

Mains PYQs - GS-III (2025) (Q. 13 - 15)

13. Examine the factors responsible for depleting groundwater in India. What are the steps taken by the government to mitigate such depletion of groundwater? (250 words, 15 marks)

Direction: Intro-----Factors responsible for depletion + Steps taken by govt to mitigate----
-Conclusion.

Introduction:

Describe briefly about India's groundwater resource.

Groundwater is India's largest source of freshwater, accounting for nearly 62% of irrigation, about 85% of rural drinking water supply, and around 45% of urban water needs.

Main Body

Factors responsible for depletion

- Overextraction of groundwater.
- Rapid urbanization.
- Climate change.
- Overfarming of water-intensive crops.
- Inefficient irrigation practices.
- Population growth.

Steps taken by govt to mitigate

- Jal Shakti Mission - Catch the Rain Campaign.
- Atal Bhujal Yojana.
- National Aquifer Mapping and Management Programme.
- PM Krishi Sinchayee Yojana (PMKSY).
- Central Ground Water Authority (CGWA).
- Works through MGNREGA and Watershed Development.

Conclusion:

Give a neutral conclusion.

14. Examine the scope of the food processing industries in India. Elaborate the

measures taken by the government in the food processing industries for generating employment opportunities. (250 words, 15 marks)

Directions: Intro-----Scope + Measures taken-----Conclusion.

Introduction:

Describe the food processing industry with data.

Main Body

Scope of the food processing industries

- Abundance of raw materials
- Increase in domestic consumption
- Expansion of urban areas
- Employment generation
- Income to farmers
- Technological advancement
- Growth of MSME
- High export potential

Measures taken by the government

- Production Linked Incentive Scheme for Food Processing Industry
- Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)
- PM Formalisation of Micro Food Processing Enterprises Scheme
- Mega Food Parks
- Cold Chain and Value Addition Infrastructure
- Promotion of Farmer Producer Organisations (FPOs)
- Skill development

Conclusion:

Give a neutral and progressive conclusion.

15. How does nanotechnology offer significant advancements in the field of agriculture? How can this technology help to uplift the socio-economic status of farmers? (250 words, 15 marks)

Directions: Intro-----Advancement in agriculture + Help in uplift of farmers-----Conclusion.

Introduction:

Describe briefly about nanotechnology & its use in agriculture.

Main Body

Nanotechnology Advancements in Agriculture

- Nano fertiliser – Controlled and targeted nutrient release.
- Nano pesticides & herbicides – Minimise excessive use of chemicals.
- Nano sensors for precision agriculture.
- Nano coating – Seed enhancement.
- Early disease detection.
- Water and soil management.

Uplift the socio-economic status of farmers

- High crop productivity.
- Enhanced farmers' income.
- Lower cost of cultivation – reduced input cost for fertiliser, pesticide, etc.
- Reduced post-harvest loss.
- Improved market competitiveness.
- Employment generation.

Conclusion:

Give a positive conclusion - Nanotechnology has the potential to usher in a second green revolution by making Indian agriculture more productive, resource-efficient, climate-resilient, and sustainable.