

Secondary Activities

Fundamentals of Human Geography - Chapter 5

What the chapter is about

- Secondary activities ADD VALUE to natural resources by turning raw materials into more valuable, usable products.
- They cover manufacturing, processing + construction (infrastructure) industries.

Two classic examples

- Cotton in the boll has limited use; spun into yarn it becomes valuable + makes cloth.
- Iron ore cannot be used straight from the mine; as steel it makes machines, tools, etc.

Where it sits in economic activity

- Primary = extract from nature (farm, mine, sea).
- Secondary = process raw material into goods.
- Tertiary + quaternary = services + knowledge.

How to use these notes

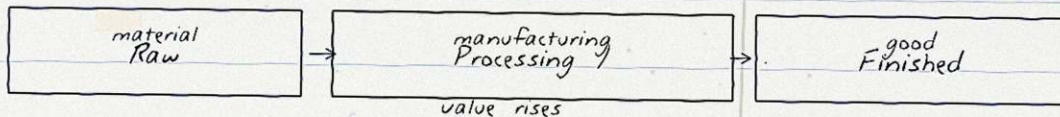
- Read the mind-maps + tables first, then bullets.
- Last pages give quick-recall + common slips.

Key idea: secondary activity = value added to raw material.

Value Addition: The Big Idea

Raw material to finished good

- Raw material has low value + limited use.
- Processing transforms it into a finished good of HIGHER value for sale in markets.
- True of most stuff from farm, forest, mine + sea.



Worked examples to memorise

- Cotton boll → yarn → cloth (textile).
- Iron ore → steel → machines + tools.
- Sugarcane → sugar; milk → dairy products.*

Three branches of secondary activity

- Manufacturing (handicraft to space vehicles).
- Processing (e.g. agro-processing, refining).
- ~~Construction~~ Infrastructure
(roads, dams, buildings).

Remember: secondary = make / process / build, not extract,
and not sell services (that is tertiary).

What is Manufacturing?

The full range

- Manufacturing runs from handicrafts + moulding iron + steel, to stamping plastic toys, to assembling computers or space vehicles.

Common characteristics

- Application of POWER to do the work. power +
- Mass production of identical products. mass
- Specialised labour in factory settings. + skill +
- Output = standardised commodities. factory

Meaning of the word

~~Manufacture is to make by machine~~

to "make by hand". Now it includes goods

* "made by machines." too.

Industry vs manufacturing industry

- An INDUSTRY is a located manufacturing unit keeping accounts + records * under management.
- Some secondary activities are NOT in factories - (e.g. entertainment, tourism "industry").
- So "manufacturing industry" is the clear term.

Tip: define manufacturing as turning raw material into

Modern Large Scale: Traits (1)

Specialisation of skills

- Craft method: a few made-to-order pieces, costs are HIGH.
- Mass production: large quantities of standard parts; each worker does ONE task repeatedly.

Mechanisation + automation

- Mechanisation = using gadgets to do tasks.
 - Automation = the advanced stage, working WITHOUT human thinking during the process.
- Automated factories - loop computer control; machines that "think".

Technological innovation

- Comes through research + development (R and D).
- Used for QUALITY control, cutting waste + inefficiency, and fighting pollution.

Organisation + stratification

- Complex machine technology + extreme division of labour: more goods, less effort, low cost.
- Needs vast capital + a large executive bureaucracy.

Four traits so far: skills, mechanisation, R and D, organisation.

Modern Large Scale: Traits (2)

Uneven geographic distribution

- Modern manufacturing is concentrated in a ^{few} places, under 10% of the world's land area.
- These nations became centres of economic ^{big} political power.
- Sites take less area than farms due to greater intensity of processes.

Farm vs factory: the corn-belt fact

- 2.5 sq km of the American corn belt = about 4 large farms, 10-20 workers, 50-100 persons.
- The SAME area could hold several integrated factories + employ thousands of workers.

Two broad types of large-scale regions

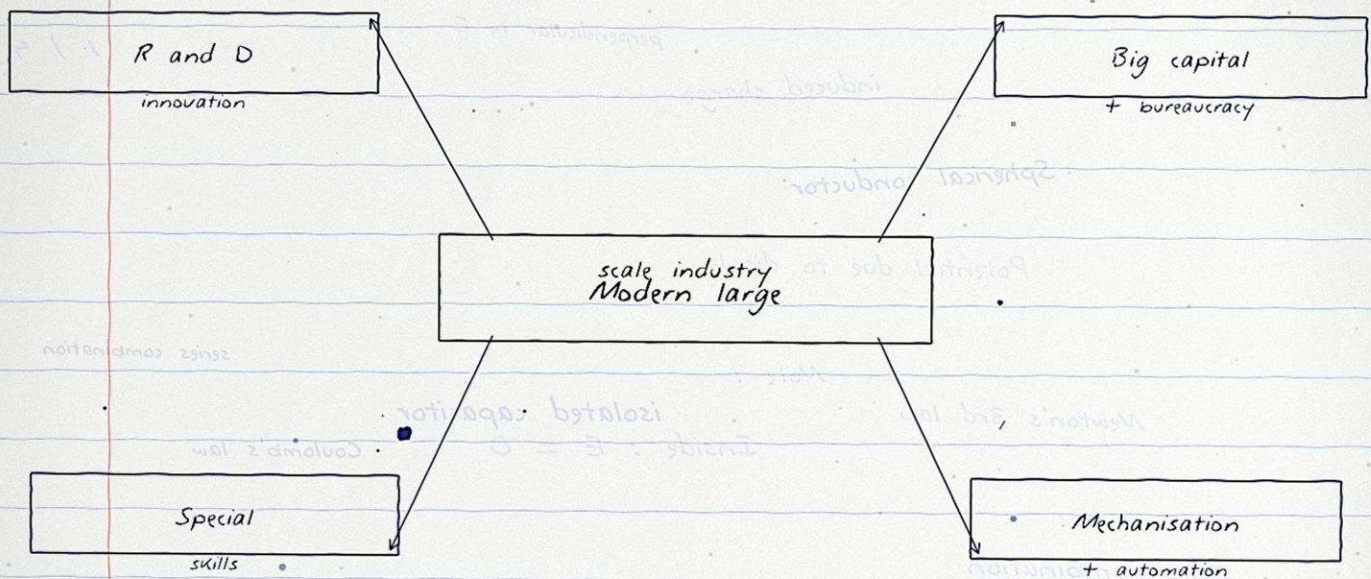
- Traditional regions: thickly clustered in a few more developed countries.
- High-technology regions: have diffused to less developed countries too.

Quick recap of all traits

- Skills, mechanisation, R and D, organisation,
- and uneven geographic distribution.

Exam: list these five characteristics with one line each.

Manufacturing: Mind-Map



One more spoke to add

- Uneven distribution: under 10% of world land, yet these places hold the economic power.
- Together the spokes = the five characteristics of modern large scale manufacturing.
- Memorise the map, then write a line per spoke.

Five spokes, one idea: big, mechanised, skilled, costly + geographically concentrated production.

Why Industries Choose Locations *

The * basic rule

- Industries maximise PROFIT by reducing COSTS.
- So they locate where production cost is minimum.

Factor 1: Access to market

- Market = people with DEMAND + purchasing power.
- Developed Europe, N. America, Japan, Australia give large markets (high purchasing power) ^{factor}
- Dense S. + SE Asia also give large markets.
- Some (aircraft, arms) have a GLOBAL market.

Factor 2: Access to raw material

- Raw material should be cheap + easy to carry.
- Weight-losing / bulky ores: locate near the source (steel, sugar, cement industries).
- Perishable goods: locate near source too (agro-processing, dairy near farm / milk).

Factor 3: Access to labour supply

- Some manufacturing still needs SKILLED labour.
- More mechanisation + automation has REDUCED industry's dependence on labour.

Three factors so far: market, raw material, labour.

Location Factors (continued)

Factor 4: Access to energy

- Power-hungry industries locate near the energy source, e.g. the aluminium industry.

~~petroleum~~ ~~Electricity~~ was the main

source; now hydel + petroleum matter too.

Factor 5: Transport + communication

- Speedy transport carries raw material in + finished goods out; transport cost matters.
- W. Europe + E. North America have developed transport, so industries concentrate there.
- Communication is needed to exchange + manage information. *

Factor 6: Government policy

- Governments use "regional policies" for balanced development, setting up industries in chosen areas.

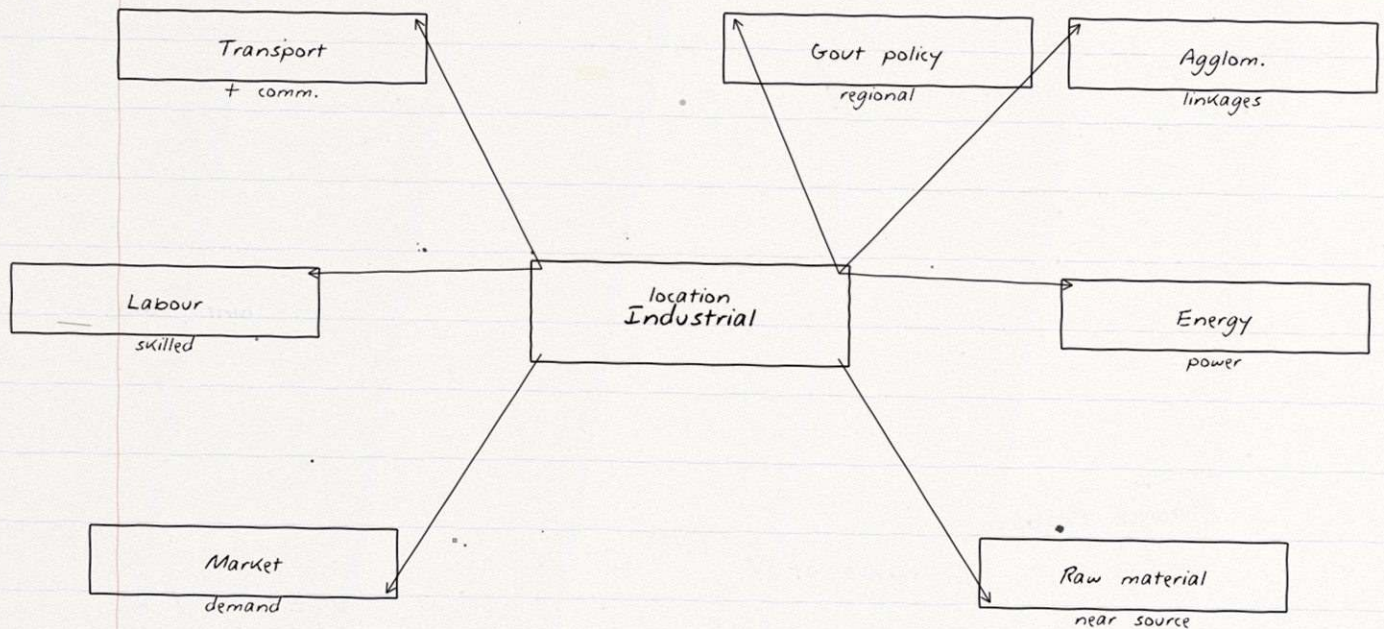
Factor 7: Agglomeration economies

- Gains from being NEAR a leader-industry + others.
- Savings come from LINKAGES between industries.
- All seven factors operate together to fix location.

Seven factors: market, raw material, labour, energy,

Location Factors: Diagram

Seven pulls decide where a factory is built.



How to use the spokes

- Market is the *SINGLE* most important factor.
- Weight-losing + perishable goods chase raw material.
- All seven act together; no single one decides alone.

Mnemonic: Many Robots Like Eating Tasty Green Apples

(Market, Raw, Labour, Energy, Transport, Govt, Agglom.).

Footloose Industries

What they are

- Footloose industries can locate in a WIDE ^{free to} variety of places. _{locate}
- They do NOT depend on any specific raw ^{almost} material (weight-losing or otherwise). _{anywhere}

Their key features

- Depend on component parts got from ANYWHERE.
- Produce in SMALL quantity + employ a small labour force.
- Generally NOT polluting industries.
- Key location factor = accessibility by ROAD network. *

Watch the common trap

Sugar + cotton ~~Footloose~~ are

NOT footloose; they are tied to raw material.

- Footloose need NEITHER bulky raw material NOR huge power, so road access is enough.

Easy examples

- Light, assembled goods like electronics, watches.
- Small, clean, road-linked component industries.

Footloose = free of raw-material + power ties; needs roads.

Primary vs Secondary

Feature	Primary	Secondary
Work	extract	process / make
Source	nature directly	raw material
Example	farming, mining	steel, textiles
Value	low (raw)	added, higher
Output	raw material	finished goods

The link between them

- Primary FEEDS secondary: the farm + mine give raw material that factories process.
- Secondary adds VALUE that primary alone cannot.

Trends in developed countries

- More mechanisation, automation + flexibility.
- Rise of high-tech + footloose units.
- Less labour dependence; more R and D + capital.

Exam framing

- 150-word answer: define each, give 2 examples,
- then show value addition is the key difference.

Core difference: primary extracts; secondary adds value.

Classifying Industries

Four bases of classification

- 1. By SIZE (capital, workers, output). size
- 2. By INPUTS / raw materials used. input
- 3. By OUTPUT / product made. output
- 4. By OWNERSHIP (who owns + runs owner).

By size: three classes

- Size is set by capital invested, workers employed + volume of production.
- Household / cottage industries.
- Small-scale manufacturing.
- Large-scale manufacturing.

Household / cottage industries

- The SMALLEST unit; artisans use local raw material + simple tools, at HOME, with family.
- Goods for own use, local markets, or barter.
- Capital + transport have little influence.
- E.g. foodstuffs, fabrics, mats, pottery, baskets, leather goods, gold / silver jewellery.

Cottage = home + family + local + simple tools + low value.

It has the lowest commercial significance of the three.

Small + Large Scale

Small scale manufacturing

- Differs from cottage by production technique + place: a WORKSHOP outside the home.
- Uses local raw material, simple power-driven machines + semi-skilled labour.
- Gives EMPLOYMENT + raises local purchasing power.
- India, China, Indonesia, Brazil use labour-intensive small scale units to create jobs.

Large scale manufacturing

- Needs a large market, varied raw materials, huge energy, specialised workers, advanced technology, assembly-line mass production, large capital, large energy.
- Developed in the last 200 years in the UK, NE U.S.A. + Europe; now spread worldwide.

Two types of large-scale regions

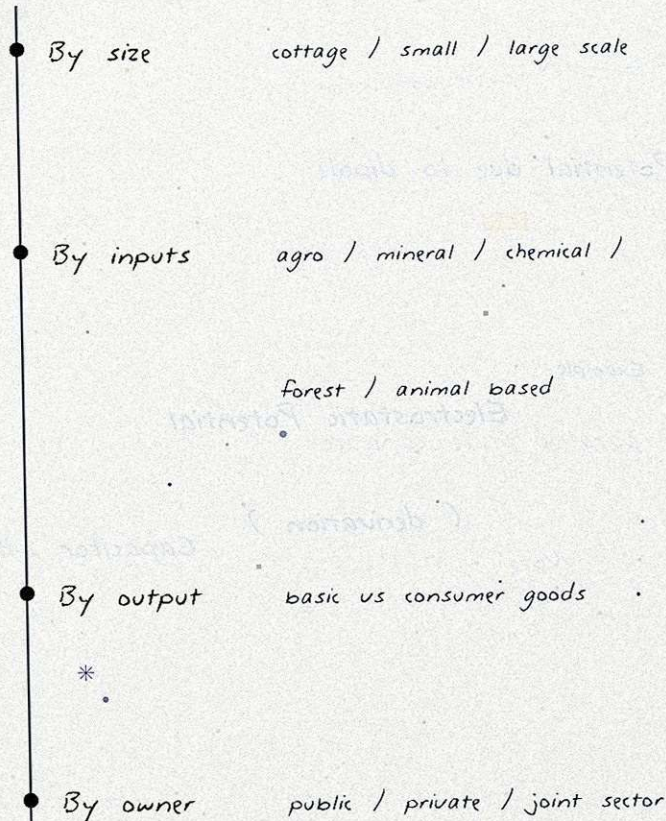
- Traditional: clustered in more developed nations.
High-~~developed~~ developed countries.

Size order: cottage < small scale < large scale.

Workshop vs home is what separates small from cottage.

Classification: Tree

Industries split four ways. Learn the branches.



Why so many bases?

- One industry fits **MANY** classes at once, e.g.
steel = large scale + mineral based + basic +
(often) public sector.
- Read each base separately, then combine them.

Four bases: SIZE, INPUTS, OUTPUT, OWNERSHIP.

By Inputs / Raw Materials

(a) Agro-based industries

- Process field + farm produce into goods for rural + urban markets.
- E.g. food processing, sugar, beverages (tea, coffee, cocoa), oils, textiles (cotton, jute, silk).
- Food processing: canning, cream, fruit, confectionery.

(b) Mineral-based industries

- FERROUS metallic (contain iron): iron + steel.
- NON-ferrous metallic: aluminium, copper, jewellery.
- NON-metallic minerals: cement, pottery. else not

(c) Chemical-based industries

- Use natural chemical minerals: mineral-oil (petroleum) in the petro-chemical industry.
- Salts, sulphur, potash + wood / coal based too.
- Synthetic fibre + plastic are other examples.

(d) Forest-based (e) Animal-based

- Forest: timber (furniture), bamboo / grass (paper), lac (lac industry).
- Animal: leather (from hides), wool (woollens), ivory (from elephant tusks).

Five input classes: agro, mineral, chemical, forest, animal.

By Output + By Ownership

By output: basic vs consumer

- BASIC industries: products are used to make OTHER goods, e.g. iron + steel.
- Link: iron / steel $\rightarrow$ machines for textiles $\rightarrow$ clothes for consumers.

CONSUMER (non-basic) ~~by good industries~~

directly by consumers: bread, biscuits, tea, soaps, paper, televisions.

By ownership: three sectors

- PUBLIC sector: owned + run by GOVERNMENT (India's PSUs); socialist states have many.
- PRIVATE sector: owned by individual investors; common in capitalist countries.
- JOINT sector: run by joint stock companies or public + private together.

Mixed economy note

- Mixed economies have BOTH public + private sector enterprises (e.g. India).
- Capitalist $\equiv$ mostly private; socialist $\equiv$ mostly state-owned.

Output: basic vs consumer. Owner: public / private / joint.

High-Technology Industry

What high-tech means

- The LATEST generation of manufacturing.
- Intensive R and D makes products of advanced scientific + engineering character.

Workforce + processes

- Professional (WHITE collar) workers are a large share; they OUTNUMBER production (blue collar).
- Uses robotics on the line, CAD + manufacturing, electronic controls, new chemicals + *pharma.

*

Its landscape

- Neat, low, modern, dispersed office-plant-lab buildings, NOT massive assembly structures.
- Planned business parks for high-tech start-ups.

Technopolies

- Regionally concentrated, self-sustained + highly specialised high-tech industries = TECHNOPOLIES.

~~Silicon Forest near SF~~

Silicon Valley near San Francisco; Silicon Forest near Seattle.

High-tech = R and D heavy, white-collar led, clean, dispersed.

Key Terms + Facts

Secondary act.	Add value: raw material to goods
Manufacturing	Turn raw material into finished goods
Industry	A located manufacturing unit
Mechanisation	Using gadgets to do tasks
Automation	Mechanisation with no human thinking
Footloose	Locates anywhere; needs road access
Agglomeration	Savings from links between industries
Cottage	Smallest unit, at home, family labour
Basic industry	Makes goods used by other industries
Consumer goods	Used directly by consumers
High-tech	R and D led, advanced products
Technopolies	Concentrated, specialised high-tech

Facts worth quoting.

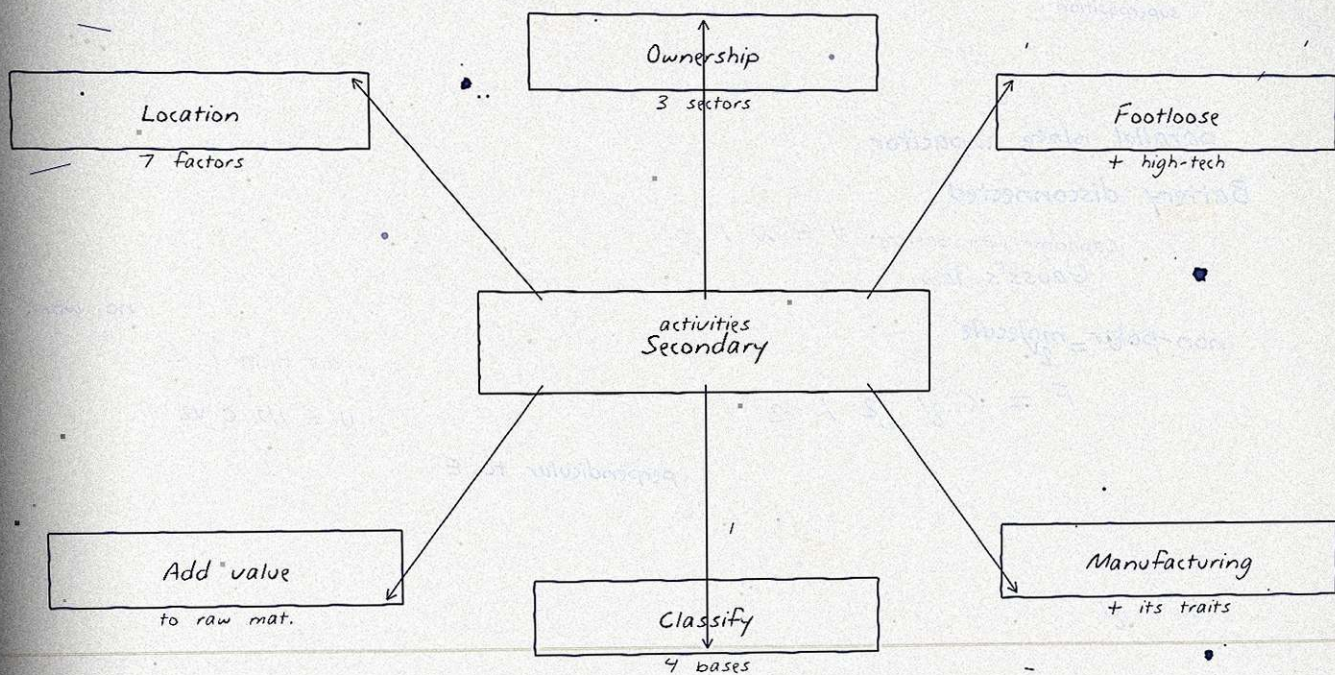
- Modern manufacturing = under 10% of world land.
- Large scale grew in the last 200 years (UK, NE U.S.A., Europe), now worldwide.
- Market is the most important location factor.

~~spatial interaction~~ agglomeration,

mechanisation, technopolies.

Learn the terms exactly; CBSE + CUET reward precise wording.

The Whole Chapter: Mind-Map



Read it as one chain

- Secondary activity adds value to raw material.
- Manufacturing does it with power, skill + scale.
- Seven factors decide WHERE; classify FOUR ways.
- High-tech is the newest, footloose the freest.

Learn this chain; it frames most short + long answers.

Quick Recall + Traps.

Five-line answer skeleton

- 1. Secondary activity adds value: raw material becomes a finished good.
- 2. Manufacturing = power + mass production + specialised labour in factories.
- 3. Five traits of large scale; market is the top location factor.
- 4. Classify by size, inputs, output, ownership.
- 5. High-tech + footloose are the modern trends.

Common slips to avoid

- Sugar + cotton ~~footloose~~ NOT footloose; they cling to raw material.
- Basic industry makes goods for OTHER industries, not for consumers directly.
- Cottage is at HOME; small scale is in a WORKSHOP.

Exam pointers

- Always give an EXAMPLE with each industry type.
- For location, name the factor + why it pulls.

Automation ~~with~~ WITHOUT human thinking during the process.

Students who define terms + give examples score best.