

# RESOURCE 3

## INTENSIVE FARMING



Using this resource, pupils will explore intensive farming and learn about the advantages and disadvantages of this method. Pupils find out how farmers can use technology and reduce their carbon footprint.

<p><b>Learning Outcomes</b></p> <p>Unit 2: Animals on the Land</p> <p>Unit 1: Soils, Crops and Habitats</p>	<p><b>Pupils will be able to:</b></p> <ul style="list-style-type: none"> <li>• assess the advantages and disadvantages of intensive farming systems; and</li> <li>• describe ways farmers can reduce their carbon footprint.</li> </ul>
<p><b>Cross-Curricular Skills</b></p>	<p><b>Pupils will have opportunities to develop skills in:</b></p> <ul style="list-style-type: none"> <li>• Using ICT</li> <li>• Communication</li> </ul>
<p><b>Thinking Skills and Personal Capabilities</b></p>	<p><b>Pupils will have opportunities to develop skills in:</b></p> <ul style="list-style-type: none"> <li>• Working with Others</li> <li>• Thinking, Problem-Solving and Decision-Making</li> </ul>
<p><b>Resources</b></p>	<ul style="list-style-type: none"> <li>• Internet access</li> <li>• Video 3: Farm Case Study – Rowreagh Farm</li> <li>• Resource 1: For or Against Intensive Farming?</li> <li>• Intensive Farming PowerPoint</li> </ul>



## CONTEXT

Global intensive farming practices aim to maximise agricultural yields to meet the food demands of growing populations. These practices can involve intensive use of pesticides and fertiliser, concentrated feeding of livestock and other means to achieve maximum productivity. These practices result in increased food production, but there can be unwelcome side effects.

## LOCAL CONTENT

There is a large variety of farm types in Northern Ireland that vary in terms of enterprise, size and farming practices. While some may use practices that could be thought of as intensive, in general, agriculture and specifically the dairy sector in Northern Ireland are not regarded as very intensive when compared to similar systems in other countries. For example, the average dairy cow herd size in Northern Ireland is around 100 cows, whereas in the U.K. it is 148 cows. In the United States, almost half the cows belong to herds of over 1000 animals.

This resource provides opportunities to enhance pupils' knowledge of the Care and Management of the Countryside, Renewable Energy and Climate Change parts of Unit 1: Soils, Crops and Habitats and Nutrition and Farm Economics parts of Unit 2: Animals on the Land. The following activities are designed to encourage your pupils to consider these **key concepts**:

- the features of an intensive farming system;
- advantages and disadvantages of intensive farming;
- technology used on the farm; and
- sustainable agriculture practice that reduces the carbon footprint.

## SUGGESTED TEACHING AND LEARNING ACTIVITIES

### LAUNCH

Display the Intensive Farming PowerPoint slides 2 and 4 explaining the learning intentions and definitions for this resource.

Display slide 3. Working in small groups, encourage your pupils to **discuss** the following questions:

- What is intensive farming?
- What are the features of an intensive farming system?
- How has consumer demand influenced farm production?
- Can you identify any advantages or disadvantages of intensive farming?

Ask your pupils to report back, and establish prior knowledge.



You might also find it useful to setup an online collaborative whiteboard such as Google Jamboard or Padlet and invite your pupils to contribute what they know or understand about intensive farming.



Display slide 5 and play **Video 3: Farm Case Study – Rowreagh Farm** to introduce the topic to your pupils. Ask your pupils to consider these questions:

- What examples of good farming practice do you see in the video?
- Are there any farming practices that you consider to be intensive?
- What technology does the farmer use?
- How does the farmer reduce his carbon footprint?

Encourage pupils to use **Resource 1: For or Against Intensive Farming?** to record their answers.

## ACTIVITY

This debate involves several small groups who take opposing sides of the topic.

- Display slide 6. Divide the class into small groups and assign each of the groups the role of being **for** or **against intensive farming**.
- Ask each group to write a short speech to present to the class, encouraging their classmates to agree with their view on intensive farming.
- Both groups will have ideas from the video and their own knowledge and understanding, but a range of other stimulus material would help to get pupils thinking critically. These examples of web articles may be useful:
  - » [Intensive farming 'least bad option' for food and environment](http://www.bbc.co.uk/news) (www.bbc.co.uk/news)

Articles on pig and poultry farming:

- » [Surge in mega farms sparks Northern Ireland animal welfare concerns](http://BelfastTelegraph.co.uk) – BelfastTelegraph.co.uk
- » [Poo overload: Northern Ireland could be forced to export a third of its animal waste](http://TheGuardian) – The Guardian
- After your pupils have listened to the speeches, ask them to decide whether they are for or against intensive farming.

## DEBRIEF

Conclude by reviewing the **learning outcomes** and **key concepts** from the start of the resource with your pupils.



If you used an online collaborative whiteboard in the launch activity, return to the whiteboard and ask your pupils to use a different coloured font to add any new ideas or information they have learned.



## RESOURCE 1: FOR OR AGAINST INTENSIVE FARMING?

While watching the video, use this page to answer the questions about intensive farming.

What examples of good farming practice do you see in the video?

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Are there any farming practices that you consider to be intensive?

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What technology does the farmer use?

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How does the farmer reduce his carbon footprint?

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List the advantages of intensive farming:

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List the disadvantages of intensive farming:

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