

CHAPTER 2=SECONDARY ECONOMIC ACTIVITIES

Secondary economic activities=involve taking a raw material(timber) and making a finished product in a factory (table).Or you can take a semi-processed raw material and process it further like from balls of wool into a jumper.

Raw material=eg trunk of a tree.

Semi-finished product=eg planks of wood.

Finished product=eg table or door.

Secondary economic activities all have a system of inputs,outputs and processes

Every factory is a system=every industry has inputs,processes and outputs .

<u>INPUTS</u>	<u>PROCESSES</u>	<u>OUTPUTS</u>
->main inputs=raw materials ->electricity ->factory building and machines ->labour-workers ->capital(money)	->measuring ->cutting ->moulding	->finished product ->waste ->profit

FACTORS INFLUENCING THE LOCATION OF A FACTORY

(1)Market

EU(27 countries-500 million european citizens)they have a high purchasing power.there is no tariffs in between the european countries.there is extra tax up to 50% put on a product with countries outside of the EU.having access to markets means being close to the places where you're going to sell your products and customers who are going to buy them.the closer you are the fewer transport costs you'll have to move your goods and you can also do it faster.

(2)Labour force

Labour force means people needed to work in the factory.factories must be built near universities skilled/educator workforce e.g. contact lenses.tectiles(clothes)the companies vary in countries with cheap labour some countries might have no unions.

(3)transport

If your raw material or finished product is quite bulky then you transport it by water (boats)then locate near a port .If raw material or finished product is light and high value then you locate it in a city with a big airport.the motorways are also important.

(4)raw material

If raw materials or resources needed by a factory are big and heavy the factory would need to be located close to them. If the factory is located faraway it would be too difficult and quite expensive to get them to the factory.

(5)services

Services like water,electricity,sewage treatment ,waste disposal,telephone,broadband and wifi access.companies need good quality services so they set them up only where these things are readily available

DIFFERENT TYPES OF MANUFACTURING INDUSTRY

- (1)heavy industry
- (2)light industry
- (3)multinational corporations (MNCS)
- (4)footloose industry

(1)Heavy industry-local factory

-in this industry resource materials and the products being made are big and heavy.iron and steel making are examples of heavy industry.

An example in Ireland of heavy industry is the =Aughinish Alumina factory in limerick near foynes.

aughinish alumina is a factory that makes alumina.alumina is a semi-finished product.it is a white powder used to make aluminum.the alumina is exported y ship to aluminum smelters in the uk and scandinavia.the aughinish plant is the largest of its kind in europe it began in 1983 and now produces over 1.8 million tons of alumina per year.provides 450 jobs for the local area.

Reasons for its location

(1)raw material=bauxite is the main material used in making alumina.its bulky and heavy material that comes from the guinea in africa.its shipped to the shannon estuary where there's a deep water port at aughinish.this port is suitable for the ships bearing the large containers to dock.

(2)labour force=there are 450 people employed at the factory these workers mostly come from nearby towns and villages like foynes,askeaton,rathkeale and newcastle west.Aughinish near limerick UL and LIT have skilled and educated workers like engineers.

(3)market=ireland is a member of the EU and is close to the european markets.alumina can be easily exported to smelters in the UK,scandinavia and other European countries.most of alumina is exported to sweden,finland and they are part of the EU and there's no tariffs put on them and don't have to pay extra.EU countries have a high purchasing power so when its made cars/trucks there will be a big market people will buy over 500 million people live in europe.

<u>inputs</u>	<u>processes</u>	<u>outputs</u>
->bauxite ->caustic soda ->electricity ->factory building	->bauxite is crushed and mixed with caustic soda and then heated	->alumina powder ->profit ->waste

(2)light industry

-in this type of industry the products being made are small and light.examples are =electronic products and healthcare.

Example of a light industry=apple computers ltd location Hollyhill,cork city

Apple

Apple produces products like computers,ipads,iphones for the world market.company employs 3,300 workers in cork city area.it first located in cork in 1980 over last number of years it had grown.the cork city plant is the operational headquarters for europe,middle east and asia.

Reasons for its location

(1)corporation tax

Ireland's low corporation tax encouraged Apple to locate here and that low corporation tax kept the company in place. The fact that Ireland is a member of the EU means Apple can locate its european headquarters here and avail of free movement of goods.

(2)transport

Its proximity to the cork port and airport means goods can be shipped worldwide at a lower cost.

(3)labour force

It being close to the University College Cork and the Cork Institute of Technology means there is a steady supply of skilled graduates available.

(3)multinational corporations (MNCs)

Type of companies that make their products in many different countries.headquarters located in one country and then they've branches in other countries throughout the world.eg apple,samsung,google,facebook.there is a lot of multinational companies in ireland as it's in the EU and tariff free.RUSAI is part of a multinational corporation.

(4) Footloose industry

•.in the past these industries could only set up in places where there was easy access to coal fields.that is because coal was the main source of energy at that time.coal was used in the production of iron and steel and it was also used to create steam to power the spinning machines to make textiles during the industrial revolution of the 18th and 19th centuries.that trend had continues until the coal fields were overused and became exhausted and new source of energy had been developed.

•these days.It is a industry that can locate wherever it chooses to it is not tied down to any one specific location like port.these are usually light industries and they often locate in industrial estates or business parks close to large cities.**eg microsoft ireland is in the Sandyford Industrial Estate**

Examples of light raw material in a footloose industry like makeup,textiles,laptops,phones.

Non-footloose industries are= normally heavy industries that use bulky or heavy raw materials and make heavy,bulky finished product.it locates near its raw material a port for example alumina,cars,ships,iron and steel.

The british iron and steel industry

In the 1700's during the industrial revolution Britain had begun to develop its iron and steel industry.britain had large amounts of coal and iron ore deposits. These were the raw materials to make iron and steel.wood had been the main source of energy in Britain it was used for fuel in homes and small industries.as population grew so did the demand for timber.as forests were cut down wood had to be carried further to reach towns and this had become very expensive.coal was a much better form of power providing up to 3 times more energy than wood.steel mills were now built beside the coal mines because coal is a bulky,heavy raw material and was expensive and time consuming to transport.

Decline of the coal industry

The coal mining industry peaked in 1913 there were over 2,500 coal mines in Britain. other countries like Germany had increased their production of steel and that had led to greater competition. by the end of 2011 there were fewer than 50 mines left in Britain. locating a factory beside the coast is now more favourable so that goods can be exported as they are produced..

Industrial inertia

When a factory doesn't change its location /or locate somewhere else even though somewhere else would be cheaper to do so.

Why do some relocate?

Because the labour and raw materials are cheaper somewhere else

E.g of a factory that did not relocate

-->sheffield steel

•They are high quality.mainly used for cutlery.medical equipment.

Why didn't it close the factory/relocate?

•This factory did not relocate because of its reputation for the best quality.they have skilled labor that has improved over many generations.it has a government policy (coal) and they also got grants.

Women in industry

Developed World(ireland)

The role of women had changed in the industry over the years.in past women worked mainly at home.there are many reasons why things changed.from 1960 everyone in ireland had free education boys and girls had equal access and opportunities to gain qualifications and participate in the workforce.the women's liberation movement led to change in the status of women and their role in society.legislation changed allowing women to continue in employment following marriage.gender equality laws have given women equal status with men in the workforce.in 2011 women accounted for 44% of the labour force.

Developing world (china)

Many workers in china are women.they are often from poor rural families.they migrate to the cities in search of work in the factories.they work long hours for very poor pay.they make things such as toys and clothes which are exported to countries in Europe and also to the United States.the situation in china is now improving and the percentage of women attending school is now more than 90%.

Different industrial regions

- (1) industrialised regions
- (2) Newly-industrialised regions
- (3) industrially-emergent regions

(1) industrialised regions

• This includes the USA, Europe, Japan and Australia. All of these countries have become industrialized since the industrial revolution. The labour costs are generally high in these countries and all industrialized regions are developed countries.

(2) Newly-industrialized regions

These countries are mainly in South-East Asia, such as South Korea, China and India, as well as Mexico and Brazil. Cheap labour means that more multinational corporations are outsourcing production to these countries. Examples of products made in these countries are shoes, clothes and electronic goods.

(3) Industrially-emergent regions

Very little manufacturing takes place in the countries in these regions. They are mainly in sub-Saharan Africa, as well as Asia and South America. Companies are looking to cut their costs and Africa is becoming more attractive to companies. Over the next few years as wages will increase in Asia we will see more and more companies setting up in Africa to take advantage of the low costs there.

Effects of industrial activity on the environment

Positive

It provides people with jobs and can improve infrastructure and the standard of living in a region.

Negative

Has a major impact on the region and environment. It causes acid rain. Acid rain is formed when sulphur dioxide and nitrogen oxide are released into the atmosphere. That's done when fossil fuels (oil, coal and gas) are burned on cars and factories. The gases produced combine with the water vapour in the atmosphere and fall as acid rain. Acid rain can be produced in one region but be blown by wind to another region.

Problems caused by acid rain

Acid rain can wash nutrients from the soil stopping crops from growing. That means that farmers have to use more fertilisers. Acid rain also wipes out fish stocks in lakes because fish cannot reproduce if the water in the lake is too acidic. Forests are also affected. They can

become vulnerable to disease and can be wiped out due to damage done to the soil. example of a place where large stretches of forest have been damaged by acid rain is the **black forest germany**.

Solutions to acid rain

- ① use more renewable and clean energy sources such as solar and wind power.
- ② use natural gas instead of coal in power stations because its a cleaner fuel.
- ③ use filters on coal and oil to reduce sulphur dioxide emissions.
- ④ tax cars with high emission or develop cleaner technology for cars.
- ⑤ encourage people to use public transport instead of their cars.

Industry and conflict

Conflict may arise between factory owners and the inhabitants of the surrounding area. example of this in Ireland would be the huge controversy in recent times around the locating of incinerators such as one in indaver in duleek, Co. Meath. ©martapiasecka2021

Incinerators

->are factories that burn waste. they are built everywhere. local people protest against them as because the fumes coming from these incinerators are carcinogenic =which is a cancer-causing agent that can lead to people developing various types of cancers.

<u>Positives of incinerators</u>	<u>Negatives of incinerators</u>
<ul style="list-style-type: none"> ① landfill sites are filling up and there is little room left to dump waste ② many countries in Eu use incinerators as a way of getting rid of waste and rubbish. ③ they can prove electricity for the surrounding area while also attracting other industries to the region ④ jobs can be created from the building and maintenance of the incinerator. 	<ul style="list-style-type: none"> ① they can be seen as a easy option to get rid of rubbish and so more environmentally friendly solutions like recycling are not explored enough. ② people living in the surrounding areas fear that the toxins emitted from the incinerators can be poisonous and are carcinogenic.

EXAM QUESTIONS

HERE ARE A FEW SAMPLE ANSWERS TO QUESTIONS THAT ARE ASKED IN THE JUNIOR CYCLE GEOGRAPHY EXAM PAPERS.

SAMPLE C QUESTION 10 PART (V)

DESCRIBE THE INPUTS, PROCESSES AND OUTPUTS OF A HEAVY OR LIGHT INDUSTRY THAT YOU HAVE STUDIED.

Aughinish Alumina factory in limerick near foynes is a heavy industry that i have studied.the inputs in this factory are bauxite,caustic soda,electricity and factory building.Bauxite is the most important input in this factory as it is the main material used to make alumina which is what this factory produces.the main process in this factory is the bauxite being crushed then mixed with caustic soda and then heated.the main input in this factory is the alumina powder.then there's profit and .waste

SAMPLE E QUESTION 7 PART (F)

WHY DO YOU THINK MANUFACTURING INDUSTRIES ARE LOCATED IN INDUSTRIAL ESTATES NEAR TOWNS AND CITIES?

I think that they are located in industrial estates near towns and cities because they need labour and alot of workers.People with skill or technical expertise are needed. It would also be easier to transport stuff and cheaper by being near towns and cities.They would locate near towns and cities because people live there and will buy their products.they would locate there because of banking facilities.banking facilities are better suited to the establishment of industries.

Now try doing questions from the exam papers

(1)sample E question 7 ive done part (f) above

(2)sample F question 3

Learning outcome=

Describe a local secondary activity in relation to its function and the factors that influence its location