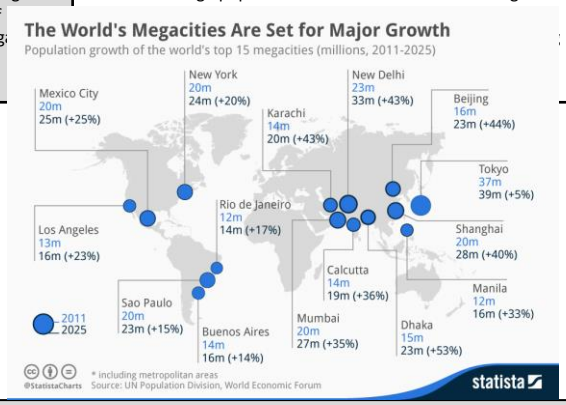
GCSE Urban Issues and Challenges – Urbanisation and Lagos Knowledge Organiser

KI : A growing percentage of the world's population lives in urban areas

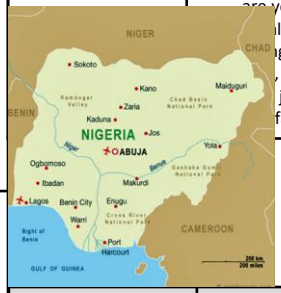
Key terms	Definitions
Mega cities	Urban area with population in excess of 10 million people
Migration	When people move from one area to another
Natural increase	Birth rate minus death rate
Urbanisation	The process by which an increasing percentage of the country's population comes to live in towns and cities
Global pattern of urban change	• More than 50% of world's population live in urban areas • By 2030 it is expected to be more than 60% • By 2050 expected to be more than 70% • In 1950 there were 4 megacities • Now there are more than 20
Urban trends worldwide	• Highest rate of urbanisation in LICs due to rural to urban migration and high rates of natural increase (birth rate much higher than death rate) • Lower rates in HICs as already urbanised and have aging population • Some NEEs in South America following HICs pattern • Largest increase in India, China and Nigeria – by 2050 urban areas will have grown by 37%
Emergence of mega s	• Asia – huge population. Massive rural to urban migration.

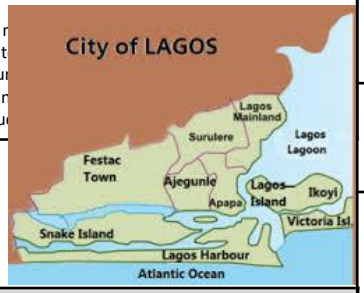


KI : Urban growth creates opportunities and challenges for cities in LICs and NEEs

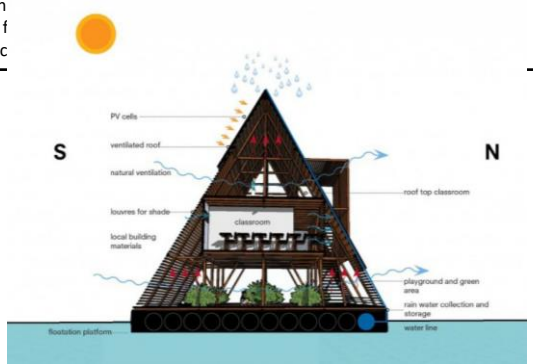
Key terms	Definitions
Economic opportunities	Chances for people to improve their standard of living through employment
Pollution	Presence of chemicals, noise, dirt etc which have harmful or poisonous effects on an environment
Sanitation	Measures designed to protect public health e.g. clean water
Social opportunities	Chances for people to improve their quality of life
Squatter settlement	An area of poor quality housing lacking in amenities which develops spontaneously and illegally
Traffic congestion	Occurs when there is too great a quantity of traffic for

Case study : LAGOS	Urban growth creates opportunities and challenges for cities in LICs/NEEs
Location and importance regionally, nationally and internationally	• SW Nigeria, Gulf of Guinea • Capital in early 20th century until 1991 (Abuja now the capital) • 80% of Nigerian industry in Lagos • Main finance centre in West Africa • International airport and port • Increasing population (15 million at present and increasing by 15,000 a year) • Expanded north and west of Lagos lagoon)
Causes of growth	• Natural increase – youthful population and most migrants are young l to urban r ging climat , political u jobs, urban family, edu





	Opportunities created by urban growth in Lagos
Social – access to services, health and education	• More schools and universities • Growing industry – fashion, finance and film (Nollywood) • Healthcare available • 68% have secondary education (40% of people in rural areas don't get a primary education) • Above average healthcare, education and employment – 9 years education, 53 years life expectancy
Access to resources, water and energy	• 2 power stations planned. • Wealthy houses and businesses have generators • Rich have pipes water • Rest use public taps, boreholes or buy from vendors
Economic – how urban industrial areas can stimulus f economic	• More jobs in Lagos in both the formal and informal economy



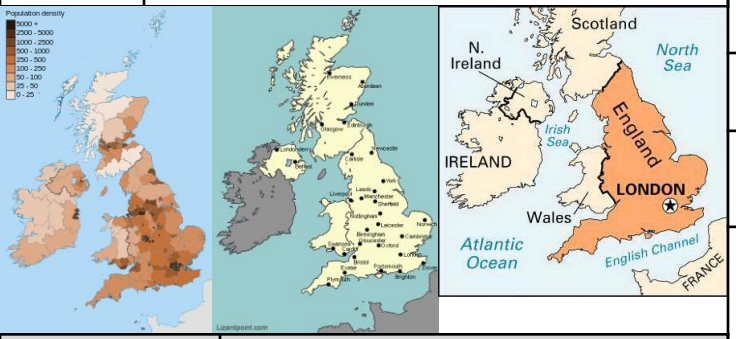
Case study : Lagos	Challenges of urban growth
Management of the growth of slums / squatter settlements	• 60% live in slums • Most in Lagoon area e.g. Makoko • Lack basic facilities, communal toilets, waste put into the lagoon causing disease. 3km to communal water point • Crime in the slums an issue • Eco Atlantic – New city of 250, 000
Providing clean water, sanitation systems and energy	• 2 new power stations planned • Plans to harness methane from rubbish dumps • 2012 Lagos state water Regulatory Commission ensures safe water and fair prices. Responsible for water treatment plant and monitors boreholes • Water bought from vendors • Lack of sewage system • High risk of flooding as low lying
Providing access to services – health and education	• Most in informal areas live on less than $1.25 a day • Healthcare free in government clinics though often long queues
Reducing unemployment and crime	• 3 helicopters for police • 9.9% unemployment • Grants via the Trust Fund Bill have helped people become self employed • 30% of new jobs in the informal economy
Managing environmental issues – waste disposal, air and water pollution, traffic congestion	• Only 40% waste collected • Waste recycling industry e.g. Olyssun dump • Fatal accident rate 28 per 100, 000 (x3 nended level n Area set up a em nsport, ferry airport, walking well as better

Case Study : Makoko floating school	An example of urban planning that is improving the quality of life for urban poor
When?	2014
Problems in Lagos	• Growing population • Increasing population density • Rising sea levels • Poor water supply • Unreliable power supplies
Design of the school	• Solar panels • Natural ventilation • Playground / green area • Floating platform • Local building material • Collects rainwater and stores it
Hopes for the future	Hoped this design could be applied to houses in the Lagoon.

GCSE Urban Issues and Challenges – London and urban sustainability Knowledge Organiser

KI : Urban change in cities in the UK leads to a variety of social, economic and environmental opportunities and challenges

	Overview of the UK population and major cities in the UK
Population	260 per km^2 on average 5000 per km^2 in London and less than 10 per km^2 in North of Scotland Most in low lying flat areas especially by coasts and rivers
Cities	Fastest growing are in south east. London the fastest growing Sunderland is the only city with a decreasing population



Case study : London	Urban change in cities in the UK leads to a variety of social, economic and environmental challenges and opportunities
Location and importance of city in UK and wider world	• South East England on either side of the River Thames • Capital city – centre of trade, manufacturing and finance • Hub for transport networks • Wealthy city • House prices and earnings increasing • Headquarters of TNCs • Universities, research, tourism, culture, media, communications
Impacts of national and international migration on the growth and character of the city	• 8.6 million in 2015 • Increased during industrial revolution, decreased after WWII, increased since 1991 • Young population in 20s and 30s moving for work. Also pushing up the rate of natural increase • Migrants from worldwide • Multicultural – current influx from Eastern Europe • White British 46%, White other 15%, South Asian 18%, Black 13%, Mixed 5% and other 3%

Key terms	Definition
Brownfield site	Land that has been used, abandoned and now awaits some new use
Dereliction	Abandoned buildings and wasteland
Greenfield site	A plot of land that has not yet been subject to any building development
Inequalities	Differences between poverty and wealth as well as in peoples' wellbeing and access to services
Integrated transport systems	When different transport systems connect together making journeys smoother and public transport more appealing
Rural urban fringe	Zone of transition between the built up area and the countryside
Social deprivation	The degree to which an individual or an area is deprived of services, decent housing, adequate income and local employment
Urban greening	The process of increasing and preserving open space such as public parks and gardens
Urban regeneration	The revival of old parts of the built up area by renewal or redevelopment
Urban sprawl	Unplanned growth of urban areas into the surrounding countryside

Case Study : Shoreditch, London	How urban change creates opportunities
Cultural Mix (Social)	• Older residents and Bangladeshis moving out • Young professionals moving in • Gentrification occurring
Recreation and Entertainment (Social)	• Nightclubs set up • Fashionable shops • Pubs and bars
Employment (Economic)	• Finance and creative industries • High tech companies in area called Silicon Roundabout • Increase in jobs in London in general
Integrated transport systems (Social and economic)	• Increasing number of passengers • 2014 – 75 million on underground and buses • Cross Rail East West route opening 2018 • Cross Rail 2 opening in 2030 with a north south route
Urban greening (Environmental)	• London has 47% greenspace • Central London parks, woodlands, cemeteries and gardens • Produce oxygen, decrease flooding, more habitats, healthy recreation and can grow food • Trying to connect green areas with a green grid

Case Study : London	How urban change has created challenges
Urban deprivation	• 2 million living in poverty
Inequalities in housing, education, health and employment	

	Kensington and Chelsea	Newham
Life expectancy	M – 83.7 years F – 87.8 years	M – 75.7 years F – 79.8 years
Unemployment	3.9%	9.4%
5 GCSEs	80%	62%
Earn less than £15000 a year	9%	26%
Earn more than £60,000 a year	26%	7%

Environmental dereliction	• Air pollution causes 4000 deaths a year • Trying to cycle superhighways (currently 15% cycling)
Building on brownfield / greenfield sites	• 20,000 new homes (London's population increasing by 100,000 a year). Severe housing shortages • Brownfield sites – old industry needs demolishing, less urban sprawl, public transport there, land expensive, can improve environment • Greenfield sites – poor public transport, increases urban sprawl, loss of countryside, loss of habitats
Waste disposal	• 25% to landfill causing methane. Target is 0% by 2030
Impact of urban sprawl on rural urban fringe and growth of commuter villages	• Greenbelt land designated in 1947 at risk of development • Now urban sprawl has shifted to commuter settlements outside the greenbelt • New housing estates and business parks encroach into surrounding countryside

Case Study : London Docklands	An example of a regeneration scheme
Reasons why the area needed regeneration	• 1970s – docks went into decline as too small for larger ships • 1980s – lay empty. Industry gone and traditional jobs lost • Most housing substandard • Declining environment
Main features of the project	• 1981 – London Dockland Development Corporation set up. • Aimed to improve social, economic and environmental conditions in the area • Idea was a mix of government and private funding • Canary wharf area developed • Office blocks – international banks led to 100,000 jobs • Transport links include Dockland light railway, City of London Airport • Shopping malls and International Indoor Water Centre as well as a campus for the University of East London • 22, 000 new homes and 10,000 refurbished • Increase in green space to 130 hectares – 200,000 trees planted

KI : Urban sustainability requires management of resources and transport

Key term	Definitions
Sustainable urban living	Includes the use of renewable resources, energy efficiency, public transport, accessible resources and services
Waste recycling	Process of extracting and reusing useful substances found in waste

Case Study : Curitiba, Brazil	Features of sustainable urban living
Water and energy conservation	• Energy efficient lightbulbs in streetlights • Promote renewable energy by public awareness Energy by products produce electricity • Biodiesel buses • 84% of energy from HEP • Water metres installed • Separate pipes for drinking water and rainwater collection
Waste recycling	• Green exchange - swop waste for food or bus tickets • Recycling centre built from recycled materials • Converted buses used for services and education • Mobile market sells blemished foods • 420,000 tonnes waste split into organic and inorganic • If own old building and can't restore it can trade it with the city
Creating green spaces	• Development of 28 parks – 21 million m^2 • Cycle paths • 1.5 million trees planted reducing risk of flooding

How urban transport strategies are used to reduce traffic congestion

- Curitiba – Integrated bi-articulate buses. 5 main routes. Interlink.20,000 passengers an hour. 1 a minute. 1.5 million passengers a year. Also 2 airports. 62 miles cycle lanes
- Freiburg – 400km cycle paths, 9000 bike parking spaces, 30km tram network connected to 168km bus routes
- Singapore – restrict entry to city, electronic pricing system, high petrol prices, quota for new cars, car sharing schemes, overhead railway, efficient bus network, electronic control f traffic systems

Knowledge Organiser: Year 11 Changing Economic World p1

What is development?

Development is an improvement in living standards through better use of resources.

Economic	This is progress in economic growth through levels of industrialisation and use of technology.
Social	This is an improvement in people's standard of living. For example, clean water and electricity.
Environmental	This involves advances in the management and protection of the environment.

Measuring development

These are used to compare and understand a country's level of development.

Economic indictors examples

Employment type	The proportion of the population working in primary, secondary, tertiary and quaternary industries.
Gross Domestic Product per capita	This is the total value of goods and services produced in a country per person, per year.
Gross National Income per capita	An average of gross national income per person, per year in US dollars.

Social indicators examples

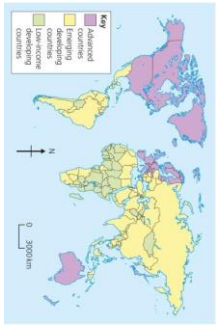
Infant mortality	The number of children who die before reaching 1 per 1000 babies born.
Literacy rate	The percentage of population over the age of 15 who can read and write.
Life expectancy	The average lifespan of someone born in that country.

Mixed indicators

Human Development Index (HDI)	A number that uses life expectancy, education level and income per person.

Variations in the level of development

LICs	Poorest countries in the world. GNI per capita is low and most citizens have a low standard of living.
NEEs	These countries are getting richer as their economy is progressing from the primary industry to the secondary industry. Greater exports leads to better wages.
HICs	These countries are wealthy with a high GNI per capita and standards of living. These countries can spend money on services.



Causes of uneven development

Development is globally uneven with most HICs located in Europe, North America and Oceania. Most NEEs are in Asia and South America, whilst most LICs are in Africa. Remember, development can also vary within countries too.

Unit 2b

The Changing Economic

Physical factors affecting uneven development

Natural Resources

- **Fuel sources** such as oil.
- Minerals and metals for fuel.
- **Availability for timber**.
- Access to **safe water**.

Natural Hazards

- Risk of tectonic hazards.
- Benefits from **volcanic material** and **floodwater.**
- Frequent hazards **undermines redevelopment**.

Climate

- **Reliability** of rainfall to benefit farming.
- **Extreme climates** limit industry and affects health.
- Climate can **attract tourists.**

Location/Terrain

- **Landlocked countries** may find trade difficulties.
- Mountainous terrain makes farming difficult.
- **Scenery attracts tourists**.

Human factors affecting uneven development

Aid

- Aid can help some countries develop **key projects** for infrastructure faster.
- **Aid** can improve services such as schools, hospitals and roads.
- Too much **reliance on aid** might stop other trade links becoming established.

Trade

- Countries that export more than they import have a **trade surplus**. This can improve the national economy.
- Having **good trade relationships**.
- **Trading goods** and services is more profitable than raw materials.

Education

- Education creates a **skilled workforce** meaning more goods and services are produced.
- **Educated people earn more money**, meaning they also pay more taxes. This money can help develop the country in the future.

Health

- **Lack of clean water** and poor healthcare means a large number of people suffer from **diseases**.
- People who are ill cannot work so there is little contribution to the economy.
- More money on healthcare means less is spent on development.

Politics

- **Corruption** in local and national governments.
- The **stability of the government** can effect the country's ability to trade.

History

- **Colonialism** has helped Europe develop, but slowed down development in many other countries.
- Countries that went through

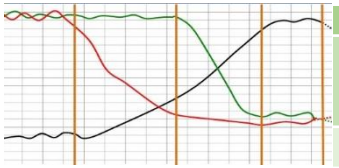
Consequences of Uneven Development

Levels of development are different in different countries. This uneven development has consequences for countries, especially in wealth, health and migration.

Wealth	People in more developed countries have higher incomes than less developed countries.
Health	Better healthcare means that people in more developed countries live longer than those in less developed countries.
Migration	If nearby countries have higher levels of development or are secure, people will move to seek better opportunities and standard of living.

The Demographic Transition Model

The demographic transition model (DTM) shows population change over time. It studies how birth rate and death rate affect the total population of a country.



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
High DR High BR Steady	*BR Low Declining DR Very High*	*Rapidly falling DR Low BR High*	*Low DR Low BR Zero*	*Slowly Falling DR Low BR Negative*
e.g. Tribes	e.g. Kenya	e.g. India	e.g. UK	e.g. Japan

Knowledge Organiser: Changing Economic World

Key Vocabulary

- **NEE –** Newly emerging economy
- **LIC –** Low income country
- **HIC –** High income country
- **Employment Structure** - % of workers in each industrial sector
- **Primary Industry** – extraction of raw materials (agriculture, mining, fishing)
- **Secondary Industry**– manufacturing of raw materials (food processing, clothes, oil refinery)
- **Tertiary Industry** – selling of services and skills (education, health service, transportation)
- **Quaternary Industry** – information and research services (ICT, computing, research, consultancy)
- **Pre-Industrial UK –** before the 1800s (mainly primary industry)
- **Industrial UK –** Late 1800s – 1950s (mainly secondary industry)
- **Post Industrial UK –** 1950s onwards (secondary industry declines, mainly tertiary and quaternary industry)
- **Industrialisation –** Process of moving towards a mainly secondary (manufacturing) economy
- **De-Industrialisation –** Process of decline in manufacturing industry
- **Science Park –** designated areas for research and cutting edge technology development

UK links to other countries:
Trade: UK overseas exports are worth £250Bn per year
Culture: Media and creative industries exported worldwide
Transport: Channel Tunnel, Heathrow = hub airport
Electronic Communications: Global IT HQs, trans-Atlantic communication networks

Case Study: Economic Development in Nigeria

Location & Importance

Nigeria is a NEE in West Africa.
Nigeria is just north of the Equator and experiences a range of environments.
Nigeria is the most populous and economically powerful country in Africa. Economic growth has been base on oil exports.

Influences upon Nigeria's development

Political

Suffered **instability** with a **civil war** between 1967-1970.
From 1999, the country become **stable** with **free and fair elections**.
Stability has **encouraged global investment** from China and USA.

Social

Nigeria is a **multi-cultural, multi-faith society**.
Although mostly a strength, diversity has caused **regional conflicts** from groups such as the Boko Haram terrorists.

Cultural

Nigeria's **diversity** has created rich and varied **artistic culture**.
The country has **a rich music, literacy and film industry** (i.e. Nollywood).
A successful national football side.

Industrial Structures

Once mainly based on agriculture, **50% of its economy is now manufacturing and services**.
A thriving manufacturing industry is **increasing foreign investment** and **employment opportunities**.

The role of TNCs

TNCs such as **Shell** have played an important role in its economy.
+ Investment has **increased employment and income**.
- **Profits move to HICs**.
- Many **oil spills** have **damaged fragile environments**.

Changing Relationships

Nigeria plays a leading role with the **African Union** and **UN**.
Growing links with **China** with huge **investment in infrastructure**.
Main import includes petrol from the EU, cars from Brazil and phones from China.

Environmental Impacts

The 2008/09 **oil spills devastated swamps** and its **ecosystems.**
Industry has caused **toxic chemicals** to be discharged in open sewers - **risking human health**.
80% of forest have been **cut down**.
This also increases **CO^2 emissions**.

Aid & Debt relief

+ Receives **$5billion** per year in aid.
+ **Aid groups** (ActionAid) have improved health centres, provided anti-mosquito nets and helped to protect people against AIDS/HIV.
- Some aid fails to reach the people who need it due to **corruption**.

Effects of Economic Development

Life expectancy has increased from 46 to 53 years. 64% have access to safe water. Typical schooling years has increased from 7 to 9.

Case Study: Economic Change in the UK

UK in the Wider World

The UK has one of the largest economies in the world.
The UK has huge political, economic and cultural influences.
The UK is highly regarded for its fairness and tolerance.
The UK has global transport links i.e. Heathrow and the Eurostar.

Causes of Economic Change

De-industrialisation and the **decline** of the UK's industrial base.
Globalisation has meant many industries have moved overseas, where labour costs are lower.
Government investing in supporting vital businesses.

Towards Post-Industrial

The **quaternary industry** has **increased**, whilst **secondary** has **decreased**.
Numbers in **primary** and **tertiary industry** has **stayed the steady**.
Big increase in **professional** and **technical jobs**.

Cambridge Science Park

A major **quaternary industry** on the outskirts.
Good transport access to the **A14** and **M11**.
A good **location for sourcing highly educated workers** from **Cambridge University**.
Staff benefit from **attractive working conditions**.
Attracts **clusters** of related **high-tech businesses**.

Change to a Rural Landscape - South Cambridgeshire

Cambridge is one of the fastest growing cities in the UK. Current population is 155,000 but will increase to 175,000 by 2026.

Social

Rising house prices have caused tensions in villages.
Villages are **unpopulated** during the day causing **loss of identity**.
Resentment towards **poor migrant communities**.

Economic

Lack of affordable housing for local first time buyers.
Sales of farmland **has increased rural unemployment**.
Influx of poor migrants puts **pressures** on local services.

Improvements to Transport

A **£15 billion 'Road Improvement Strategy'**. This will involve 10 new roads and 1,600 extra lanes.
£50 billion HS2 railway to improve connections between key UK cities.
£18 billion on Heathrow's controversial **third runway**.
UK has many **large ports** for importing and exporting goods.

UK North/South Divide

- Wages are **lower** in the North.
- Health is **better** in the South.
- Education is **worse** in the North.
+ The government is aiming to support a **Northern Powerhouse** project to resolve regional differences.
+ More **devolving of powers** to disadvantaged regions.

Knowledge Organiser: Year 11 Geography 1B Resource Management Part 1

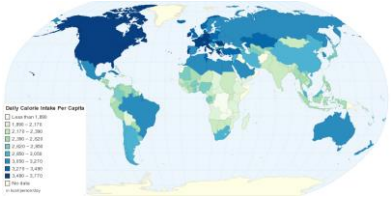
The significance of food, water and energy to economic and social well being

Key for human wellbeing. All lead to social and economic benefits which all increase the standard of living

Food	• Calories provide energy • Availability depends on climate, soil and level of technology • Malnourishment means disease and death. Can also lead to underperforming at school which decreases economic wellbeing in life • More than 1 billion people are malnourished • 2 billion are undernourished (poor diet) • Obesity is an issue in some areas
Water	• Used for survival, washing, food production, industry • We need clean safe water otherwise we can get stuck in a cycle of poverty
Energy	• Traditionally we get energy from oil, coal and wood • Many different sources • Used for production, heating, transport and for water supply (e.g. wells)

An overview of global inequalities in the supply and consumption of resources

Food	• UK consume 3200 calories per person per day • Somalia 1580 calories per person per day • Areas of greatest population growth have highest levels of undernourishment • Demand depends on changing diets and increasing population • Supply depends on climate, soil and level of technology
Water	• Fresh water is unequally distributed • Water footprint is the amount of water used per day • Global average is 1240 l per day • Bangladesh is 896 l per day • USA is 2483 l per day • Water scarcity can be physical or economic • 1 in 5 (more than 1.2 billion people) live in areas of water scarcity • 1 in 3 (2.4 billion people) have no access to clean drinking water
Energy	• Richest billion people use 50% of the energy • Poorest billion people use 4% of the energy • Countries import and export energy • Some countries do not have their own sources of energy



The changing demand and provision of resources in the UK create opportunities and challenges

Key terms	Definitions
Agribusiness	Application of business skills to agriculture
Carbon footprint	A measurement of all the greenhouse gases we individually produce
Energy mix	The range of energy sources of a region or country
Food miles	The distance covered supplying food to consumers
Fossil fuels	A natural fuel formed in the geological past from the remains of living organisms
Local food sourcing	A method of food production and distribution that is local
Organic produce	Food produced using environmentally and animal friendly farming methods on organic farms

Food

The growing demand for high value food exports from LICs and all year demands for seasonal food and organic produce	• Used to be seasonally and locally sourced. Now eat globally sourced foods all year • In 2013 47% of UK food was imported • More disposable income and increased demand for greater choice • Can't grow all foods in the UK and foods can only be grown at certain times • High value products are five times the price of similar products e.g. Madagascan vanilla, gourmet coffee • Positive impacts : Jobs and wages for those in LICs, more tax income leads to a better quality of life • Negative impacts – less land for locals, high water use and exposure to chemicals • Organic – no pesticides or fertilisers used. Since the 1990s there has been an increase in demand. Worth £2 billion a year
Larger carbon footprints due to the increased number of food miles travelled	• Grown more cheaply elsewhere • Production and transport lead to carbon footprint • 17% of the UK's carbon footprint is due to food • Tomatoes have less of a carbon footprint being grown in Spain and imported to the UK than if we grew them in the UK • Food miles travelled by UK food imports is 18.8 billion. • 68% of food imported is from within the EU, 32% from the rest of the world • Push now for buying local and having an allotment
A trend towards agribusiness	• Agribusiness is a farm run as a business with the main aim being profit • Big impacts on the environment as often heavy use of pesticides and fertilizers • East Anglia has a lot of agribusinesses

Water

Changing demand for water	• Increasing wealth • Hygiene • Demand for out of season food • Increasing industrial use • Increased domestic use • Increasing population • Increased use in domestic properties since 1975 by 70%
Water quality and pollution management	• Water quality is managed by legislation, education campaigns, waste eater treatment, building better treatment plants, investing in infrastructure, pollution traps, green roofs and walls • Key pollutants are fertilisers, pesticides, heavy metals and acid rain
Matching supply and demand – areas of deficit and surplus	• Highest population is in the South East (area of deficit) and highest rainfall is in the north and west (water surplus) • 80% of Southern England relies on groundwater. 50% are affected by water quality
Need for transfer to maintain supply	• Lake Vyrnwy scheme moves water from Wales to Liverpool. Wales – sparsely populated with excess supply, Liverpool – densely populated with water surplus. • Built a dam and reservoir and transported the water via pipeline 68 miles. • Had positive and negative impacts including loss of homes (37 homes and 10 farms), recreational area, 10 deaths during construction, reliable supply of water for Liverpool

Energy

The changing energy mix – reliance on fossil fuels and the growing significance of renewable energy	UK Energy mix in 2015 : • Coal 31% • Gas 25% • Nuclear 19% • Renewable sources 22% In 1970 91% was from coal and oil • UK investing in renewable energy e.g. solar energy and subsidies given by the government • Shale gas most recent focus
Decreasing domestic supply of oil, coal and gas	• In 1980 North Sea oil and gas was discovered • Now have decreasing reserves of fossil fuels • EU regulations on emissions has meant decrease in fossil fuel use • 12% less energy being used in homes since 1970 and 60% less in industry due to energy efficiency, public awareness and increasing costs
Economic and environmental issues associated with the exploitation of resources	• Cheaper to import coal into the UK than to mine it • Nuclear sites being decommissioned and all current plants will close by 2023 – issues of contamination and disposal of nuclear waste • Economic issues – coasts, jobs, set up costs, research, reliability • Environmental costs – ecosystems, waste, noise, aesthetics, emissions, pollution, radiation leaks