

CHAPTER - 5

LAND RESOURCES AND AGRICULTURE

GIST OF THE LESSON:

LAND USE CATEGORIES

1. Forests
2. Land put to non-agricultural use
3. Barren and waste land
4. Area under permanent pastures
5. Area under miscellaneous tree crops
6. Culturally waste land
7. Current fallow land
8. Fallow other than current fallow
9. Net sown area

LAND USE CHANGES IN INDIA THREE TYPES OF CHANGES

- I. Size of economy: grow over time; change in income level, marginal lands will become useful
- II. Composition of the economy: the secondary and tertiary grew much faster than primary activities especially agriculture
- III. The contribution of agricultural activities reduces over time

The share of Agriculture is declined. No. of people fed by Agriculture is increasing

INCREASE IN THREE CATEGORIES

1. Forest
2. Area under non agricultural use
3. Current fallow land
4. Four areas declined
 1. Barren and waste land
 2. Cultivable waste land
 3. Area under pastures & tree crops
 4. Net sown area

COMMON PROPERTY RESOURCES

- I. The CPRs are used by common purpose / society owned by state
 - ii. Provide fodder for livestock fuel for the house holds

iii. Produce minor forest products such as fruits, nuts, fiber, and medicinal plants

iv. Every member has right to access agricultural land use in India

1. Contribution of land in agricultural use is more important

2. Lack of access to land leads to poverty

3. Productivity depends on quality of land

4. Land ownership has social value in rural areas

TOTAL CULTIVABLE LAND IS = NET SWOWN AREA + FALLOW LAND + CULTURABLE WASTE LAND

1. Since there is no extra land available only the high yielding varieties can increase the productivity

2. Number of times the land can be increased by providing irrigation

Crop intensity can be raised

CROPPING SEASONS

SEASON	PERIOD	CROPS
KHARIF	JUNE-SEP	RICE, COTTON, MILLETS, GROUND NUT
RABI	OCT-NOV	WHEAT, GRAM, RICE, MAIZE, MILLETS
ZAID	APRIL-JUNE	VEGETABLES FRUITS

STRATEGY OF DEVELOPMENT

Govt. of India took steps to increase the production

i. Switching over from cash crops to food grains

ii. Increase crop intensity

iii. Increasing cultivated area

iv. Improvement of irrigation

v. Intensive agricultural district programme and intensive agricultural area programme were launched

vi. Use of HYV seeds, fertilizers, irrigation, pesticides,

vii. Use of package technology

viii. Introduction of GREEN REVOLUTION

ix. Large agriculture inputs

GROWTH OF AGRICULTURAL OUTPUT AND TECHNOLOGY

1. Production and yield increased (wheat, rice, oilseeds, sugarcane, tea pulses, cattle, milk, and ground nut)

2. Expansion of irrigated area.

3. Use of HYV seeds
4. Use of modern agricultural technology
5. Increased consumption of chemical fertilizers

PROBLEMS OF INDIAN AGRICULTURE

1. Uneven and unreliable rainfall
2. Low productivity
3. Poverty of the farmers
4. Lack of land reforms
5. Fragmentation of land holdings
6. Lack of commercialization
7. Vast under employment
8. Degradation of cultivable land.
9. Illiteracy

Very short Answer question (1 mark each)

1. Which state is the leading producer of rice?

Ans: West Bengal

2. How much part of total geographical area is cultivated?

Ans: 43%

3. What is fallow land?

Ans: A land which is not cultivated for 1 to 5 years.

4. Which state has the highest intensity of crops?

Ans: Punjab 189%

5. Name the main cropping season of India.

Ans: Rabi, kharif and zaid

Short answer question (3 marks each)

6. What is the difference between dry land and wetland farming?

Ans: **Dry land farming:**

1. Dryland farming located in the area of less than 75cm rain fall
2. Drought resistant crops are grown
3. Millets, maize fodder crops
4. Practice rain water harvesting

Wetland farming:

1. Found in areas of high rainfall zones
2. Water intensive crops such as rice, sugarcane, jute are grown

7. Describe the condition of growth, production and major area of cultivation of rice in India.

Ans: RICE is a crop of tropical regions

Temperature: 20 to 27 degree centigrade.

Rainfall: 75 to 200 cm

Soil: Alluvial

Cheap and skilled labour : large no of labour required Production area : middle plain, coastal plain, Himalaya foot hill, Punjab, Haryana

8. Describe three main achievements of the green Revolution in India.

Ans: i) it has led to a substantial increase in production and productivity of food grains.

ii) Import of food grains declined from

10. 3 million tons to 2.4 million tons in 1983. There is no import of food grains in 2000-01.

The cropped area, use of HYVs, the yield per hectare use of irrigation and Fertilizers has increased.

Long answer question (5marks each)

9. Discuss the problems of Indian agriculture?

- Ans:
1. Uneven and unreliable rainfall
 2. Low productivity
 3. Poverty of the farmers
 4. Lack of land reforms
 5. Fragmentation of land holdings
 6. Lack of commercialization
 7. Vast under employment
 8. Degradation of cultivable land
 9. Illiteracy
 10. What geographical condition is required to grow wheat?

Ans: i) **Temperature:** 10 to 20 degree Celsius and 100 frost free period

ii) **Rainfall:** need 50 to 100 cm of rainfall

iii) **Irrigation:** Irrigation is required

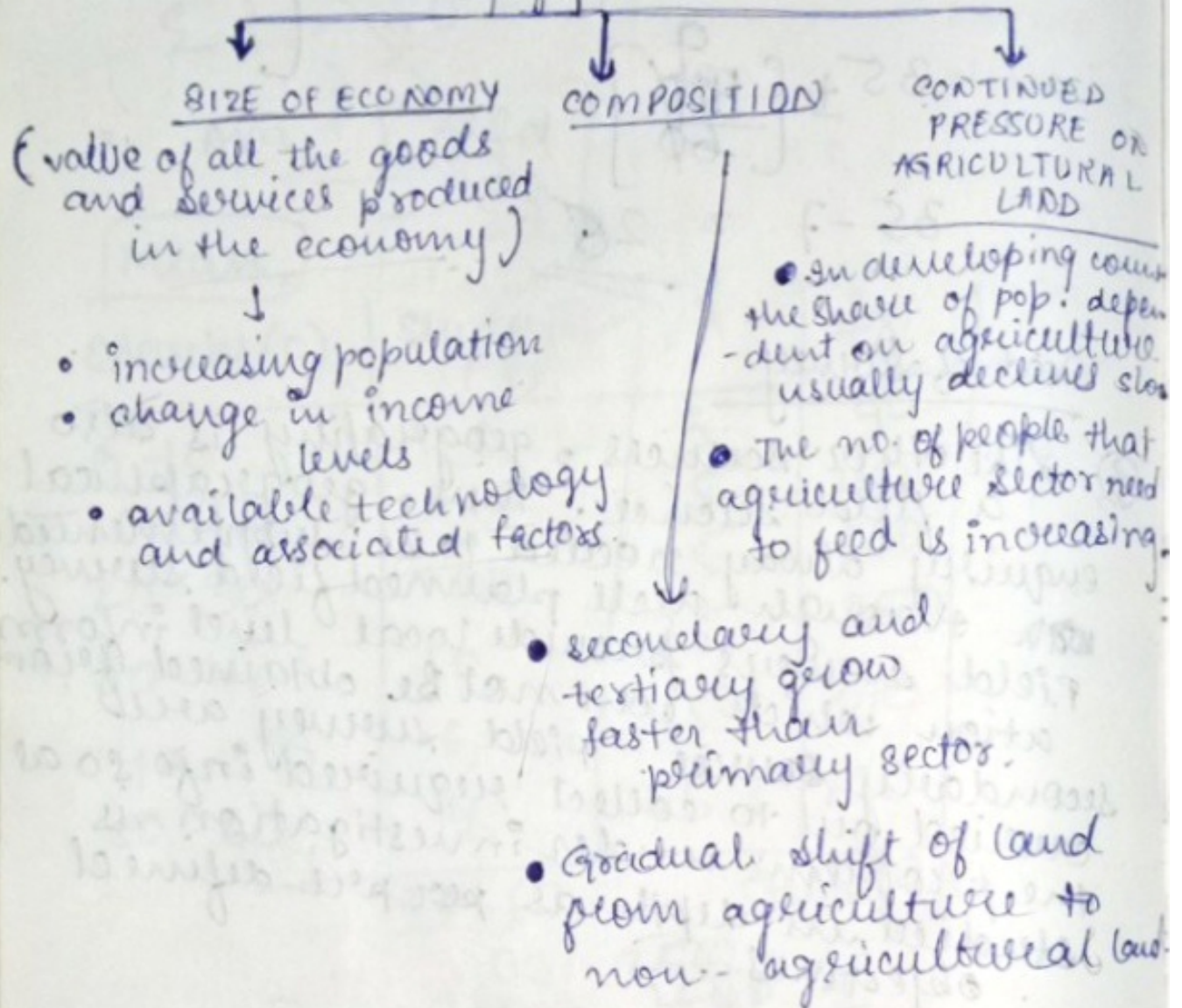
iv) **Soil:** heavy loamy or light clay is the best

v) **Production in India:** Punjab, Haryana, India is the second largest wheat

vi) Producing country after green revolution.

5. Land Resources and Agriculture

→ Land-use Changes in India ..
changes in economy



INCREASE IN ^{FOUR} ~~THREE~~ CATEGORIES

① Area under non-agricultural uses

↓
This is due to the changing structure of Indian economy → contribution from industrial and services sectors and expansion of related infrastructural facilities.

② Share of area under forest

↓
increase in the demarcated area under forest rather than actual increase in the forest cover.

③ Increase in current fallow

↓
The trend of current fallow fluctuated a great deal over years, depending on the variability of rainfall and cropping cycles

④ Increase in net-sown area

- ↓
- recent phenomenon due to use of cultivable waste land for agricultural purposes.
 - most of the decline had occurred due to the increases in area under non-agricultural use.

DECREASE IN FOUR CATEGORIES :

- ① Barren and Wasteland
[due to increase in the pressure on land]
- ② Cultivable wasteland
[due to increase in the pressure on land]
- ③ Area under pastures and tree crops.
[illegal encroachment due to expansion of cultivation on common pasture lands is largely responsible for this decline]
- ④ Fallow lands.

5. LAND RESOURCES AND AGRICULTURE

- Q1. "Land resource is more crucial to the livelihood of the people depending on agriculture". Support this statement with any three suitable arguments. [CBSE 2012]
- Q2. "Erratic monsoon" and "Indebtedness" are the major problems of Indian agriculture". Suggest and explain the measures to overcome these problems. [CBSE 2016]
- Q3. What is dry land farming? [CBSE 2015]
- Q4. Classify rainfed farming on the basis of adequacy of soil moisture during cropping season. [CBSE 2017]
- Q5. Describe any three characteristics of "wetland farming" in India. [CBSE 2013]
- Q6. State any two characteristics each of the three distinct "cropping seasons" of India. [CBSE 2014]
- Q7. Analyse any five major problems related to Indian agriculture. [CBSE 2014]
- Q8. Define the term "Net Sown Area". Explain any two features of each of dryland and wetland farming. [CBSE 2014]