

Agriculture and Rural Land-Use

AP Human Geography ■ Unit 5

AP Human Geography



What we will cover

- 1 Intro & settlement
- 2 Origins & revolutions
- 3 Production regions
- 4 Von Thünen
- 5 Global system
- 6 Consequences & challenges

Introduction and settlement

- **Intensive** 集约农业 = high input/small area;
extensive 粗放农业 = low input/large area.
- **Subsistence** 自给农业 feeds the family; **commercial** 商品农业 is for sale.
- Settlement: clustered, dispersed, linear; survey: long-lot, township-and-range, metes-and-bounds.



*Subsistence
farming feeds the household*

Origins and revolutions

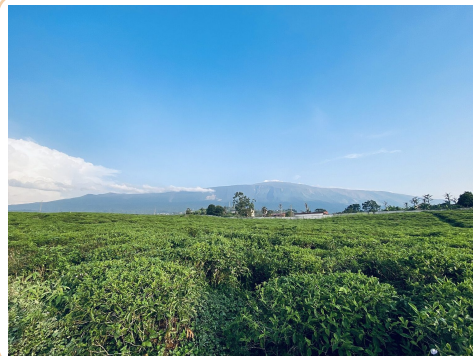
- An **agricultural hearth** 农业起源地 is where farming began (Fertile Crescent).
- The Second Agricultural Revolution mechanised farming with the **Industrial Revolution** 工业革命.
- The **Green Revolution** 绿色革命 used high-yield seeds – big yields, costly inputs.



Mechanisation raised yields at scale

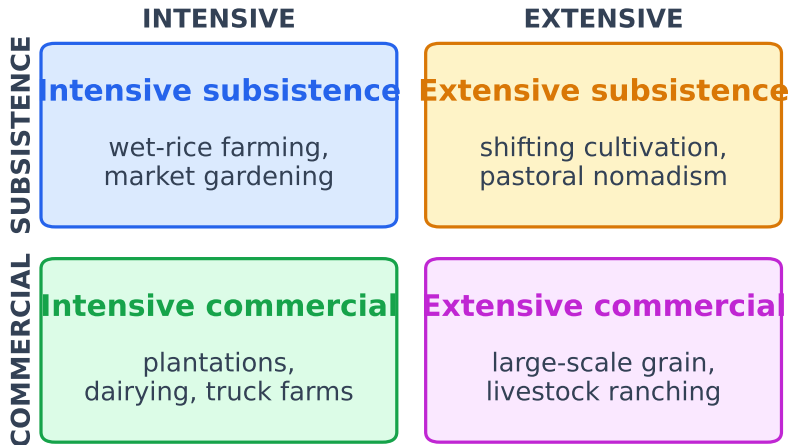
Production regions

- **Shifting cultivation** 迁移农业, **pastoral nomadism** 游牧 (subsistence).
- **Plantation** 种植园, **market gardening** 商品园艺 (commercial).
- **Monoculture** 单一栽培 is efficient but risky.



Plantations specialise for export markets

Production regions



The Von Thünen model

- Land use rings a central market, driven by **transport cost** 运输成本.
- Perishable/heavy goods near market; cheap-to-move goods far out.
- Assumes flat, uniform land – refrigeration and roads break the rings.

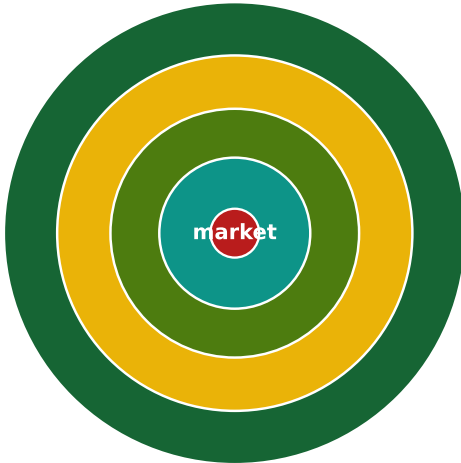
Worked example – reading the rings

Von Thünen puts dairy beside the market and grain far out. Wheat is worth far less per tonne than milk – so why does wheat get the land?

Rent is what a crop can pay for land, and dairy loses most from distance – milk spoils and is heavy, so its cost rises steeply. Dairy therefore outbids everything near the market; wheat, cheap to move and slow to spoil, still profits far out.

The rings are set by transport cost per km, not crop value. Refrigerated trucks flatten dairy's curve – which is exactly why real cities no longer show clean rings.

The Von Thünen model



distance from market →

- Ring 1: dairy / market gardening
- Ring 2: forest (fuel, timber)
- Ring 3: field crops / grain
- Ring 4: ranching (extensive)

The global system

- Food moves through global supply chains.
- **Export dependence** 粮食出口依赖 on one crop is risky.
- **Fair trade** 公平贸易 pays producers a fairer price.

Consequences and challenges

- **Soil degradation** 土壤退化, water **pollution** 污染, **deforestation** 森林砍伐.
- **Food deserts** 食物荒漠, the **GMO** 转基因 debate, local-food and organic movements.
- Women do much subsistence farm work but hold weaker land rights.



Intensive farming reshapes land and water

Key points

Farming: **subsistence/commercial, intensive/extensive**

The **Green Revolution**
raised yields at a cost

Von Thünen: transport
cost sets land-use rings

Agriculture drives **soil, water, and forest** change

Worked example – the command word is the question

“Describe the concept of an early hearth of domestication.” (real AP question)

“A place where people first domesticated a wild plant or animal into a farmed variety, and from which that farming practice then spread to other regions.”

Describe wants **more than a definition** – give the key features (where it began **and** that it spread) – but **not** the cause-and-effect “Explain” demands.

Check yourself

- 1 Why does Von Thünen put dairy nearest the market?
- 2 What is an early hearth of domestication?
- 3 Intensive or extensive: high input per hectare?
- 4 Name one consequence of the Green Revolution.

Answers 1. it is perishable and costly to transport 2. where a species was first farmed, and spread from 3. intensive 4. higher yields, but more inputs and inequality