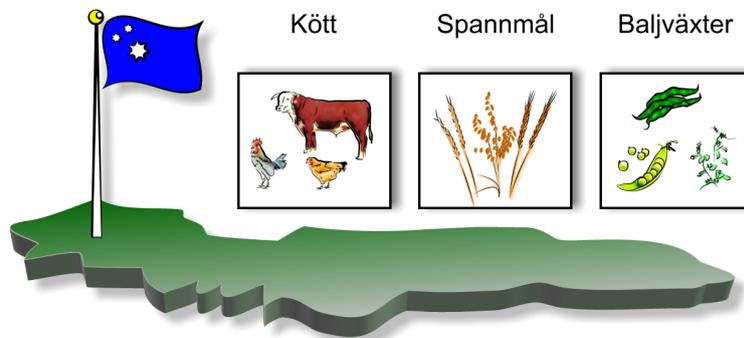


## 10. Increase the food production

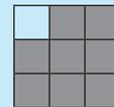
A country wants to increase their food production and thereby decrease their import of food. The country's Minister of Agriculture contacts you.



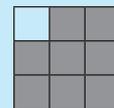
Your assignment is to write a proposal to the country's Minister of Agriculture, where you recommend an increased production of one of the food types; meat (beef, poultry), corn (wheat, grain, oat, rye), or leguminous plants (peas, beans, lentils). This proposal is going to be used as a foundation for the decision made by the government.

In the proposal, you have to:

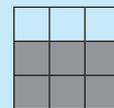
- **Use scientific information**  
by starting from the fact sheet about the different foods and deepen your reasoning with help from your biology content knowledge.



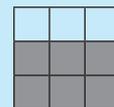
- **Take a position**  
by recommending increased production of **one** of the food types; meat, corn or leguminous plants.



- **Motivate your position**  
by explaining why the food type you recommend is the best choice.



Your motivation shall build on the advantages and disadvantages of the food types, regarding nutriment, effect on the environment, and production.



Your comparisons and your thoughts about advantages and disadvantages have to be clear.

## Fact sheet

		Food type		
		Meat	Corn	Leguminous plants
<b>Aspects</b>	<b>Nutriments</b> (per 100 gram) <ul style="list-style-type: none"> <li>• <b>protein</b></li> <li>• <b>carbohydrate</b></li> <li>• <b>fat</b></li> </ul>	20 g  0 g  3-13 g	10 g  65 g  4 g	22 g  50 g  1 g
	<b>Effect on the environment</b> (for 1 kg of a product) <ul style="list-style-type: none"> <li>• <b>emission of carbon dioxide</b></li> <li>• <b>water consumption</b></li> </ul>	Beef                  Poultry 26 kg                  3 kg  Beef ,                  Poultry 16 000 litres        2800 litres	0,6 kg   1200 litres	0,7 kg   2000 litres
	<b>Production</b>	<p>Cows eat plants that the humans cannot use. Grazing cows makes to landscape open and increase the biodiversity.</p> <p>The cows also eat concentrated feed, for instance corn. This fodder is produced on fields possible to use for productions of food for people.</p> <p>Half or the area under cultivation in the country is used for grazing and the growth of food for animals.</p> <p>Half of the meet used in the country is imported.</p> <p>2 kg fodder is needed for 1 kg poultry. 7 kg fodder is needed for 1 kg beef.</p>	<p>Corn is one of the most important raw materials for the production of food for both humans and animals.</p> <p>Approximately 50 % of the cultivated area in the country is used to produce corn.</p> <p>In the production, fertilizers and then plant nutrition, for instance nitrogen and phosphorus, is leaking from the area under cultivation.</p>	<p>Leguminous plants have the capacity to gather and fix the nitrogen in the air. Therefore, they do not need too much fertilizer.</p> <p>Approximately 10 % of the cultivated area in the country is used to grow leguminous plants.</p> <p>By the alternative cultivation, artificial fertilizers are replaced by "green" fertilizers. This means that you plough leguminous plants into the soil which can fix nitrogen from the air and leave it in the soil.</p>