountainous regions ranging from 300-800m above sea level.
- This specific climate is available only in **Kanyakumari district**, **Tamil Nadu and Kerala**, which constitute the traditional area.

Impact on ecosystem

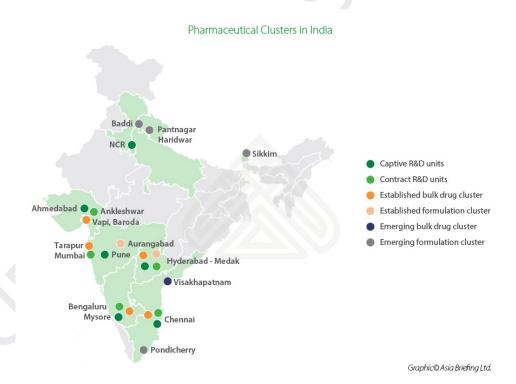
- Farmers increase pesticide and fertiliser use, crop density, and the number of crop cycles every season to keep up with enhanced output, but **crop diversity suffers as a result.**
- Overcrowding genetically homogeneous plants permits pests to spread through fields with little resistance.
- Increases in average temperature offer a suitable environment for pest populations to thrive.
- Higher average temperatures will not only reduce insect reproductive cycles, but will also **impair pest control systems.**
- Sorting, packaging, and shipping crops require significant amounts of fossil fuel energy when selling crops nationally or overseas.
- In India's plantation belts, there are problems with soil erosion, compaction, and soil degradation.

Plantation crops though have economic significance, their ecological implication have not received adequate attention from policy makers nor farmers. So, we need to balance both. For that, farmers can adopt environmentally friendly practices.

With examples, discuss the factors that influence the location of pharmaceutical industries. (10 mark) (150 words)

India ranks third worldwide for pharmaceutical production by volume and 14th by value. The country has an established domestic pharmaceutical industry, with a strong network of 3,000 drug companies and about 10,500 manufacturing units.

Andhra Pradesh, Gujarat, Maharashtra, and Goa are the major pharmaceutical manufacturing clusters in the country. The bulk drug clusters are located primarily in Ahmedabad, Vadodara, Mumbai, Aurangabad, Pune, Hyderabad, Chennai, Mysore, Bangalore, and Visakhapatnam (Vizag).



Factors influencing location of pharmaceutical industries

1. Availability of **raw materials** - This ensures constant supply of raw material and reduction in the operational cost. Eg. The Indian pharmaceutical sector

- is centred near **the country's western coast**. The ports on the **western coast** aid in the import of raw materials essential for drug manufacture.
- 2. Nearness to the market- For Reduction in company's overhead expenses and transportation cost. Eg. The proximity to ports (Kandla, Bhavnagar, etc.) allows for **easy export** to Africa, Europe, and other destinations.
- 3. Constant Power supply- The need for cheap, continuous, and adequate supply of electricity are of paramount importance.
- 4. Supply of Labour- Since labour is one of the most important inputs required to transform raw materials into consumer goods, it is necessary to locate companies where both skilled and unskilled labour are readily available at cheaper rates.
- 5. Transportation Networks- Efficient transportation service is very important for marketing and distribution of finished products, bringing raw materials and supplies, as well as allowing customers to reach without difficulty.
- **6. Communication-** Good communication facilities, such as, internet, postal and telecommunication links are of great importance towards the success of a business.
- 7. Water supply- The availability of constant water supply is another important requirement for pharmaceutical industries.
- 8. Suitability of land and climate Extremely hot, humid, dry or cold climates are not much suitable for the establishment of pharmaceutical plants.
- 9. Environmental impact, waste disposal and Safety requirements
- 10. Local building and state policy rules: The proposed location must not violate any local ordinances or bylaws. Building codes, local taxes, and other factors should all be considered while choosing a location. Favourable state government policies, such as Gujarat's and Maharashtra's stable policies, also impact the location of industries.

Over the last several decades, the pharmaceutical sector has flourished, promising to produce valuable goods that improve people's quality of life. As the world's pharmacy, India has demonstrated its ability to be the leading producer in the

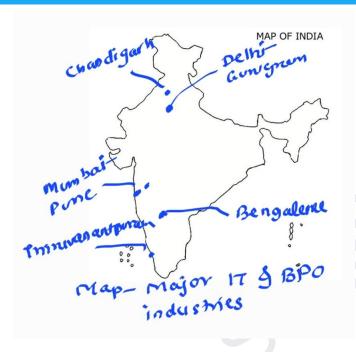
pharmaceutical sector; with further improvements, India can prove to be a world leader in the pharmaceutical sector.

With examples, discuss the factors that influence the location of IT and BPO industries. (10 mark) (150 words)

The information technology industry stores, processes, and distributes data. According to the **Economic Survey of India 2017-18**, **about 4 million people are employed** in IT-BPO.

Factors affecting IT and BPO industry location

- The major factors of industry location are resource availability, cost, and infrastructure. Silicon Valley, California, and Bengaluru, India are prominent IT centres.
- **Bengaluru** is on the **Deccan Plateau** (sometimes called the Silicon Plateau). The city enjoys a year-round pleasant climate.
- Silicon Valley is a portion of the Santa Clara Valley, near the Rocky Mountains. The area enjoys a mild environment with temperatures rarely falling below 0°C.
- Mumbai, New Delhi, Hyderabad, and Chennai are major emerging IT hubs in India. Other prominent IT hubs include Gurgaon, Pune, Thiruvananthapuram, Kochi, and Chandigarh. This is one of the reasons why Bengaluru has always had an edge over other cities.



Despite rising urbanisation in India, spatial differences between cities have grown. Concentration of IT jobs in few cities generates many career prospects but also many disadvantages.

Sustainable Growth Goal 11 requires India to make cities inclusive, safe, resilient, and sustainable. So these IT centres should be planned systematically and sustainably.