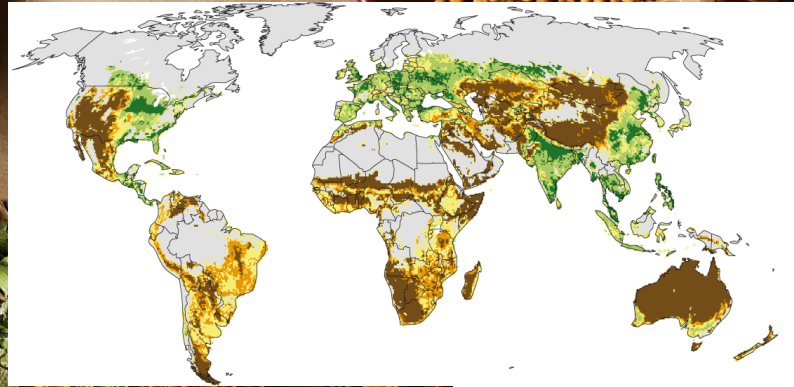




Year 5 World Kitchen

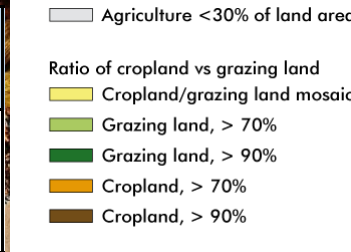
***Understanding how food production is influenced by climate.**

Respect, Believe, Achieve





As a Geographer, what do I already know?

- ♦ In Year 2, we explored the connection between the equator and hot and cold areas of the world.
- ♦ In Year 4, we learnt about biomes and their climates.



Key Words

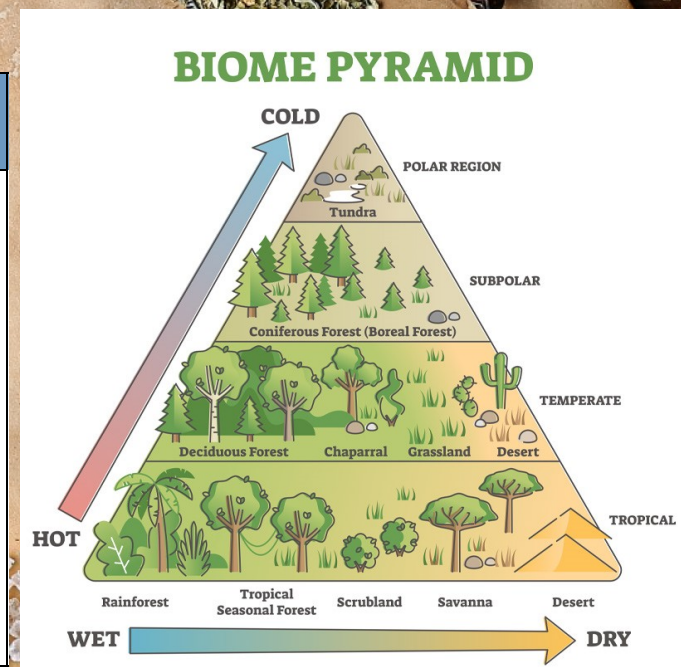
Vegetation	A general term for the plant life of a region; it refers to the ground cover provided by plants
Importing and Exporting	Exporting is the sale of products and services in foreign countries that are sourced or made in the home country. Importing refers to buying goods and services from foreign sources and bringing them back into the home country.
Yield	How many crops a particular field, farm, or area of land produces.
Pasture	Pasture is land used for grazing. Pasture lands in the narrow sense are enclosed areas of farmland, grazed by domesticated livestock, such as horses, cattle, sheep, or swine.
Cropland	Land that is suited to or used for crops, such as the growing of wheat or corn.
Global Warming	Global warming is the term used to describe the rising of the average temperature on Earth. It has to do with the overall climate of the Earth rather than the weather on any given day.

Key Skills	
	<p><u>Knowledge Location</u></p> <ul style="list-style-type: none"> I can locate cities, countries and regions of Europe and Asia on physical and political maps. I can locate places studied in relation to the equator, the Tropics of Cancer and Capricorn, and their latitude and longitude, and relate this to their climate and vegetation.
	<p><u>Understanding Place</u></p> <ul style="list-style-type: none"> I can understand how climate and vegetation are connected in biomes, e.g. the tropical rainforest and the desert. I can understand how food production is influenced by climate. I can understand that products we use are imported as well as locally produced. I understand how human activity is influenced by climate and weather.
	<p><u>Enquiry and Skills</u></p> <ul style="list-style-type: none"> I can use globes and atlases to locate places studied in relation to the equator, the Tropics of Cancer and Capricorn, and their latitude and longitude. I can use thematic maps for specific purposes. I can read and compare map scales up to 1:25,000

Key information—What do I need to know?
<p>♦ What a biome is: A biome is a large region of Earth that has a certain climate and certain types of living things. Major biomes include tundra, forests, grasslands, and deserts. The plants and animals of each biome have traits that help them to survive in their particular biome. Plants and animals that live within smaller areas of a biome also depend on each other for survival. These smaller areas are called ecosystems. Each biome has many ecosystems.</p> <p>♦ Why different foods are grown/ produced in different countries: Climate – the UK is too cold to grow many of the ingredients on this list. Space – some countries have a lot more land. It's no coincidence that the top producers of most food products are China, India and Brazil and this is contributing to the strength of their current economies. Expertise – crops may be grown in a country where they have been grown there years, so the skills and infrastructure are available. Cost of production – labour, for example, can be cheaper overseas.</p>

As a Geographer, here's the knowledge, skills and understanding I will have by the end of the unit:

- I will understand that products we use are imported as well as locally produced by examining different food items and their countries of origin and creating a thematic map.
- I will be able to explain why some products are sourced from abroad and can propose solutions to the environmental and social impacts of global food production.
- I will be able to explain the various types of biome and talk about which biomes are used the most for agriculture (pasture and cropland).
- I will be able to explain the influence of climate on crop yield.
- I will be able to investigate and explain why the UK is unable to grow particular crops (cocoa) naturally and commercially, making reference to the equator and creating graphs to reinforce my reasoning.
- I will be able to showcase my understanding of the influence climate has on vegetation/ food production by deciding which seeds to plant in which country for the greatest yield, offering reasoning for this.
- I will understand how climate change is affecting the farming industry and the impact the farming industry has on global warming.



2.8 Influencing crop yield

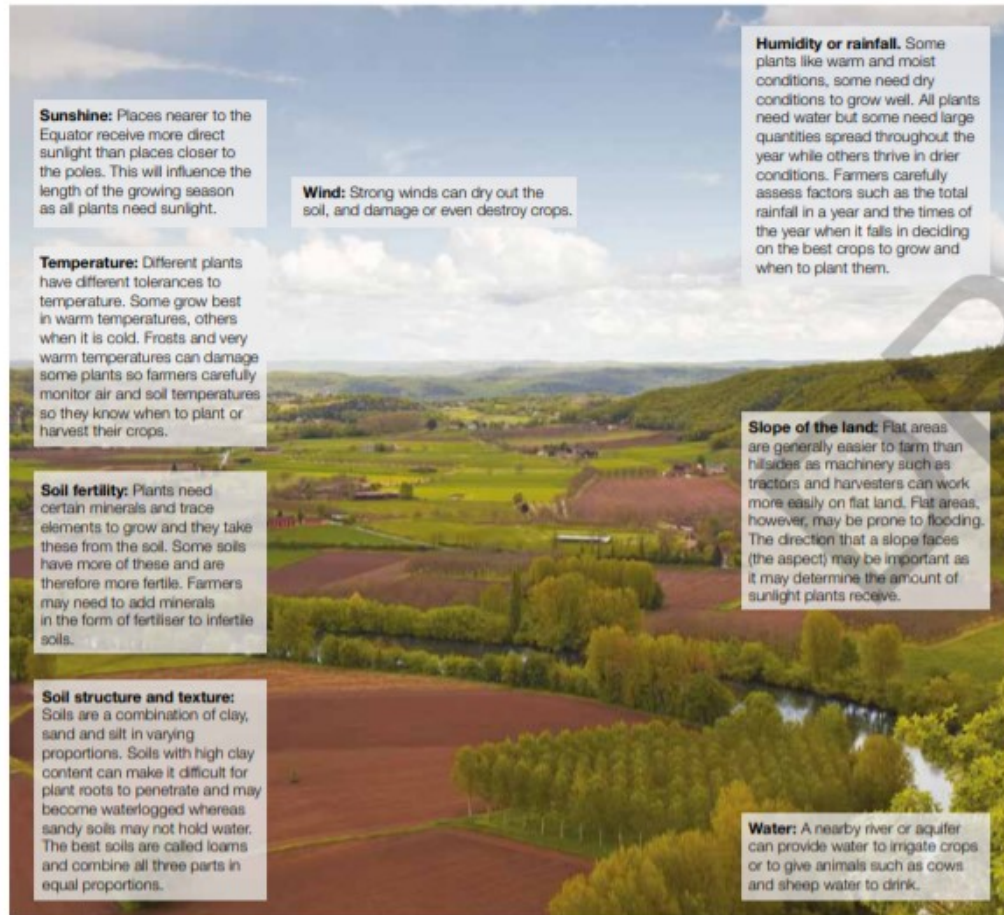
Every year, farmers in different countries around the world make decisions about what crops they will grow and what animals they will raise on their properties. Before they make any decisions, they must consider a number of competing factors. They need to consider their own level of experience as a farmer, the types of machinery and help they have available, the cost of grain, the amount of rain forecast, the quality of the

soil, the estimated price they will be paid for the crops they produce and how they will transport them to market. Broadly speaking, all of these competing factors can be divided into two main categories:

- environmental factors
- technological and economic factors.

Examples from each of these categories are provided in Sources 1 and 2.

ENVIRONMENTAL FACTORS



Source 1 A range of environmental factors that need to be taken into account when making decisions on a farm.

TECHNOLOGICAL FACTORS



Source 2 A range of technological factors that need to be taken into account when making decisions on a farm.

2.9 The importance of climate

More than any other factor, climate (especially rainfall and temperature) determines the type of farming that is practised in a given location. Some crops, such as rice and sugar cane, require warm temperatures and a reliable supply of water. Other types of farming, such as sheep and camel farming, can tolerate a wider range of temperatures and water supply (see Source 1). Farmers who share a similar climate, therefore, tend to practise the same type of farming. This leads to large regions of the Earth's surface being farmed in the same way.

In some places, farmers are able to use technology to overcome some of the limitations of climate. Many Australian farmers, for example, use water from rivers and dams to irrigate their crops rather than relying on natural rainfall. Others pump water from natural underground water storages called aquifers. Others use greenhouses so they can control the temperature and humidity, allowing crops such as flowers and vegetables to grow throughout the year.



Source 1 A nomadic farmer herds his camels in Ethiopia.