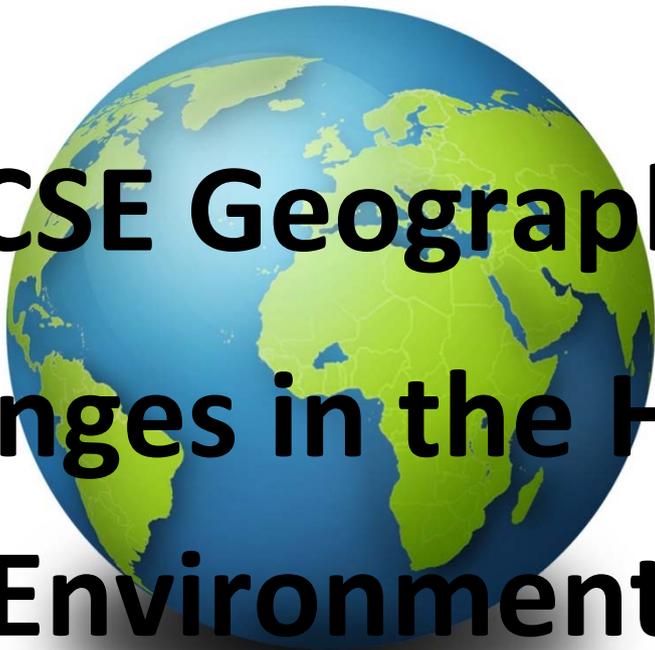




Geography Department



# GCSE Geography

# Challenges in the Human Environment

# Core Knowledge

Name:

Class:

Teacher:

**Paper 2:**

3.2.1 Urban issues and challenges (p.2-6)

3.2.2 The changing economic world (p.7-12)

3.2.3 The challenge of resource management (p.13-17)

## Urban Issues and Challenges Glossary

<b>Keyword</b>	<b>Definition</b>
<b>Brownfield site</b>	Land that has been used abandoned and now awaits some new use. <i>Commonly found across urban areas, particularly inner city areas.</i>
<b>Choropleth map</b>	A map using one colour to show information e.g. population density. <i>The higher categories (e.g. largest populations) are shown in a darker colour and they get lighter as the figures are reduced (e.g. smallest populations).</i>
<b>Dereliction</b>	Abandoned buildings and wasteland.
<b>Economic opportunities</b>	Chances for people to improve their standard of living through employment.
<b>Formal economy</b>	This refers to the type of employment where people work to receive a regular wage and are assured certain rights (e.g. paid holidays, sickness leave)
<b>Greenfield site</b>	A plot of land, often in a rural area or on the edge of an urban area that has not yet been subject to any building development.
<b>Inequalities</b>	Differences between poverty and wealth, as well as in people's wellbeing and access to things like jobs, housing and education. <i>Inequality may occur in housing provision, access to services, access to open land, safety and security.</i>
<b>Integrated transport systems</b>	Where multiple transport systems are connected together, making travel easier and more appealing. <i>Integration in this way should enable people to switch from private car transport to a more sustainable option.</i>
<b>Megacity</b>	An urban area with a total population in excess of ten million people.
<b>Migration</b>	When people move from one area to another. In many LICs people move from rural to urban areas (rural-urban migration)
<b>Natural decrease</b>	The death rate is higher than the birth rate. Population is getting smaller.
<b>Natural increase</b>	The birth rate is higher than the death rate. Population is getting bigger.
<b>Pollution</b>	Presence of chemicals, noise, dirt or other substance which have harmful or poisonous effects on an environment.
<b>Rural-Urban fringe</b>	A zone of transition, between the built up area and the countryside, where there is often competition for land use.

	<i>It is a zone of mixed land uses, from out of town shopping centres and golf courses to farmland and motorways.</i>
<b>Sanitation</b>	Measures designed to protect public health, including the provision of clean water and the disposal of sewage and local employment.
<b>Social deprivation</b>	The degree to which an individual or an area is deprived of services, decent housing and the disposal of sewage and waste.
<b>Social opportunities</b>	Chances for people to improve their quality of life, for instance, access to education and health care.
<b>Squatter settlement</b>	An area of poor-quality housing lacking in basics such as fresh water supply and sewers. <i>Often develop spontaneously and illegally in cities, usually LICs.</i>
<b>Sustainable urban living</b>	A city which partakes in minimal damage to the environment, with a fair allocation of jobs. <i>People are involved with the decisions that affect their living and a strong sense of community is present.</i> <i>The city strives to use renewables, public transport while being accessible to all people.</i>
<b>Traffic congestion</b>	Occurs when too great a volume of traffic for roads to cope with, so traffic jams form and traffic slows or is stationary.
<b>Urbanisation</b>	The process where an increasing percentage of a countries population comes to live in towns and cities.
<b>Urban greening</b>	The process of increasing and preserving open space such as public parks and gardens in urban areas.
<b>Urban regeneration</b>	Revival of old parts of the built-up area by either installing modern facilities in old buildings (renewal) or opting to redevelop entirely through demolition.
<b>Urban sprawl</b>	The unplanned growth of urban areas into the surrounding countryside.
<b>Urban sustainability</b>	A sustainable city is one in which there is minimal damage to the environment. <i>Also the economic base is sound with resources allocated fairly and jobs secure, and there is a strong sense of community.</i>
<b>Waste Recycling</b>	The process of extracting and reusing useful substances found in waste.

## Urban Issues and Challenges Pop Quiz

<b>Define birth rate.</b>	The number of live babies born in a year for every 1000 of the population.
<b>Define death rate.</b>	The number of people who have died each year for every 1000 of the population.
<b>Give two push factors as to why someone would leave a location.</b>	Extreme climate, lack of resources, lack of safety, lack of services, limited job opportunities, crop failure, political and/or religious persecution, risk of natural hazards.
<b>What percentage of migrants to Mumbai come from Maharashtra state?</b>	38%
<b>What percentage of slum-dwellers in Dharavi Slum work there?</b>	85%
<b>Name three social opportunities of Dharavi Slum.</b>	Community spirit, education for most children, flexible use of space and virtually no crime.
<b>What are the challenges with disease that people in Dharavi Slum face?</b>	Doctors deal with 4000 cases of sickness per day and there are rats inside and outside homes.
<b>Name two of the issues with there being an informal economy in Dharavi Slum?</b>	Unregistered companies making small profits, it's illegal, working conditions are poor with cheap labour and small factories, no legal age for workers so children are also employed.
<b>What is the development strategy of the Slum Rehabilitation Authority?</b>	Health Income Knowledge Environment Socia-Culture
<b>Slum structures are eligible for development by the Slum Rehabilitation Authority existing on or prior to when?</b>	1 <sup>st</sup> January 1995
<b>Define conurbation and give an example.</b>	Major high density areas (e.g. London and Greater Manchester).
<b>As of 2012, what was the population of London?</b>	8.1 million

<b>How many jobs were there in London in 2012?</b>	5,053,000
<b>What percentage of London's population is black, Asian or ethnic minority?</b>	36%
<b>List three opportunities in London.</b>	Cultural mix, recreation and entertainment, employment, integrated transport systems and urban greening.
<b>What was London's gross value added (GVA) in 2010?</b>	£274 billion.
<b>What is urban greening?</b>	Urban greening means to increase the amount and proportion of green spaces within a city, these green spaces being essential for people's quality of life.
<b>List three challenges in London.</b>	Urban decline and deprivation, dereliction, Inequalities in housing, education, health and employment, waste disposal, atmospheric pollution, the impact of urban sprawl on the rural–urban fringe and building on brownfield and Greenfield sites.
<b>Name two effects of urban sprawl.</b>	Extra cost to the tax payer, increased traffic, health issues due to having to commute regularly to work, environmental issues as animals are displaced from their habitat, isolation as people live further from their neighbours.
<b>What is the benefit of the athletes' village in the Olympic park in London?</b>	The athletes' village has been relaunched as a housing estate called the East Village. 40% of these 2,818 new homes will be affordable. Eventually the whole Olympic Parkland will house 8,000 people.
<b>How many acres of brownfield land was the Olympic park built on?</b>	560 acres
<b>What was an environmental disadvantage of the Olympic park and games?</b>	Many of the materials for the stadiums and the Olympic Park came from overseas, the games produced 3.3 million tons of CO <sub>2</sub> and a lot wildlife had to be relocated by the Olympic Delivery Authority.
<b>What are the three 'E's that define the idea of urban sustainability?</b>	Economy Ecology Equity
<b>How does the Newcastle City Council's 'warm up north' scheme</b>	The scheme included providing insulation, UPVC windows or doors, a new heating system or boiler and loft or cavity wall

<b>improve energy efficiency in homes in the North East?</b>	insulation. The scheme has also been installing solar panels on homes across the city.
<b>What is park and ride?</b>	Parking your car on the outskirts of a city and take a bus to the city centre.
<b>What is the purpose of the Tyne and Wear Metro in Newcastle?</b>	The Metro was to cover main trunk journeys, while buses were reoriented toward shorter local trips, integrated with the Metro schedule, to bring passengers to and from Metro stations, using unified ticketing.
<b>Name the two advantages of the Tyne and Wear Metro.</b>	The Metro is subsidised to keep prices low, and runs on electricity so does not pollute in the city.

## The Changing Economic World Glossary

Key Word	Definition
<b>Age Structure</b>	The proportion (amount) of each age group in a population.
<b>Asylum Seekers</b>	Someone forced to leave their country due to persecution e.g. over religion or politics. <i>They seek asylum in another country and do not return to their original country.</i>
<b>Birth rate</b>	Number of babies born per 1,000 people per year.
<b>Child mortality</b>	The number of children that die under five years of age, per 1,000 live births.
<b>Choropleth map</b>	A map using one colour to show information e.g. population density. <i>The higher categories (e.g. largest populations) are shown in a darker colour and they get lighter as the figures are reduced (e.g. smallest populations).</i>
<b>Commonwealth</b>	The voluntary association of 53 independent and equal states, mostly territories of former British Empire. <i>Home to 2.2 billion, member states have no legal obligation but share history, language, culture and democracy.</i>
<b>Country of origin</b>	The country from which a migrant starts (original country – home)
<b>Death rate</b>	Number of deaths per 1,000 people per year.
<b>Debt crisis</b>	A situation whereby a country cannot pay its debts, often leading to calls to other countries for assistance.
<b>Debt relief</b>	When HICs write-off some LIC debt, or lower interest rates, so the LIC has less to pay back.
<b>Dependency ratio</b>	The balance between people who are independent (work and pay tax) and those who depend on them e.g. children and elderly people.
<b>Deindustrialisation</b>	The decline in the countries traditional manufacturing industry due to exhaustion of raw materials or jobs moving abroad due to a cheaper competitor.
<b>Demographic Transition Model</b>	Shows population change over time and space. <i>There are 5 stages of the DTM.</i>
<b>Development</b>	The progress of a country in terms of economic growth, the use of technology and human welfare.
<b>Development gap</b>	The difference in standards of living and wellbeing between the world's richest and poorest countries (HIC versus LIC)
<b>Economic migrant</b>	Someone trying to improve their standard of living. Moves willingly
<b>Emigrant</b>	Someone leaving their country of residence to move to another country.
<b>European Union (EU)</b>	A group of 28 countries across Europe that work together towards a single market <i>E.g. they trade as if they were one country, without any trade barriers.</i>

<b>Exponential growth</b>	Population growth rate is constantly increasing,
<b>Fairtrade</b>	When producers in LICs are given a better price for the goods they produce. <i>Often this is from farm products like cocoa, coffee or cotton. Better prices reduce exploitation.</i>
<b>Free trade</b>	When trade between countries is not restricted. <i>For example by import duties or not being a member of a group of trading nations.</i>
<b>Gender structure</b>	The balance between the number of males and females in a population.
<b>Globalisation</b>	Links between different countries around the world.
<b>Gross Domestic Product (GDP)</b>	The total value (amount) of goods and services produced by a country in one year divided by its total population.
<b>Gross National Income (GNI)</b>	Measurement of economic activity that is calculated by dividing the gross (total) national income by the size of the population. <i>GNI takes into account not just the value of the goods and services, but also the income earned from investment overseas.</i>
<b>Human Development Index (HDI)</b>	A method of measuring development in which GDP per capita, life expectancy are combined to give an overview using social and economic indicators.
<b>Immigrant</b>	Someone entering a new country with the intention of living there.
<b>Industrial structure</b>	The relative proportion of the workforce employed in different sectors of the economy (primary, secondary, tertiary and quaternary.)
<b>Infant mortality</b>	The number of babies that die under a year of age, per 1,000 live births.
<b>Information technologies</b>	Computer, internet, mobile phone and satellite technologies used in a range of economic activities, serving local needs in LICs.
<b>Intermediate technology</b>	The simple, easily learned and maintained technology used in a range of economic activities serving local needs in LICs
<b>International aid</b>	Money, goods and services given by the government of one country or a multilateral institution such as the <b>World Bank</b> or <b>International Monetary Fund</b> to help quality of life and economy of another country.
<b>Life expectancy</b>	The number of years a person is expected to live.
<b>Literacy rate</b>	The percentage of adults in a country who can read and write well enough to function in their job and society.
<b>Microfinance loans</b>	Very small loans which are given to people in LICs to start a small business
<b>Migration</b>	The movement of people from one permanent home to another, with the intention of staying at least a year. <i>This move may be within a country (national) or between countries (international).</i>

<b>Multiplier Effect</b>	Initial investment and jobs lead to a knock on effect. <i>This knock on effect creates more jobs and money which are then reinvested.</i>
<b>Natural change</b>	The difference between birth rate and death rate.
<b>North-South divide (UK)</b>	Economic and cultural differences between Southern England and Northern England that relate to issues such as health and lifestyle.
<b>Post-industrial economy</b>	The economy of many economically developed countries where most employment is now in the service industries.
<b>Pull factors</b>	The attractions and opportunities of a place that encourage people to move there.
<b>Push factors</b>	The negative aspects of a place that encourage people to move away.
<b>Refugee</b>	Someone forced to leave their country due to war or famine. <i>They are able to return to their own country once the war or famine is over.</i>
<b>Science and business parks</b>	Purpose built areas of offices and warehouses, often placed at the edge of the city where high tech, large scale complexes can be built and scientific research, often in co-operation with a university.
<b>Service industries (tertiary industry)</b>	Economic activity that provides a service. <i>Commercial (shops) Professional (Dentist) Social (schools) Entertainment (cinema) Personal (hairdresser) are all types of service.</i>
<b>Trade</b>	The buying and selling of goods and services between countries
<b>Transnational Corporation (TNC)</b>	A large and wealthy corporation or enterprise (business). Headquarters are in one country and they have many other branches spread across the world.

## The Changing Economic World Pop Quiz

<b>List three things that can be used to measure development.</b>	GNI per head, Human Development Index, birth rates, death rates, infant mortality, people per doctor, literacy rate, access to safe water, life expectancy.
<b>What is the North-South Divide?</b>	An economic division that exists between the wealthy developed countries, known collectively as "the North", and the poorer developing countries (least developed countries), or "the South."
<b>What is the difference between First and Second World countries?</b>	First World countries are the richer, democratic and industrialised countries and Second World are centrally organised and often communist countries.
<b>What is the Poverty Trap?</b>	Poverty can lead to poverty. Low investment in key areas such as infrastructure (roads, rail, telecommunications etc.), education and healthcare can have dire consequences for a population. Lack of investment in things like these can exacerbate (make worse) poverty, and keep countries mired in a low level of development.
<b>Why is water supply a major issue for a country's development?</b>	In many parts of the world unreliable water supplies limit agriculture and other development areas. If people are searching for and carrying water they cannot focus their energies on other areas of the economy, limiting development further.
<b>List two consequences of uneven development.</b>	More international migration, lack of social opportunity, a lower growth of wealth, political instability and billions of people live in poverty.
<b>What does a population pyramid show?</b>	A population pyramid shows the age and gender structure for an area or country.
<b>What are the two ways that the DTM shows population change?</b>	Change over space (a number of countries can be in different stages) and change over time (a country will theoretically progress through the stages).
<b>What happens in the second stage of the DTM?</b>	Birth rate increases and death rate decreases, so total population increases.
<b>Name three ways of reducing global inequalities.</b>	Investment and industrial development, aid, intermediate technology, free trade, fair trade, debt relief and microfinance loans.
<b>What makes intermediate technology to reduce inequalities appropriate?</b>	It should be labour intensive, use sustainable technology, use new, low cost technology, and be in harmony with the local environment.
<b>What are microfinance loans?</b>	Very small loans which are given to people in the LICs to help them start a small business.

<b>Which countries border Kenya?</b>	Tanzania, Uganda, South Sudan, Ethiopia and Somalia.
<b>What percentage of Kenya's capital investment comes from tourism?</b>	7.6%
<b>Whilst tourism in Kenya can open up new jobs for the locals, what is a problem that could occur?</b>	Foreign companies may bring foreign workers to do the skilled jobs; so local people only do low skilled, poorly paid work.
<b>How are NEEs different from LICs?</b>	NEEs differ from LICs in that they no longer rely primarily on agriculture, have made gains in infrastructure and industrial growth, and are experiencing increasing incomes and high levels of investment.
<b>Where is Nigeria located?</b>	West Africa.
<b>How many people in Nigeria live below the national poverty line?</b>	Approximately 60 million.
<b>What are two limits to growth in Nigeria?</b>	Poor infrastructure, taxes and barriers to exports, lack of financial services for independent small/medium businesses and an unstable government.
<b>Why do TNCs tend to have production areas in poorer countries?</b>	In order to take advantage of labour, lower environmental standards and raw material costs.
<b>What is the negative effect of Shell extracting oil on the Ogoni people?</b>	Many of them live without electricity or running water, and see none of the oil profits, instead having to live with the poisoning of land and water from pipelines, oil spills and gas fires.
<b>What percentage of Nigeria's economy does oil revenue make up?</b>	75%
<b>How much money did Nigeria get of the UK's overseas aid from 2013?</b>	£1.14 billion
<b>Name three areas in which UK aid money was spent.</b>	Governance, wealth creation, health, education, water and sanitation and poverty and vulnerability.
<b>How many additional children were able to receive</b>	481,000.

<b>education due to the UK's aid money?</b>	
<b>What are the reasons for changes in the UK's economic structure?</b>	Globalisation, deindustrialisation, government policies and decline in resources.
<b>What is the effect of resources such as coal and iron decreasing in availability in the UK?</b>	There has been a decrease in employment in the primary sector.
<b>What is a science park?</b>	A science park is often located near university sites, and high-tech industries are established. Scientific research and commercial development may be carried out in co-operation with the university.
<b>What is the objective of the High Speed Railway Network 2?</b>	Reduce journey times between the cities of the Northern part of England, and also to reduce the journey times to London. The idea is that businesses will function better with less loss of time spent travelling.
<b>How many jobs is the HS2 expected to create once the entire line is running?</b>	100,000
<b>How expensive is the HS2 expected to be?</b>	£50bn
<b>What is the latest idea from the government for ironing out differences between the north and south of the UK?</b>	The latest idea (created during the parliaments of 2010 to 2015 and 2015+) is to create a "Northern Powerhouse" of well linked northern cities to match, rival and compete with the economic muscle of London.
<b>What is the Commonwealth?</b>	It is an intergovernmental organisation of 53 countries that were mainly territories of the British Empire. They are linked together by history, culture, language and 3 shared values: democracy, human rights and the rule of law.
<b>What is the European Union?</b>	The European Union is a group of 27 countries that have common goals and close ties to one another.

## The Challenge of Resource Management Glossary

Key Word	Definition
<b>Agribusiness</b>	Application of business skills, like large scale production methods and applying them to agricultural practises.
<b>Biomass</b>	Renewable organic materials, such as wood, agricultural crops or waste used as a source of fuel. <i>Particular biomass can be processed and turned into biofuel such as ethanol.</i>
<b>Carbon footprint</b>	The amount of carbon generated by things people do <i>E.g. travel and a demand for out of season foods like strawberries in winter.</i>
<b>Energy conservation</b>	Reducing energy consumption through using less energy.
<b>Energy exploitation</b>	Developing the use of energy for profit.
<b>Energy mix</b>	The range of energy sources of a region or country, the mix may be both renewable and non-renewable.
<b>Energy security</b>	Uninterrupted availability of energy sources at an affordable price.
<b>Famine</b>	Extreme scarcity of food
<b>Food miles</b>	The distance that food items travel from.
<b>Fossil fuels</b>	A natural fuel such as coal, oil or gas, formed in the geological past from the remains of living organisms.
<b>Fracking</b>	The process of injecting liquid at high pressure into rocks, boreholes, etc. so as to force open existing fissures and extract oil or gas
<b>Geothermal energy</b>	Energy generated by heat stored deep in the earth.
<b>Hydroelectric power</b>	Electricity generated by turbines, driven by moving water.
<b>Local food sourcing</b>	Food produced and distributed locally, close to source. <i>Food is grown, harvested and purchased by the consumer that has been distributed over very short distances.</i>
<b>Malnourishment</b>	A condition that results from eating a diet in which nutrients are either not enough or are too much such that the diet causes health problems
<b>Nuclear power</b>	Energy released by nuclear reactions, such as fission or fusion. <i>From mined and processed uranium, it creates heat energy, making steam and generating electricity.</i>

<b>Organic produce</b>	A method where food is produced using environmentally and animal friendly farming methods on an organic farm. <i>Food produced in this way is free from synthetic additives and pesticides.</i>
<b>Renewable energy</b>	A resource which is not diminished when it is used
<b>Resource management</b>	The control and monitoring of resources so that they do not become depleted or exhausted.
<b>Solar energy</b>	The sun's light energy collected by solar panel cells to heat water or air, generating electricity.
<b>Sustainable development</b>	Development that meets the needs of the present without limiting the ability of future generations to meet their own needs.
<b>Sustainable energy supply</b>	Energy that potentially can be used well into the future without harming future generations. <i>It may involve energy saving, energy efficiency measures, technological advance and the use of renewables.</i>
<b>Undernourishment</b>	Having insufficient food or other substances for good health and condition
<b>Wind energy</b>	Electrical energy obtained from harnessing the wind with windmills or wind turbines.

## The Challenge of Resource Management Pop Quiz

<b>What is social well-being?</b>	The social condition of an individual or group (often related to economic, psychological, spiritual or medical issues)
<b>What is economic well-being?</b>	A measure of how much money people have to sustain their standard of living
<b>How can poor water quality affect economic well-being?</b>	Poor water quality can lead to disease, which weakens people and therefore has a direct impact on their productivity and hence economic development
<b>Name 3 countries that consume 3300+ calories/person per daily</b>	USA, Germany, UK
<b>How much of the UK's fruit is imported?</b>	89%
<b>What is agribusiness?</b>	The application of business skills to agriculture or food production. This means that farms are run as big businesses which attempts to increase food production by using lots of inputs such as fertilisers or labour-saving machines
<b>What are water transfer schemes?</b>	These make up for water shortages by constructing elaborate systems of canals, pipes, and dredging over long distances to transport water from one river basin to another
<b>Give an example of a UK water transfer scheme</b>	Kielder Water - Water is trapped behind a dam in north-west Northumberland then moved by pipe and rivers into the Derwent, River Wear and River Tees to supply the major settlements along the north-east coast
<b>Name two ways that the UK government attempt to combat water pollution</b>	Educating people, putting in laws and legislation, treating our water and improving our water courses
<b>By what percentage does the UK government plan to increase the production of renewable energy?</b>	17% (22% (2015) to 39% (2020))

<b>What are the concerns over fracking?</b>	The long term environmental impacts of this process are unknown and fears exist over water contamination, water use and even small earthquakes in fracking areas
<b>Name one main issue with fossil fuel use</b>	<ul style="list-style-type: none"> <li>• Damage to the natural environment during extraction</li> <li>• Production of pollutants during burning such as CO<sub>2</sub> which lead to global warming</li> <li>• Dust which is hazardous to human health</li> <li>• Sulphur dioxide which contributes to acid rain.</li> </ul>
<b>Which continent produces the most food?</b>	Asia
<b>What does NEE stand for and what is an example of a NEE?</b>	Newly Emerging Economies  China or India
<b>Name three things that can affect food supply</b>	Climate, technology, pests and diseases, water stress, conflict
<b>Name three causes of soil erosion</b>	Deforestation, overgrazing of animals and over-cultivation
<b>What are three strategies to increase food supply?</b>	Irrigation, aeroponics, hydroponics, use of biotechnology, appropriate technology
<b>What is the benefit of golden rice?</b>	People lacking vitamin A in their traditional diet can make the vitamin if they eat genetically modified 'golden' rice
<b>What is an advantage of the warm weather in Almeria, Spain to the agricultural development?</b>	It helps cut energy costs
<b>Why do migrants from North Africa and Eastern Europe go to Almeria?</b>	There are large amounts of cheap temporary labour available to help in the farming
<b>Name one way that organic farming is sustainable</b>	<ul style="list-style-type: none"> <li>• Reduces intensification of food production allowing the land to "rest"</li> <li>• Encourages a more local approach</li> <li>• Artificial fertilisers are largely banned</li> </ul>

	<ul style="list-style-type: none"> <li>• Farmers develop fertile soil by rotating crops and using compost, manure and clover</li> <li>• Strict regulations (standards) define what organic farmers can and can't do</li> <li>• Uses biological pest control rather than pesticides</li> </ul>
<b>Where in the UK was an urban farming scheme launched?</b>	Middlesbrough
<b>How does rice-fish agriculture work?</b>	Rice is grown in flooded paddies with deeper water either side for fish, a net over the top to keep out predator birds and bunds to retain water
<b>Name two ways that small scale rice-fish agriculture can help families in Jamalpur, Bangladesh</b>	<ol style="list-style-type: none"> <li>1. Selling rice and fish enable families to afford better food at markets</li> <li>2. Selling rice and fish enable families to send their children to school</li> </ol>