



Agriculture is at the heart of our life. The main purpose of farmers in the European Union (EU) is to produce a reliable supply of healthy, high-quality food, but farming is not just about food. Farming is about rural communities and the people who live in them. Farming is also about our countryside and its precious natural resources. Without farming there would be little to keep many communities alive and in areas where farming is particularly difficult, as in hilly, mountainous and remote places, there would be a problem of land abandonment.

There is a wide variety of farm types in the EU, including intensive, conventional and organic farms. Most typical are family farms, often passed on from one generation to the next and the vast majority of which are relatively small. The average farm size in the EU is about 12 hectares of land (equivalent to about 20 football pitches), whereas in the United States the average farm size is around 180 hectares. Farmers keep the countryside alive and maintain the rural way of life, and in so doing they provide 'public goods' for EU citizens. The market does not pay for these public goods so it is only fair that farmers are remunerated through the common agricultural policy (CAP) for providing the public with these valuable and irreplaceable goods. The CAP therefore gives farmers financial assistance to ensure that they continue working the land to feed us and to preserve the landscape, rural development, our natural resources and cultural heritage.

Farming is a principal economic activity in most rural areas of the EU. There are nearly 44 million people employed in the agri-food industry/sector, working on farms and in related sectors, providing farm inputs, such as farm equipment or machinery or food processing, distribution and food retailing. The farming and food sectors together represent around 7 % of the gross domestic product (GDP) in the EU and this means the future is bright with possibilities for your students.

This module will help students explore:

- ▶ how the EU supports farmers who care for the countryside for us and how the whole of society — present and future — benefits from a countryside that is carefully managed and well looked after (see **worksheet 'Guardians of the countryside'**);
 - ▶ how the EU helps farmers to be more productive and to modernise and improve their technical skills (see **worksheet 'The modern farmer'**);
 - ▶ how the EU supports young farmers and pathways to a career in farming (see **worksheet 'The young farmer'**).
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The module's project suggestion is a visit to a livestock farm.



Additional resources

- EU agriculture map
- CAP factsheet
- Glossary

Detailed statistics on farming around the EU can be found at:

- ▶ Agricultural data — EU Member States
http://ec.europa.eu/agriculture/statistics/factsheets/index_en.htm
- ▶ EU agricultural data
http://ec.europa.eu/agriculture/statistics/factsheets/pdf/eu_en.pdf





GUARDIANS OF THE COUNTRYSIDE

Farmers play an important role in our countryside's environmental and economic well-being. The EU supports these producers by helping them introduce sustainable farming practices. This collaboration also safeguards Europe's biodiversity by protecting ecosystems and preventing environmental degradation.

1. Farmers need to take care of the land they work so that it can continue to produce food in the years to come. They take a variety of environmental measures, such as crop rotation and planting and managing hedgerows, to do this. With a partner, research the three measures below and list the reasons why farmers take these steps.

ENVIRONMENTAL MEASURE	REASON
Retain and manage hedgerows	
Protect the margins of fields and nature corridors ('buffer zones')	
Crop rotation	





- 2.** Farming also has a crucial economic role as it supplies the food industry, which is the largest employment sector in the EU providing some 44 million jobs. Many of these jobs exist in rural areas, which means that farmers are supporting rural communities and helping to ensure they thrive.

The EU is helping its farmers to diversify their activities and invest in new ventures, which can often bring benefits to local communities too. These include agri-tourism and direct selling. John and Martha, the farmers in the animated clip, were working in these areas — they had renovated their barn to make guest rooms and were selling their cheese in a farm shop and online.

a) In a small group discuss the following questions.

- ▶ What is agri-tourism?
 - ▶ What are the benefits for farmers?
 - ▶ What are the benefits for the local community?
- ▶ What is direct selling?
 - ▶ What are the benefits for farmers?
 - ▶ What are the benefits for consumers?



Report back to the rest of the class on your discussions. Has anyone visited a farm as an 'agri-tourist' or bought produce directly from a farm?

- b)** Imagine you're a farmer who's just renovated some rooms for guests or opened a farm shop. Create a poster or advert to promote this new venture and encourage people to visit the farm.



AGRI-TOURISM



THE MODERN FARMER

Today's farmers rely on their smartphones as much, if not more, than we do! Soil analysis results, calving alerts, vet reports on herd health testing and the farming weather reports can all reach them directly wherever they are on the farm. Wifi, broadband and satellites are as essential to the modern farmers as their trusty tractors.



1. Read the text below and match the words from the following list with the numbered spaces.

cultivator – combine harvester – plough – planter

The tractor is the farmer's workhorse and is at the heart of the farm's operation. Modern tractors may be quite hightech with GPS systems and sensors, but they still provide the power by which most other machines work. One of the many attachments used with a tractor is a set of curved blades to slice through and turn over the soil, the ①..... Once the soil is prepared, a ②..... feeds several rows of seed at equal spacing and specific depths, then its rear wheels close up the furrow. Once the crop is growing, a ③..... is used to tend the soil, moving above the plants, softening the soil to make room for water, oxygen and growing shoots. On grain and cereal farms it is the ④..... that cuts the stalk a few centimetres from the soil, detaches the grain from the stalk and then separates the grain from the chaff, which is not for consumption. The grain is then transported to the store silo for various products for humans or as animal feed.





2. The EU helps its farmers learn from modern science and technology to meet the challenges and opportunities the future brings. Specifically, it helps farmers to:

- ▶ produce more in a sustainable way;
- ▶ produce more with less (less water, less energy, fewer fertilisers).

This is vital as by 2050 the world's population will have grown to 9 billion people — all in need of a secure food supply. As well as boosting production, harnessing new technology and tools can also help a farmer increase their farm's revenue by opening up new markets and opportunities.

One tool is a strip tillage drill which is pulled by a powerful tractor and uses a third of the energy and seed, and disturbs the land as little as possible, compared to the traditional process.



Read the article on strip tillage below and explain how this type of attachment for a tractor can help a farmer use more sustainable farming practices.

Strip tillage creates a seedbed but only where it is needed rather than across the entire field. The reduction in soil movement retains moisture and organic matter, and makes significant savings in energy as seed and fertiliser are applied with precision. Natural soil structure is encouraged, increasing worm activity and soil fertility over time. It avoids unnecessary cultivation, eliminates any need for rolling, with no need to enter the field again until spraying. Time, labour, money, fertiliser and the environment all saved with one machine ... provided it suits a farmer's land, crops and budget!





THE YOUNG FARMER

TRAINEE SHEPHERD

Hard-working young man looking to gain experience in working with sheepdogs and all aspects of hill farming and herding. Can assist for lambing season, maybe longer, in exchange for training. Have 1-year-old collie dog and van.

1. Can you guess the year when this advertisement was published in the jobs/positions wanted section of a newspaper?

The advertisement was placed by a young man in his 20s who wanted to change career and find a way to make a living while being close to nature. After training as a technician he worked installing wind turbines on farms and, although not having a background in farming, subsequently decided that his ideal career would be: '... to work in harmony with the hills, improve land management and create habitats'. He placed the ad in January 2015. Does this surprise you?

- a) What changes do you think he can expect in his income and lifestyle due to his change in career?
- b) On average young farmers, those under 35 years of age, make up only 6% of all farm holders. Calculate how many students make up 6% of the class and ask them to stand while the remaining 94% stay seated. Clearly for those of you with the appropriate skills and training there are rewarding careers and life opportunities in farming!

Brainstorm the advantages of farming life.



The farmer:

- ▶ *is self-employed;*
- ▶ *lives and works close to nature;*
- ▶





- 2. Farmers feed us and also keep rural community life (i.e. shops, post offices, schools, banks) 'alive'. Yet encouraging young people into farming is a real challenge for rural development in the EU.**

- a)** Why do you think this is so?

Jimmy and Anna, the farmers' children in the animated clip, weren't interested in farming and wanted to follow different career paths. Europe needs farmers and so farming must be made more attractive to young people. The EU helps young people get started in farming with funds to buy land, machinery and equipment and also provides grants to train new farmers in the latest production techniques.

- b)** Imagine the Department of Agriculture has a campaign to encourage young people into farming. Create a poster for the campaign that would appeal to people your age.

- 3. Many farmers grow up on a family farm like the one in the clip, but as we saw from the newspaper advertisement on the previous page, one way to become a farmer is by taking up an apprenticeship.**

- a)** Research online some of the pathways to a career in farming. Look out for apprenticeship opportunities and courses in agriculture, horticulture, agricultural management, science, economics or environmental studies and part-time and distance education courses.

- b)** Display some of the training programmes and open day posters in the classroom.

- 4. A wide range of jobs in the countryside are linked to farming and agriculture, which show how farmers contribute to the economy of rural communities. Farmers need machinery, buildings, fuel, feed, fertilisers and healthcare for their animals. Nowadays they also need business advisors and information and communications technology support. There are also careers in 'downstream' operations — such as preparing, processing and packaging food and those involved in food storage, transport and retailing.**

- a)** Make a list of different professions and careers linked to agriculture and the agri-food business.

- b)** Compare lists of professions. Who has a family member working in one of these sectors?





The health and welfare of farm animals are ultimately the responsibility of the farmer.



Part 1

In Part 1 of this project you'll **prepare for a visit to a livestock farm with sheep** (to take place at a later date and which is the subject of Part 2) by exploring how to take care of newborn lambs.

Has anyone in the class or school ever visited a sheep farm? If so invite them to share their know-how. In groups of three, using books or the internet, research one of the following areas: milk, feed and nutrition; pasture and fencing; prevention, control and treatment of injuries, illnesses and disease.

After everyone has conducted their research, the class should pool their findings and work together on a slideshow presentation or presentation page called 'The health and welfare of lambs'.





Part 2

Using the knowledge you acquired about the care and management of a herd animal, like sheep, **organise a visit to a livestock farm**. Brainstorm questions to ask and on the day remember to bring a camera and journal to note what you discover on your farm visit.

Question headings might include: type of farming (e.g. dairy, beef, mixed, family farm, organic, conventional); breeds and general care in relation to feeds and disease prevention; and daily management of the herd (free-range or housed, grass- or feed-fed).

Think about EU herd identification and traceability systems. There are standards and rules to identify and control cattle movement to help prevent the spread of disease. They also tackle animal housing and handling facilities. You might also ask about the types of machinery used and the cost of transporting animals.

After preparing for the visit, remember to ask the farmer about the challenges and the rewards of a farming life. You could also take note of the various agri-related jobs — for example, think back to the animated clip and the jobs created by the family's cheese-making business or the guest rooms in the barn — that are linked to this farm. Select volunteers to ask the questions during your visit.

On returning to class after the farm visit, each group of three students can draw a plan of the layout of the farm on an A3 sheet, including the farm buildings (animal houses, machinery sheds and crop- and feed-storage areas) and shelter areas such as hedgerows, trees and water supply. Add photos or other artefacts gathered during the farm visit to your display, noting the health and welfare measures taken by the farmer for the care of the animals.



Arrange an exhibition of your work and invite other classes to view your display.

