

## Population Changes in Scotland 1830 – 1930

The first reasonably reliable attempt at a census, or population count, in Scotland was made in 1755 by the Rev. Alexander Webster who calculated that Scotland at that time contained 1,265,380 people.

- The first official British census was taken in 1801 and has been repeated every ten years since then.
- Since 1836 in England and Wales and 1855 in Scotland, all births, deaths and marriages have had to be officially registered

Although the population showed a 'natural increase', since births exceeded deaths, the story is complicated by emigration, immigration and migration within Scotland itself. At the start of the period (1830) the population was increasing rapidly

- Scottish figures are unknown
- In 1836 the birth rate in England and Wales was 30.3 per thousand..
- By 1871, in Scotland the birth rate was 35 per thousand, while the death rate was 22.6 per cent.

(In 1989 Scotland had a birth rate of 12.5 per thousand and a death rate of 12 per thousand. i.e. - for every thousand people living in the country 12 died and 12.5 were born).

### What Caused the Population changes?

**Child Labour** - rapid industrialisation in Britain in the 18<sup>th</sup> century. Factory towns. Jobs available for men, women and children. Long hours, low pay; terrible working conditions. Large families meant lots of children who could work in mines and factories. People married early and had enormous families..

**Early Marriages** -early marriages also were common in rural areas. In the Highlands, in 1800, illegal whisky distilling and smuggling was an enormously successful industry. There were 200 illegal stills in Glenlivet alone and an enormous number in Argyll.

Highland whisky was better and cheaper than what was produced in licensed Lowland stills, so business was good. Whisky making needed people, and big families. Every smuggler needed a wife to create the whisky while he was away selling the goods she made in the big Scottish cities. Families grew quickly.

1821 - the government transferred production to official whisky factories, and spoiled much of this trade .Large families also worked in the kelp industry in the coastal Highlands (flourished between about 1760 and 1820)

**Improved food supply** – caused by the changes of the Agricultural revolution.

### The birth rate fell after 1871

The collapse of the kelp Industry and whisky smuggling meant that large families were unprofitable and difficult to feed

- 1842 – Women and children forbidden to work underground with menfolk in mines.
- By 1872 – children had to go to school, legally, in Scotland

Children therefore unfashionable, expensive, unpopular.

Middle class produced fewer so that they would have more money for other things. Greatly helped by better birth control (better rubber produced now).

Many men killed in World War One; many men had emigrated before the war to other parts of the world. By 1930, there were 2 million 'surplus' women in Britain.

### **The Death rate also fell**

There was **improved public health** - public health Acts of 1848 and 1897 allowed councils to provide clean water and clean up dirty public sewers. Major cholera and smallpox epidemics began to disappear as people began to realise that they had to stay clean also.

**Housing improved** - there was a tax on windows till 1851; this tax helped to cause and spread diseases like tuberculosis, diphtheria and scarlet fever. By the end of the 1800s laws were passed to help local councils get rid of slums, and also build new houses for people. People were becoming better off and looking after houses better also.

**Medicine improved** - **vaccinations** helped to get rid of diseases like smallpox (Jenner discovered the vaccination); conditions inside hospitals greatly improved, through the work of people like Florence Nightingale. **Antiseptics** (the work of Lister and Pasteur) helped to clean up dirty hospitals and people got a better understanding of how they could help to prevent disease by keeping themselves clean; the development of cotton (could boil it and kill the germs), and soap for all helped to stop the spread of disease. **Anaesthetics** (like chloroform) helped operations. The First World War helped greatly by discovering how effective blood transfusions were.

All taken together caused the increase in the Scottish population

### **The Highland Clearances**

After Culloden, the clan system began to collapse. Clan chiefs began to spend much time in London and Edinburgh; they looked to their lands to provide money to give them a luxurious lifestyle.

- They began to demand higher rents to be paid in cash, not in kind or labour service.
- Wool prices increased greatly in the 18<sup>th</sup> century; people were evicted because sheep were more profitable. Such evictions continued till about 1850.
- The Sutherland clearances were especially bad, with many burnings etc. Many people emigrated to the USA or Canada. The rest settled on small plots of uncultivated land (crofts) beside the coast in Sutherland. Some were supposed to work in woollen mills in Brora; the rest were supposed to fish; all were to pay high rents for land. This was not really successful – some were afraid of the sea; others drowned.
- Many women were “herring girls” – they moved from fishing port to fishing port looking for work – Stornoway, Lerwick, Wick, Peterhead, Aberdeen, Great Yarmouth, Lowestoft (both in England). They got money to help pay for croft rents.
- Most of the Highland population declined, but the Western Isles population increased, because of the kelp industry; so did the Argyll and Easdale populations, because of the slate mines of Bailechaolais; so did Strontian, because of leadmines.
- There developed a fear that the Highlands of Scotland would depopulate, and that it would be difficult for the landlords to get their cheap labour. So laws were passed to slow down (stop if possible, emigration)
- 1803 – the Passenger Vessels Act – it laid down safety standards for emigrant ships; there were fewer passengers because of regulated amounts of food, water and medicine that could be carried at one time; the cost of emigration went up from £3.50 to over £10.00. This slowed the flood of emigrants.

The Sutherland land factor responsible was a man called Patrick Sellar. He used ethnic cleansing - racial prejudice against the Highlanders. “Barbarish hordes,” as he described them. The Gaelic language was an obstacle to progress, and was to be eradicated. He tried to replace Gaels with English speakers

Some said Highlands over populated anyway. Therefore, landowners were doing peasants a favour by evicting them and sending on to different places.

Because of the sparse nature if the place (the Highlands) - most people were packed into crofting townships and overpopulated them. –These were seen as places for further evictions also.

## 1830-86 - Highland disasters

- 1825 The government removed the tax on imported soda ash
- By 1827 The Kelp industry was no longer important; crofters were no longer a useful seasonal workforce. The government crushed the whisky trade; most crofters couldn't pay their rents  
The Passenger Vessels Act was abolished to encourage emigration. Most Highlanders were too poor to emigrate. Most chiefs too poor to pay to get rid of them.
- 1846 Blight destroyed the potato crop in Scotland as well as Ireland; many Scots died of disease and famine; the problem continued till 1856. The government appointed Sir Edward Pine Coffin to head a famine relief scheme, but the schemes used by the government made workers labour long hours, building "destitution" roads, dykes and ditches for a small starvation ration of oatmeal. The most effective help was given by voluntary donations; by the Free Church of Scotland and by Scots living in the USA; landowners therefore decided (because of the famine) that land was overcrowded; that emigration was necessary as soon as possible, and so between the years of
- 1848 – 55 These were years of mass evictions in the Islands where the sheep economy was still to be established. The mainland was not as bad because sheep were already established there. The most effective help was voluntary donation from Lowland Scots; from the Free Church of Scotland; from Scots living in USA

### Poor Law changes

Under the old Scots Poor Law, landowners were meant to contribute to the Poor relief fund for their parish.

- Highland landlords had traditionally ignored this obligation
- 1846 – the government made it clear that the Scots Poor Law was to apply to the Highlands. So landlords began to evict the poor rather than pay the Poor Law.
- The failure of the kelp industry pushed many landlords in the Highlands and Islands into bankruptcy; many had tried to live a rich lifestyle; they were now broke; many had to sell all or part of their lands. Many estates were bought by rich southerners –they began to pay to get rid of "surplus population" to Canada, America or Australia.
- 1820s – Australian wool reaching Scotland; sheep farming and Scottish wool less profitable as a result; farmers found that they could not keep as many sheep as they had thought; grazing sheep spoiled the land over several years; rents began to fall; so landowners began to look for other ways of making money
- Railway building in the Highlands made holiday travel much easier
- Rich southern business people and aristocrats began to pay huge sums of money to rent shooting estates in the North to hunt deer and grouse in the autumn.
- Sheep farms were converted into deer estates and more natives were evicted.

After 1850 the Highlands and Islands Emigration Commission used funds from landlords, the government and from famine relief charities to finance emigration to Canada and Australia. After the First World War the Canadian government ran an assisted passage scheme for Scots, who were guaranteed a job on arrival. Thousands went from Scotland; many Canadians of Scottish origin in the present.

## Migration Within Scotland

North/South drift as Highlanders looked for jobs in Central Belt- or were invited there.

Working conditions in mines and factories desperate - only desperate women would take them - Highlanders were disliked in South because many were Catholics and could only speak Gaelic.

- Clydeside - Heavy Engineering/shipyards boomed
- 1850's - many Highlanders moved (also Irish). Also many men joined police or women became nurses or domestic servants.
- In other European countries, peasants had rights in law and couldn't be evicted - different in Scotland.
- The same kind of thing happened in the borders also because of many agricultural improvements like enclosures, large farms etc. Fewer workers needed - because of mechanisation.
- 1870s, 1880s - Poor farm prices - therefore fewer workers; therefore displaced mill workers went to try to find work in growing mill towns of Hawick, Galashiels, Selkirk (or much further away)

## CROFTING

### Crofters Act-1886

Special law passed to give Highland Crofters the sort of rights enjoyed by peasants in mainland Western Europe.

Some of its terms

- Impossible to be evicted if they paid rents.
- Land passed on to next generation when crofter died/retired.
- A Special commission [Crofters Commission] set up to supervise Crofting affairs.
- Land Court established to set fair rents and settle disputes between crofters or crofters and landlords.

REASON for this Act

### CROFTERS WAR

1855-80 - Crofters becoming more prosperous; evictions were becoming less common

- Crofters had lost idea of Clanship, Kinship with landowner after the failure of 1745
- Radical journalists reminded us of old Gaelic idea that land belonged to people as a whole and was not something to be bought and sold
- Scots crofters/ islanders had worked/ still worked on deck hands on fishing boats off Ireland and out of Irish ports. Language fairly similar - so Scots learned of Irish land struggle. Irish peasants had faced similar conditions to Scots. Had refused to pay rent: burned crops and houses of protestant English landowners; so Scots became more determined

So Liberal government had passed the **Irish Land Act 1881** – gave Irish crofters security of tenure. This appealed to Scots also; especially Skye men.

Then, 1881, in Braes, a crofting ownership near Portree (in Skye)

- Crofters demanded returns of grazing rights on Ben Lee
- Refused to pay rent till this was done
- Attempt to evict ringleaders-resulted in sheriffs officers being jostled and eviction notices burned
- Police taken in from Glasgow, Inverness; men arrested in pre dawn raid

- Police halted with mud, stones etc by all village

This started revolts all over Skye and soon spread to Isle of Lewis; sheep farms were occupied; fences torn down ; sheep eaten ; crofters refused to pay rents. Spread to other islands further south but not as wild there Strong determined leaders in charge of these revolts John Mcpherson (Skye); The rev David MacCallum; Poetry and songs by Mary Macpherson added more emotion to all of this.

- Battle of the Braes appeared in local AND national press
- Now won much sympathy for crofters cause.

1883 Highland Land Law Reform Association formed by important prominent Gaels living in southern cities - usually called the Land League.

- It soon had formidable local structure and mass following in the Highlands with its important slogan “Is treasa Tuath na Tighearna” (A peasant is mightier than a lord)

## **1884 Napier Commission**

The government created a Royal Commission to investigate the situation in the Highlands and Islands. Government afraid that Highlands would degenerate into violence and lawlessness.

- No crofter on the commission but there were 3 landowners who were pro-crofters. Almost all were good Gaelic speakers. Traveled round the Highlands collecting evidence, listening to submissions of peasants, factors in Gaelic and English. Their recommendation to the government formed the basis of the **Crofters Act of 1886**.

### **EFFECTS OF THE LAW**

- Crofters could no longer be evicted
- Did NOT get back any of the land they had lost earlier
- Still lived in the same poverty as before (many of them)
- Emigration still continued as before
- Ageing population; culture of the region weakening.

Deer and sheep estates still continued

- Great damage to land from these animals - Their grazing prevented re-growth of nature woodland - causes deforestation.
- Soil becomes acid; bracken everywhere.
- Victorian hunters shot anything that moved.

Suggested that the aim of the Crofters Act was

- Quieten the revolt by giving Crofters the minimum possible support
- Break the unity of the crofters, which was threatening the control of the landlords.

However, there were still many land raids, even years later, especially in Lewis.

## **Irish Immigration**

Between the 18<sup>th</sup> and 20<sup>th</sup> centuries, many immigrants came to Scotland also.

### **Irish Immigration**

Ancient links between both countries

- Many Irish came from the 1700s to work seasonally on the land in the south west of Scotland. High rents and terrible poverty in Ireland drove many away from Ireland.
- Many willing to work for wages even lower than the Highlanders
- Many willing to do dirty, dangerous and low work no one else would do (e.g sugar work in Greenock)
- Many worked as navies on the canals (1700s) and railways (1800s)
- Many were skilled textile workers with experience in the linen trade; worked in places like Paisley, Lanark, Glasgow and Dundee. By 1841, about 125,000 of Irish birth in Scotland. By 1851, 19% of Dundee and 18% of Glasgow was of Irish origin; after 1850, many went to America instead.

### **The Irish influence**

- Native Scots resented the Irish and accused them of dragging wages down (true).
- Many Irish did huge amount of work in Scottish industry ; the railways; canal building
- By 1880, the Irish were becoming influential in the trade union movement; helping to push up wages.
- This was no help to the bad housing shortage in Scotland
- Led to even greater religious intolerance; Catholics from Southern Ireland and protestants from Northern Ireland hated each other; the Scots joined in to this hatred. Glasgow soon divided. Protestant Orange marches caused much street violence; football became a focus for this anger.

### **Other nationalities came also**

- Jews from Europe, especially Russia, because of vicious treatment towards them there.
- Italians looking for greater prosperity than they had at home – many started chip shops and cafes
- Lithuanians came from the Baltic; looking for more money than at home. Many settled in Lanarkshire and worked in the Iron industry.

## **Rural Living Conditions**

### **Housing – the Black House – often on the islands.**

- These were long low buildings, with very small windows and no chimney; there was a hole in the roof, with dry stone walls (no cement) and a peat fire; the roof was of heather or straw thatch; damp earth floor.
- The cattle lived at one end, the people at the other. The dung was removed in the spring, to be spread on the land as fertilizer.
- Chests were used to store clothes, meal, potatoes or blankets.
- Furniture consisted of simple wooden seats and stools, and a dresser (cupboard) made from driftwood.
- No toilets
- Diseases people caught were bovine tuberculosis (less serious and more difficult to contract than the human form); stomach upsets like enteritis (also known as dung fever); bronchitis from the smoke of the peat fire.

Tuberculosis not terribly common - perhaps because the area was not subject to the disease. It was a lethal lung disease - spread by bacillus which thrives in damp, poorly ventilated houses.

## **On Mainland**

More wood was available, so houses were higher, with steeper roofs. By 1900 a modern style of house had developed, with squared corners, cement/stone walls, a slate roof; sometimes with an upper storey; and a kitchen extension behind. The house was called a **WHITE HOUSE**

Windows had glass in them; wood/stone floor, a fireplace, chimneys; black cast iron range/ stove

- Those who didn't like the white houses would modify the black house by adding windows, floors, chimneys
- Seamen and herring girls brought treasures back with them – like clocks, dressers, tea sets; because they would not be evicted, they had incentive to improve the property
- Highland landowners would often build huge mansions – with many rooms and servants, but costs often created bankruptcy and led to the sale of estate.

## **Rural Lowland Scotland**

The Landowners – They were the rural elite, had mansions and castles. They would not go bankrupt as much as Highland Landowners.

Farmers by 1830 in the lowlands would

- Live in large stone houses if they rented or owned farms.
- Large farms might employ at least 30 men
- Unmarried laborers (men) would live in a **BOTHY** - a hovel, squalid; Cooked over an open fire, ate, slept in the one place
- The horseman would live in a room above the stables
- Unmarried women lived in an attic room in the farmhouse itself
- Married workers would live in farm cottages - earth floor, few windows, and turf roof

By 1870, a shortage of labour in the countryside, because many labourers heading for the towns due to higher wages there. So countryside living conditions began to improve - rows of solid brick or stone cottages, with stone or wooden floors and a fireplace. By end of century - running water in these places. It was well into 20<sup>th</sup> century before the majority had flush toilets and septic tanks.

## **1830-1930**

### **IMPROVEMENTS IN LIVING CONDITIONS**

**1833 - Burgh Reform Act** - Scottish burghs had had councils for centuries; controlled by wealthiest traders and merchants This act said they were to be elected by £10 householders of the burgh (ie all men owning or renting a house with annual rental of £10). The Council could act on 'Police Commissioners'.

- They could collect a local tax like the present council tax.
- This money to be spent on keeping law and order; cleaning; paving; street lighting; rounding up beggars; naming streets; numbering houses in them.
- Possible for these commissioners to be elected and to exist as a separate body from the Burgh Council.

**1848-Public Health Act (England). DID NOT APPLY IN SCOTLAND**

**1855- Nuisance Removal Act** - Commissioners could clean or close properties which were a threat to public health.

**1866- Sanitary Act (England) DID NOT APPLY IN SCOTLAND**

**1867- Public Health Act** - Very important; council got power to clean streets and houses, regulate boarding houses, provide hospitals and (of **VITAL IMPORTANCE**) were able to lay drains and sewers.

**1892 The Burgh Police (SCOTLAND) Act**

**1897 The Public Health (SCOTLAND) Act**



- June** harvesting of hay for fodder (food) for the animals; it was all dried and built into large stacks; crops were cut with a scythe and sickle; all was harvested early October if the year/weather was good. Then potatoes and turnips were lifted.
- Winter time** Grain was separated from the straw and it was used for animal feed; whisky making; beer; bread making; then it was back to the start of the cycle again; all done on a six year rotation

Hay and turnips was a good winter feed for livestock; cereal crops (oats, barley etc) were used for human food or were sold; grass was used for over wintering animals; this created more manure and returned more chemicals to the soil.

This type of farming was mainly lowland farming.

In the north of the country, and in the Borders, hill farming of sheep was the main way of life.

#### **New Machinery from the 1800s –**

- 1828 – reaping machine (Bell)
- New ploughs – (Small’s swing plough) – it was lighter and more efficient.
- The old rigs were flattened to allow new machinery flatter ground on which to operate properly
- Mobile steam engines were being used a lot more; two could operate a plough by means of a chain system. They could also operate lifting gear to raise goods to lofts.
- Mobile threshing machines moved about during the winter months; many were too heavy, and were not much use in open fields
- Between 1920 and 1950 – tractors replaced horse power, and this led to fewer labourers eventually.

#### **1850 – 1870 was regarded as the Golden Age of Agriculture**

- New inventions meant British farm production increased steadily to meet the demands of the growing population
- Overseas producers could not compete
- All was greatly helped by a series of good summers and bumper harvests
- New farmhouses and farm cottages were built
- This was a prosperous time; extra profits were invested in improvements like machinery and drainage; again, it led to less workers; technology was making them redundant

#### **In the 1870s a major depression took place in agriculture**

- There was a series of wet summers and bad harvests
- Diseases spread amongst cattle and sheep herds
- There were too many sheep on hill farms – this led to overgrazing and overstocking, which led to more disease and dead animals.
- Overseas competitors began to challenge successfully – the American prairies now created cheap grain because of the Trans-American railway and fast transatlantic shipping (steamships)
- Canning meant that meat could get from Argentina quickly and easily; corned beef became popular in Britain from now on
- Butter and lamb arrived in large quantities from New Zealand because of freezing techniques
- Cheap good quality Australian wool arrived in Britain also to challenge the home produced wool.

British farmers therefore had to concentrate on goods that were not easy to import – milk and vegetables. Now farmers began to concentrate on good quality meat, not quantity; wages therefore fell, because many in the industry were made redundant.

Deer estates developed in the Highlands, and this led to further depopulation

### **1917 – Corn Production Act**

U-Boats were causing a major threat to British food supplies in World War One. This Act

- Guaranteed a minimum price for corn to encourage farmers to grow more.
- Provided subsidies to increase the amount of land to be cultivated.
- Laid down a minimum wage for agricultural labourers to encourage them to stay on the land.
- Made farming a reserved occupation – men would not be called up to the army if they worked on the land. Men still went to war, and women did much of the farming work; (at its height, the Women's Land Army was over 16,000 strong); all kinds of land now came into use – parks etc; allotments now appeared for the first time.

### **1918 – 1930 – there was another depression in agriculture**

- The 1917 Act was repealed (abolished)
- Subsidies were taken away
- Cheap corn was brought in; British farmers could not compete, and many went broke

Farmers tried to abolish the minimum wage and created great anger amongst the farm workers; a strike broke out in 1923. The result was a minimum wage of £1.25p for a 50 hour week, plus a half day weekly holiday.

## **Agricultural Living and Working Conditions**

There was no strength to the agricultural trade unions

- Farms were usually very small with only a dozen people
- All were known to the farmer personally

In 1872, the **National Agricultural Labourer's Union** was formed by Joseph Arch

- Very successful at first – there were 50% wage rises in some parts of the country
- 86,000 members in 1874, but by 1889 this had shrunk to 5000, because of the agricultural depression.

**In Scotland**, there was a tradition of ploughman's or whipman's Societies; these were not really unions; they were more friendly societies that helped people when they were sick.

In the 1800s, localized unions were established for a time. They demanded a

- Basic wage of 15 shillings (75p) weekly
- A 10 hour working day in summer
- A 2 hour working day in winter.

There were some local successes, but these faded after a time.

In 1912, the **Scottish Farm Servants Union** was formed, campaigning nationally, wanting

- Job length to be longer than 6 months
- Monthly payment, not six monthly
- Half day holidays per week

It was not too successful, though

- Trade unions still not powerful
- No strong sense of national unity

Farm workers not too harshly treated - if a farmer was a bad master, few would go to work for him. Living conditions were fairly basic –

- Single room, 4 metres square
- Walls about 6 feet high
- Thatched roof, no ceiling
- Clay floors, or earth
- Wooden box beds inside
- Rows of four or more houses close to the farm

By the 1870's – Changes appearing

- A “but and ben” style of house, with sometimes a second storey, with a stone or wood floor and a slate roof.
- Very slow introduction of running water and toilets; not really widespread till the 1930s.
- Single lodgers would stay in the bothy, which was part of the farm building; very basic, with built in wooden beds; a chest for the belongings; the occupants of the bothy worked for themselves.
- The chaumer – this was a room for the lodgers also, but the farmer’s wife or the maid fed these men.

### **Migrant labour – people who moved about, as work was/became available**

- Additional labour was needed at times, especially harvest time.
- These were often from the Highlands, and often women, to cut and bind wheat and barley
- They were replaced in the 1840s by the Irish, because of the potato famine; conditions were often very basic for these people.

### **What changes occurred between 1830 and 1930 on the land?**

Very little

- Work on the land was still regarded as unskilled work, despite much skill needed to work with livestock, crops, machinery.
- Statutory minimum wage did help.
- Work still involved much hard physical labour.
- Horse power still the dominant work tool.
- Fewer people involved as time wore on because
  - Machines meant people out of work
  - Depression forced economy in the villages.
  - Social life declined.
  - Villages becoming more attractive places to stay than individual farms.
- Slow improvement in housing conditions.
- The big estates and landowners suffered after WW1, particularly because of death duties imposed on their estates after 1909 by the Liberal government.

### **Government Mining Reforms**

The government was moving away from its **Laissez Faire** attitude (letting people do as they want); the government was now beginning to pass laws to help the lives and conditions of the people.

<b>Mines Act 1842</b>	Women, girls and boys under 10 were banned from working underground
	Women and children could still work above ground, in dirty dangerous work (sorting and bagging coal)
	No one under 15 to be in charge of moving machinery

This made family income very difficult, because there was no alternative workplace for women; resulted in shortage of money in families; still no action on condition of boys under 10.

**Mines Act 1850** Government inspectors were appointed (only 2 initially); pits were able to disregard the laws because they were seldom caught; the inspector was given the power to collect information about accidents; it became necessary to report all fatal accidents, and it became necessary to prepare and register plans of mine workings.

**Mines Act 1855** Compulsory registration of births started (impossible beforehand to know how old children were)

**Mines Acts 1860/62** These were relating to safety in Mines; the 1862 Act made 2 exits compulsory; this increased ventilation and provided a safe exit elsewhere if one shaft was destroyed. 1860 Act: No boys under 12 to go underground unless they could read and write.

**Mines Act 1872** Compulsory for mine manager to hold competency certificate (only gained after a national exam was passed); mine workers had the right to appoint their own safety rep, to inspect their mine.

**Mines Act 1909** Eight hour working day introduced for underground workers.

**Mines Act 1911** Coal Mines Bill - Larger collieries had to have pit head baths.

**Mines Act 1917** Working day reduced to a 7 hour day.

**Great increase in the number of mines between 1830-1950.**

<b>1830</b>	<b>250,000</b>	<b>1880</b>	<b>500,000</b>
<b>1910</b>	<b>1,100,000</b>	<b>1930</b>	<b>780,000</b>

**Production**

<b>1830</b>	30 million tonnes
<b>1880</b>	150 million tonnes
<b>1930</b>	220 million tonnes

Coal Mining was Scotland's biggest employer. Trade Unions were quite powerful in the coal industry from fairly early on.

- Communities (mining) were close anyway, because they were often isolated.
- Bosses in coalmines were exceptionally powerful. They
  - controlled who got jobs
  - determined wage levels
  - owned miners housing
  - controlled spending (tokens, truck system)
- Law officers often sided with bosses.

## Early Mining Unions

- 1841 **Mining Association of Great Britain** based first in Northern England then it moved to Scotland.
- 1848 It collapsed - not much success.
- 1855 **United Coal and Iron Mines Association.** Leader was a Scot; a successful strike by Lanarkshire miners : Other areas joined up. Realisation that miners needed centralized leadership, and that the national union had to be strong enough to take on bosses
- 1871 Fife and Kinross miners forced an 8 hour day
- 1873 Scottish Miners Federation established
- 1874 A.McDonald (first secretary of United Coal and Iron Association) was elected to Parliament. Got improvements in safety and ventilation, like a shorter working day and the introduction of weight checkers to accurately tally the amount of coal mined, in order to pay miners properly.

### 1890s Keir Hardie very important in working class reform

- 1892 K Hardie became the 1st Scottish Labour MP
- 1894 The Scottish Miners Federation joined with the British one.  
A Conciliation Board for Miners was agreed, to set a minimum wage for miners; the base was to be the 1888 level, at about 20p per day (4 shillings).
- 1900 The minimum was to be about 1/3<sup>rd</sup> above this; the maximum was to be about 3/4 above this. Eventually, the minimum was raised to 50% in Scotland, because this had operated in England beforehand.
- 1912 The Miners Minimum Wage Act was passed, after a 12 week strike by miners.
- By 1914 The Triple Industrial Alliance agreed that miners, railwaymen and transport workers all joined together to support each other in industrial disputes.
- 1914 World War One - Mines taken under government control; miners exempt from war service; miners were happy with the system because there were better safety standards, higher wages, and the same pay all round, in all areas. Miners would have been happy to keep this going permanently – i.e – nationalization of mines.

### The war created problems for the miners.

- Pre-war – Britain had exported more than 60 million tons of coal annually; after the war, they never reached these figures again.
- Technological advances stimulated by the war meant much less demand for coal – (oil fired engines; electricity).
- After the war, the price of coal fell by £4.00 per ton to £1.75 per ton (coz not as much coal being used) The mineowners therefore decided to cut wages to keep the mines profitable for them.
- It was also agreed that the mine owners would have their own pay agreements, because some areas were more profitable than others. The Scottish coalfield was one of the least profitable – it could therefore expect the lowest pay rates.

1921 – a big strike; the miners asked the two other big unions to support them, but the rail and transport unions did not; so the miners kept going alone. They stayed on strike for three months, but eventually had to go back to work, on the mine owners terms.

1926 – a general strike; called by the Trades Union Congress; an attempt by the other two major unions to support the miners. The general strike lasted 9 days, but the miners kept going for 6 months, before returning, again, on the terms demanded by the employers. This was devastating for the industry, as many miners now lost their jobs for ever, and the coal mining industry fell into steep decline.

## Work in the coal mines by 1930

- Much easier, because of the use of machinery
- Much coal was still cut by hand, because still not enough spent on new machinery
- Miners safer due to new technological advances, but still dangerous because the miners working much deeper
- Age for going down the pit was now raised to 14.
- No women worked underground
- Length of the working day (though lengthened in 1926) was still shorter than the 12 hours plus of the 1830s.
- The minimum rate was kept, though the rate of pay varied from area to area
- Mining villages not so isolated because transport was now so much faster
- Truck system was abolished
- Miner's Union was still quite powerful, and it was respected by the miners. It pushed for more improvements.
- Still dust and lung problems (emphysema)
- Increasing unemployment in the mines after 1930

## Why coal had been in such demand

- Domestic use, especially in the new industrial towns
- Steam engine – used in factories, mines and many other places
- Industrial processes – iron, glass, brewing etc
- Limestone burning – used in the growing agricultural industry
- Exports to Europe from Eastern Scotland and to Ireland from western Scotland.

## New Inventions/Developments in Mining

1830s	The Rotary Drill – able to cut out a solid column of rock as it cut down
1870s	A diamond toothed rotary drill – much harder; could cut coal much more cleanly
1864-	The first really effective coal cutter – the “Gartsherrie machine” – like a giant chainsaw with big metal picks for teeth; became more effective when tougher metal was developed
1820s	Digging 2 shafts and lighting a fire at the bottom of one of them to create a draught of air; huge fans were installed in a Paisley mine in 1827; use of fans, however, not very great till the 20 <sup>th</sup> century.
1840s	Use of wheeled wagons to move coal on tracks instead of using children to pull them; use of horses also- Shetland ponies; if there was a slope, gravity was used; full trolleys rolling down pulled empty ones back up the slope.
1844	A steam engine used to pull wagons up
c. 1900	Conveyor belts being used.
1850	New inventions in lifting the coal; wire ropes and steam lifting gear replacing hemp rope and horse or water powered devices
1842	Winding operator had to be 15 years of age or older
c. 1900	The use of electricity made pumping engines much more effective
1849	Air compressor installed in the Govan Mine near Glasgow; effective; it could work machinery up to a half mile distant and the air travelled through cast iron pipes; not in widespread use till the 1880s.
1881	The first mains electrical lighting system; could be dangerous because the sparks could explode the gases.

- 1912 Compulsory for electrical equipment in mines to meet minimum safety standards, and get a flame proof stamp of approval
- Late 1800s Artificial props; wood or steel; later hydraulic ones.
- 1815 Davy Lamp was invented; meant gases didn't blow up as much
- 1900 Only the development of electricity helped to solve this problem of gas explosions in mines
- 1850 on An Act of Parliament made it compulsory for each mine to prepare and register a plan of mine workings. The old coal workings had so many miles of mine shafts that no-one knew where they were, and it could be very easy to beak into the old dangerous one.

## **Early Scottish Railways**

- 1748 No coach service Glasgow-London. Anyone going had to travel privately; cost a huge amount and took 12 days
- by 1750 Edinburgh-London coach took 12 days and ran one per fortnight; Edinburgh-Glasgow (46 miles) took 12 hours.
- 1820s Better roads; Glasgow or Edinburgh to London took 3-4 days; coach services existed between many large towns
- Coach travel was still very expensive. Out of the question for ordinary people; people had to live within walking distance of their work.
  - Industry began to develop a lot in the late 1700s and early 1800s, so transport HAD to improve. Canals linked the main industrial areas in Scotland (Forth and Clyde, Union, Monklands etc); these were still very slow means of travel, and expensive to build; railways then developed in Scotland as in England.

## **The Very Early Scottish railways.**

- Coal mines in Tranent were linked with Port Seton Harbour by 1700 by early wooden trackways.  
Jacobites used the tracks to attack the English armies in 1745 at the battle of Prestonpans.
  - By the early 1800s, steam engines and metal tracks were all being used to make the system much better
- 1826 Kirkintilloch-Monklands line was opened to carry coal; horse drawn at first, but by 1832 steam engines were being used on it.
- 1831 Garnkirk-Glasgow – the first Scottish passenger line; there were covered coaches for the richer passengers; open ones for the others; third class passengers had no seats and no roof.
- By 1840 A large network of lines in Central Scotland; many were used for mines and iron works, but extra ones for passengers also.
- 1842 Edinburgh-Glasgow opened; other lines linked Glasgow to Greenock, Paisley, Kilmarnock and Ayr
- 1846 Edinburgh – North Berwick completed, with a ferry link onwards to Newcastle.
- 1848 Carlisle to Carstairs completed; from Carstairs it linked with Edinburgh and Glasgow, so both cities became joined to London by rail
- 1849 Railways into the Borders, to Hawick and other Border towns. Eventually all was joined to Carlisle by 1862.
- 1850 Edinburgh-London was finished.
- By 1858 Aberdeen was joined with Inverness, and all were linked to other lines between Stirling, Perth, Dundee and Montrose.

### **Progress was much slower in the Highlands in completing rail links.**

- 1874 The line was finished between Inverness and Wick and Thurso;  
By 1894 The West Highland Line to Fort William was completed  
By 1901 Continued to Mallaig, and steamer travel to the Western Isles continued the connection.

By the late 1800s, underground railways were developed in Glasgow and London, and when electricity came into use, these underground electric trains were very successful

Trams were also used – horse drawn at first, then electric also.

The opening of the Highlands made this area a playground for the rich. Queen Victoria regularly visited Balmoral; many then bought large Highland estates where they held large grouse shooting or deer stalking parties. Great landowners even had their own private stations.

Railways developed football greatly, as supporters could travel easily. The sport was organised and the football league developed, with a national set of rules and fixtures. All kinds of holidays, days out, developed countrywide.

### **The effects of World Wars One and Two**

The railways were vital for the war effort, so the government controlled them. Any damage was repaired only if it was necessary for the war effort. After the war, smaller companies could not afford to keep going.

1921 **Railway Act.** The number of railway companies were reduced to four (Southern; Great Western; London Midland and Scottish; London and North Eastern).

1920s, 30s Engines improved; trains became faster and more comfortable (90 mph on express trains); first experiments with diesel and electric trains; fares fairly low; increasing use of containers for loading and unloading.

A new challenge developed to railways after World War One.

- Many hundreds of army lorries were sold to the public after World War One. These caused a rapid expansion of road transport.
- Some were converted into buses; this became a cheaper option to rail travel.
- Cars themselves became much cheaper because of the start of mass production of cars (Henry Ford); many middle class families began to buy these and motoring became a great pastime.

World War Two caused even greater shrinkage.

1948 The railways were nationalised, till the 1990s. Many lines closed because they were uneconomic.

### **Machinery to help Railway Development**

- No tractors or bulldozers till the 1880s, when steam cranes and diggers came into use. Picks, spades, shovels and barrows were used to move earth.
- Viaducts designed to cross gorges.
- Wooden framework designed to cross peatbog areas of moorland
- The Edinburgh/Glasgow line had 36 viaducts over the River Almond, and many cuttings and tunnels in its 45 miles of line.
- West Highland Line opened in 1894 had 19 viaducts and 102 stone bridges; 5000 men were used to build this line
- Navvies were used to build these lines; tough men; many from Ireland, came to Scotland to escape poverty; very rough living; they spent their high wages on drinking heavily; often involved in fights.

- Gunpowder was used to open cuttings in the rock; rubble was shifted by wheelbarrow. A good navy could shift about 20 tons of earth, rock, rubble in a day
- 20<sup>th</sup> century advances in iron and steel led to many metal bridges. Most outstanding example is the Forth Railway bridge (1890 cantilever design).
- Early stations were wooden huts; they were eventually replaced by architect designed brick or stone stations; platforms were built to make it easier to get on to the train.; ticket offices were established.
- Engines were improved; cylinders used to power the engines were built horizontally instead of vertically to make everything more stable.
- The firebox was brought inside the engine to streamline everything.
- The boiler was lengthened to increase speed and power
- Separate wheels at the front made cornering easier; wheels behind the drive wheels improved stability.
- 1841 – Samuel Hall’s improved smokebox made engines less smoky and dirty.
- 1848 – train speeds could go faster than 60 mph, but early braking systems were jerky and dangerous if the train had to stop quickly at high speeds.
- 1870 - Westinghouse invented automatic pressure brakes
- 1875 – continuous braking throughout the train was introduced (safer braking at high speeds)
- 1889 – **Regulation of Railways Act** made continuous braking compulsory in all trains.
- Faster speeds were achieved because of heavier steel rails and harder steel tyres.
- Boilers becoming bigger and more efficient in size and output, therefore speeds faster. An average of 80 mph was possible by 1900 on certain express trains.
- Signalling improvements – early on, men with flags controlled train movements, but this became unsafe, as trains got faster;
- Telegraph invention was the breakthrough – electric signals moved through wires could move a needle across a dial marked with letters (invented by Cooke and Wheatstone)
- By 1837, the telegraph was used to send signals across a railway in southern England; it was so successful that this became the standard 10 years later.
- Morse Code made things even easier. High speed train travel resulted due to the ease of sending signals form one box to another by telegraph
- Carriages became more comfortable, especially first class – by the 1870s, sleepers and dining cars were available on long journeys; by the 1880s, steam heating in place in carriages, and communication cords for emergencies. Carriages had trains with corridors in them, with toilet facilities.
- Third class was still bad – wooden seats, and no corridors even in the 1890s; no toilets or food; bad over a long distance; sometimes trains would have 15 minute “comfort stops”. As time passed by and third class improved, the second class disappeared.

### **Benefits of the Railways to Scotland**

- Expansion of the coal mines and iron works of Central Scotland; all moved far faster by train
- Borders woollen industry flourished; goods were sent to markets in Central Scotland and England.
- Borders had no coal mines, so all fuel for the mills came by rail; faster.
- Clyde shipbuilders were increasingly using Motherwell and Coatbridge iron for the ships; all carried by rail
- Branch lines were built to the Clydebank ship yards.

- Railways were specially built to the large Singers factories in Clydebank, employing many people
- Agriculture benefited – places like Lockerbie and Newtown St Boswells came important cattle market centres in the Borders
- Milk trains became daily events
- Fresh fish was moved from the ports of Eyemouth, Dunbar, Arbroath, Montrose and Aberdeen, amongst many others, to feed the population of Scotland's cities. Scottish fish (salmon etc) could be in London in a day.
- Communications benefited – newspapers could go all over the country; The penny post and the Royal Mail appeared
- Tourism developed – areas like Burns Country and the Clyde Coast; the Waverley line went through the Borders; a line went down the Ayrshire coast to the Turnberry Hotel for golf; Stirling/Perth developed for golf at Gleneagles; spa towns like Strathpeffer and Moffat developed where wealthy people could go for health cures.
- Trains and steamships combined to go on outings to islands like Arran and Bute.
- Industries grew to supply the demands of the railways – iron and steel for the engines, rails and bridges; coal for the fuel; local brickworks for lining the cuttings and tunnels; engineering businesses to keep the engines going and to build many new ones for export
- Railways themselves were major employers (station masters, ticket clerks, porters, drivers, firemen, guards, engineers, signalmen, catering staff etc)

## **The Political System before 1832 in Scotland**

- Before 1832, there were only about 4,300 voters in a population of about 2.5 million people
- There were 45 Scottish seats at Westminster, shared between the counties and the burghs.

### **The Burghs**

There were 66 Royal Burghs, sharing 15 seats. There was 1 MP for Edinburgh; the other 14 represented groups of 4/5 burghs each; there were about 1,000 electors in total.

- The right of the burgh to be represented in Parliament went back to the Middle Ages
- Burghs were run by masters of merchant and craft guilds (groups of men doing the same job); they elected each other in turns onto the Town Council. MPs were chosen by delegates sent by the Town Council.
- Easy to fix elections by bribery and corruption.

### **The Counties**

There were 33 Scottish counties, but only 30 MPs; there were 27 MPs for 27 counties; 3 for Bute, Caithness, Clackmannan, Cromarty, Kinross and Nairn. (these are the six smallest, and they were represented only in every second parliament). There were about 3,000 electors in total.

Only the better off landowners could vote

The biggest landowners created “parchment barons” – a legal trick to give people grants of land which only existed on paper. These people often made up half the voters in Scottish county elections, and they voted as instructed by landowners.

### **Changes were needed from the early 19<sup>th</sup> century onwards**

New industries were growing up and people were moving about from countryside to the new industrial towns to work. They were not represented in these new towns, despite all the social problems that they faced.

- Paisley and Greenock were relatively large towns in Scotland, in size and importance, but neither had the right to have an MP.
- Middle class industrialists and business people were frustrated that they did not have any chance to share in the running of the country.
- The workers were looking for improvements in their lives – they knew that the upper class Parliament would not help them, but they wanted changes made to their conditions through Parliament

#### **The first change came in 1832 – the First Reform Bill**

The seats were shared about more fairly; the rules were changed about who could have the right to vote. Basically, the top of the middle class now gained the right to vote.

- Scotland got 8 extra seats; all were given to the towns, including some that had never been represented before.
- The change in the rules meant that the number of Scottish voters now increased from 4,300 to about 65,000
- Edinburgh and Glasgow each got 2 MPs. Aberdeen, Perth and Dundee got one each; so did the new towns of Greenock and Paisley. Other industrial towns like Kilmarnock got a share of an MP
- All householders in the burghs whose property was worth £10.00 per year gained the vote
- Voting was still done in public; the landowners were still in control in the counties

The attitude of the government of the time (the Whigs) was that the poor had no money, no property, so why should they be given any say in taxation and lawmaking? However, different groups looked for major improvements from the 1840s – groups like the Chartists. Chartism failed by 1848; In Scotland, it was more of an east/west split. Edinburgh Chartists (mainly skilled craftsmen) were fairly peaceful –the moral type of Chartist. Glasgow (with a large population of poor factory workers) was much more extreme; they favoured violence. One of the worst riots (the Bread Riots) took place in Glasgow in 1848. Chartism died out in the 1850s, for a variety of reasons. (See elsewhere in the chapter).

#### **The Second Reform Bill of 1867 was the next major change.**

The Scottish version of the Act was passed in 1868. It increased the electorate to 230,000

- All male adult householders in the burghs could now vote
- Lodgers paying rent of £10.00 per year
- Owners of the land worth £5.00 per year in the counties gained the vote
- Tenants paying over £14.00 per year got the vote also
- These changes meant that better off working classes in the burghs (craftsmen and skilled workers), and owners and tenants of large farms in the counties got the vote. Crofters and farm labourers did not – they made up the bulk of the rural population; craftsmen and skilled workers in small country towns did not get the vote either.
- There was still no secret ballot – still bribery and corruption and intimidation.

**1872**      **The Ballot Act.** Now voters voted in secret, and it stopped much of the bribery and bullying that had been happening.

**1883**      **Corrupt Practices Act** – any form of bribery was outlawed.

**1884-85 Third Reform Bill** – it became law in Scotland in 1885

All adult male householders could now vote; there was now no longer any difference between burgh and county. This meant that now 60% of all adult Scottish males could vote. Many working class men could class as voters. The poorest, unskilled ones still did not have the vote.

The Scottish Labour party was founded in 1888, by James Keir Hardie, a miner and militant trade unionist.

- 1892 he became an MP in West Ham, in London.
- 1893 he founded the Independent Labour party.
- 1894 1900 The Labour Representation Committee was set up to work for the election of Labour MPs to Parliament. Its secretary was Ramsay McDonald, another Scot, who became the first labour Prime minister ever in 1924.
- 1906 The new Labour Party won 29 seats, including 2 in Scotland; the new party was supported mainly by the trade union movement
- 1918 The Fourth Reform Bill – all men over 21 and women over 30 could vote
- 1928 The Fifth Reform Bill – everyone over 21 could vote.

**Votes for Women**  
**Women's rights**

- 1857 A woman abandoned by her husband could keep her own earnings
- 1870 Women allowed to vote for the new school boards
- 1880 Women could vote in county council elections  
Women could now automatically keep control of their own property; husband's could not control them.
- 1886 If a man abandoned his wife, he had to pay her maintenance; if he died, she became legal guardian of their children
- 1889 Universities Act required universities to admit women
- 1891 A man could no longer lock his wife up
- 1894 Women could stand for election to local councils.