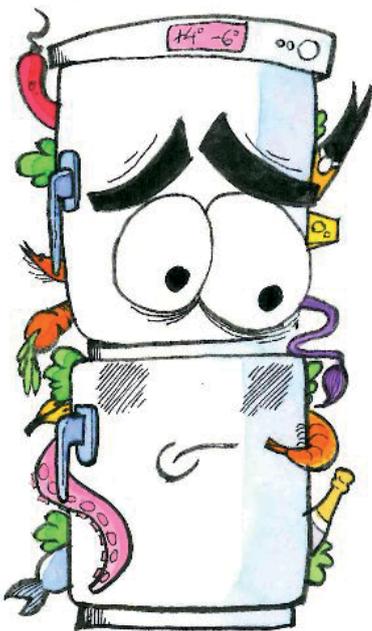
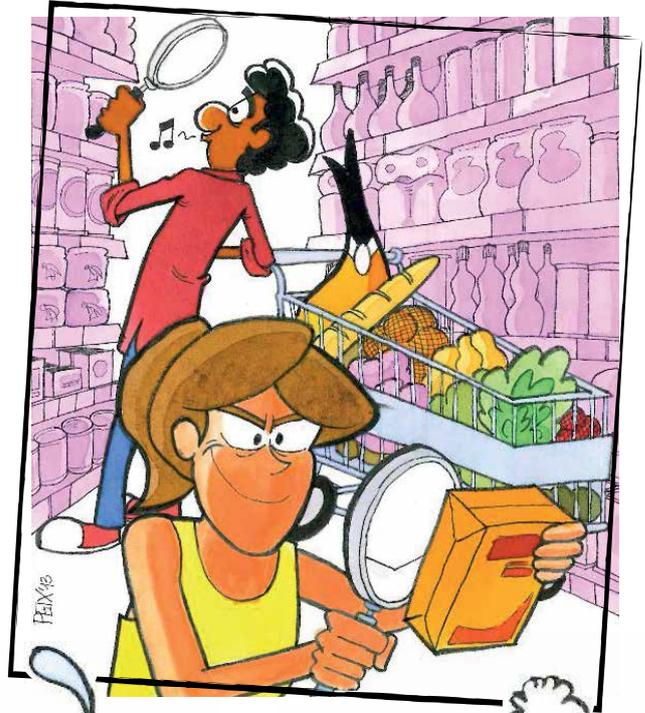
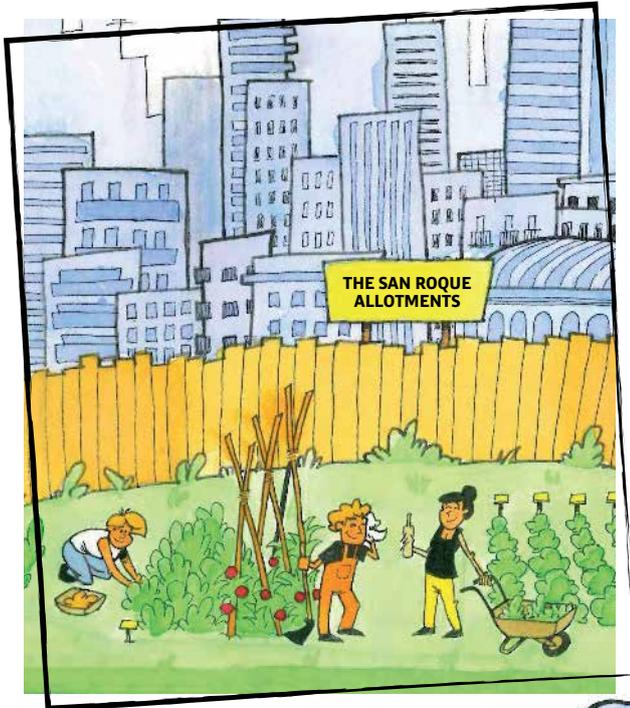




What our fridge is hiding



Activities

Look at these images and answer the following questions:

What do the cartoons suggest to you?

What is the relationship between them?

What do you think they are showing us?



Let's get the magnifying glass out

To do a good research job, we first need to understand, to have facts and collect information on what we want to study. And as we want to do research on food in this *Global Express*, we are going to look in the supermarket!

To carry out this task, you will need to go to the supermarket this week to do the weekly shop with your family. Once you are at the supermarket, you need to look at the origins of the fresh produce. Let's see if you can include large amounts of fish, meat and fruit in a table like the one below!

Product	Originates from...	Distance from the place of production

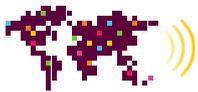
Activities

When you get home, try to place the products on the map.

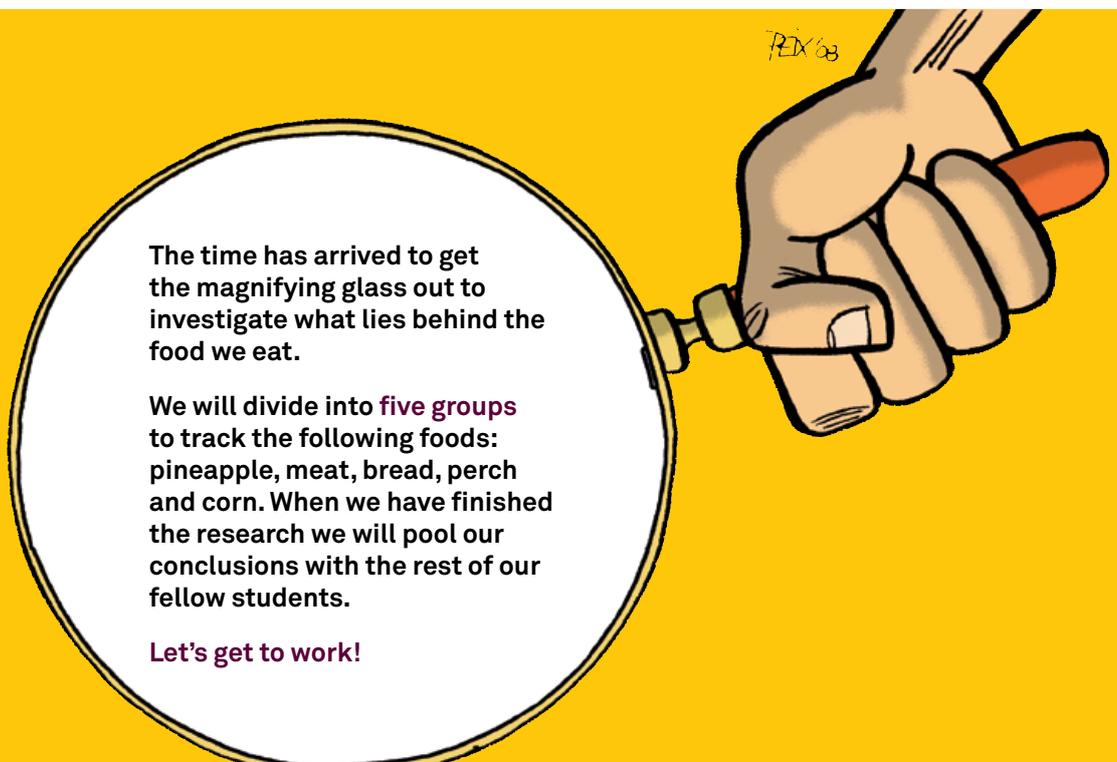


The link below will help you place the fish on the map: <http://www.fao.org/fishery/area/search/en>
On this website you will be able to find the FAO fishing areas and their codes, which is often what you will find on the product labels.

What does what you have discovered suggest to you?



On the food trail

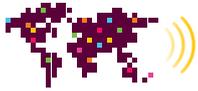


The time has arrived to get the magnifying glass out to investigate what lies behind the food we eat.

We will divide into **five groups** to track the following foods: pineapple, meat, bread, perch and corn. When we have finished the research we will pool our conclusions with the rest of our fellow students.

Let's get to work!





http://elpais.com/diario/2011/05/07/sociedad/1304719206_850215.html

Spain eats its fish quota in four months

- A report raises the alarm about external dependency because of depleted fishing grounds

WALTER OPPENHEIMER | LONDON | 7 MAY 2011

From 8th May, all the fish eaten in Spain will, at least from a statistical point of view, come from waters outside the European Union. Either caught from European boats in waters outside the Union or purely and simply bought from third countries. According to a study carried out by The New Economics Foundation (NEF) and Ocean2012, the Spanish have in just over four months eaten their entire annual quota from European fishing grounds, according to the most recently published data, 2007.

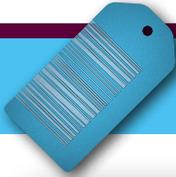
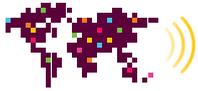
This external *fish dependency* is due to the combined effects of an increase in consumption of this food and the growing impoverishment of European fishing grounds, which means that the EU fleets have to resort to ever more distant fishing grounds. For example, in 1990 Spain did not depend on foreign fish until 18th June. And the EU supplied itself with European Union fish until 2nd September; now this runs out on 3rd July. There are countries where the situation has worsened more rapidly than Spain. If in Spain the dependency now arrives 41 days earlier than in 1990, in Italy it has advanced by 60, in Portugal by 73 and in France by 85 days. (...)

The EU has one of the biggest and richest fishing grounds in the world, but we have not really understood how to manage it responsibly, says Miquel Ortega Cerdà, political coordinator of Ocean2012, an alliance of organisations which argues for the transformation of the European fisheries policy to stop overfishing, to put an end to destructive fishing practices and to guarantee a fair and equitable use of fishing resources. The obvious way to stop this catastrophic trend is to restore European fish stocks to levels which would permit sustainable fishing and to only consume those fish we can catch safely, says Ortega.

The Portuguese are the biggest consumers, with almost 62 kilos per person per year. But among the countries with the bigger populations Spain has a clear lead, with almost 45 kilos, ahead of France (34), Italy (25) and the United Kingdom (20); all of these are way ahead of Germany (15) and Poland (11). This compares to a European average of 22 kilos a year and a world average of 17, almost double the 9 kilos consumed in 1960.

The consumer is not aware of the problem because the arrival of fish from outside the EU means that the price in Europe has not rocketed, despite the fact that it is an increasingly scarce resource. And so, whilst in 1995 the EU caught almost eight million tonnes of fish (live weight) in its own waters and only a little more than four million tonnes came from third countries, now more fish from outside the Union is eaten (almost six million tonnes) than fish from the EU (five million tonnes).





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Aniol Esteban points out that a study carried out some years ago showed that the British fishing fleet now needs to make an effort 17 times greater to catch the same amount of fish as it did over a century ago, despite the technological progress that has been made: this demonstrates the massive deterioration of the fishing grounds between then and now.

One of the solutions which have been sought is fish farming, but this brings with it both the risk of pollution and transmission of diseases and the massive use of wild fish to fatten up the farmed fish. If the consumption of fish from fish farms had not been taken into account, the situation in Spain would be even more negative. In that case, the dependency on fish from third countries would not be 8th May, but would move forward to 24th March.

The UN raises the alarm about ...

http://economia.elpais.com/economia/2012/10/30/agencias/1351623694_508633.html

The UN raises the alarm about the increasing pressure from big fishing companies

EFE ECONOMÍA | GENEVA | 30 OCT 2012 - 20:01 CET

The UN Special Rapporteur on the Right to Food, Olivier De Schutter, during a press conference in the Mexican capital. EFE/Archivo / EFE

De Schutter used the term 'ocean-grabbing' to describe the trend among the big companies in the industry to sign agreements which damage small-scale fishers, to not report on their catches, to encroach on protected waters and to divert the resources local communities need to survive.

This is a threat which could be as serious as land-grabbing, De Schutter said during the presentation of a new report on fish stocks and the right to food.

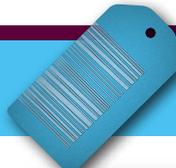
He warned that, without fast action to save the oceans from unsustainable practices, fish stocks will not be able to play their decisive role in ensuring the right to food for millions of people.

According to De Schutter, because of the increasing pressure on agricultural production, rivers, lakes and oceans are now being looked at to meet our growing daily protein requirements. (...)

In this context, the expert pointed out, it is obvious that fish stocks are lower, so the big fishing boats are tempted to break both the rules and also conservation strategies.

The report presented today indicates that the majority of the world's seas are exploited by the big fishing fleets, which is why De Schutter has requested an urgent review of the Licence and Access Agreements (LAAs), which regulate their fishing activities.

>>

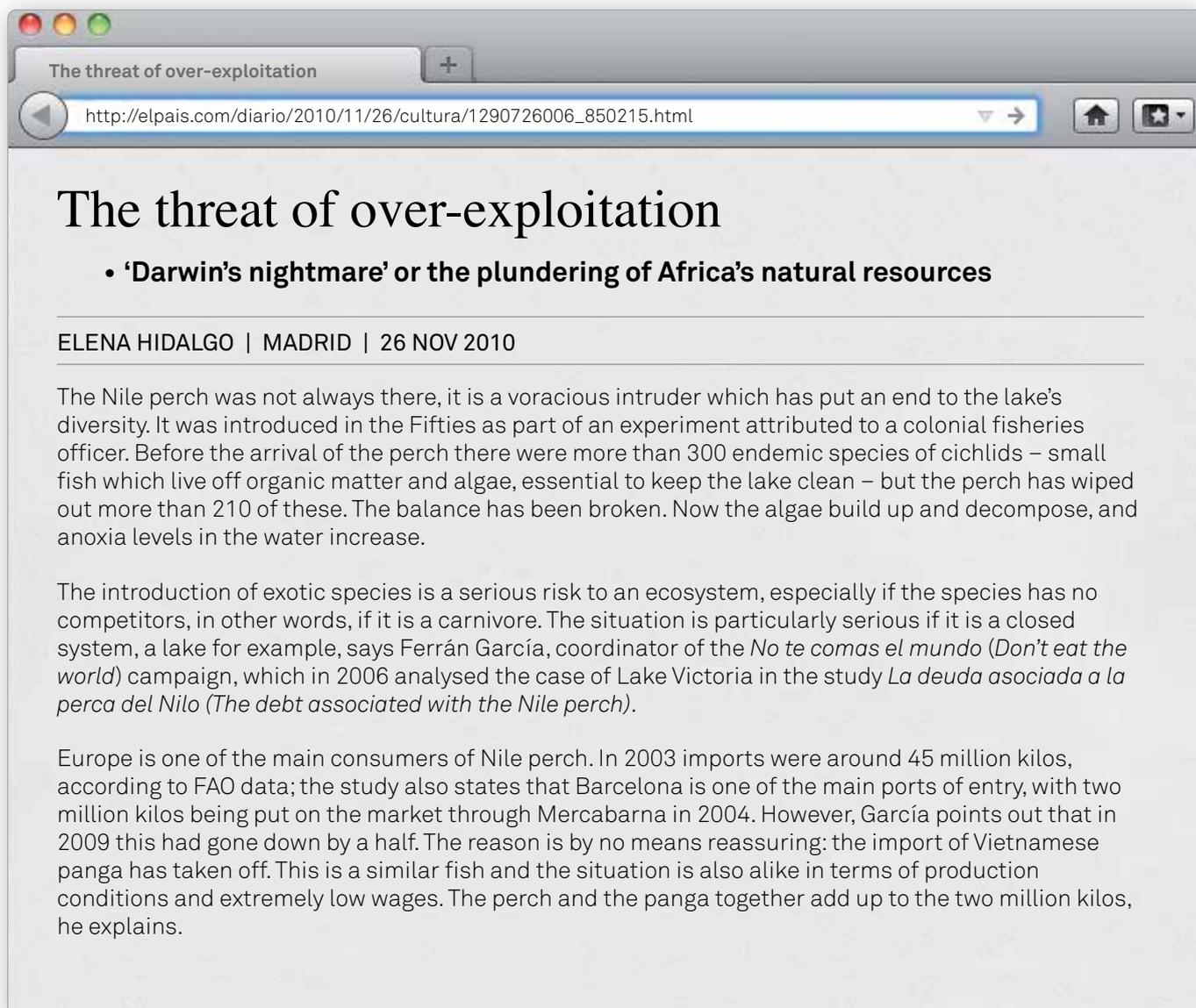


PERCH



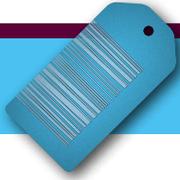
In his opinion, these agreements should include stronger surveillance mechanisms to tackle illegal fishing, to take into account the impact of large-scale exploitation on local communities and to strengthen fishers' employment rights.

De Schutter urged governments to think about the current fisheries model and to provide support to small fleets, which are much more efficient in terms of the relationship between expenditure on fuel, their catches and the volume of fish they discard.



The screenshot shows a web browser window with the following details:

- Tab: The threat of over-exploitation
- Address bar: http://elpais.com/diario/2010/11/26/cultura/1290726006_850215.html
- Article Title: **The threat of over-exploitation**
- Sub-headline: **• 'Darwin's nightmare' or the plundering of Africa's natural resources**
- Author: ELENA HIDALGO | MADRID | 26 NOV 2010
- Text: The Nile perch was not always there, it is a voracious intruder which has put an end to the lake's diversity. It was introduced in the Fifties as part of an experiment attributed to a colonial fisheries officer. Before the arrival of the perch there were more than 300 endemic species of cichlids – small fish which live off organic matter and algae, essential to keep the lake clean – but the perch has wiped out more than 210 of these. The balance has been broken. Now the algae build up and decompose, and anoxia levels in the water increase.
- Text: The introduction of exotic species is a serious risk to an ecosystem, especially if the species has no competitors, in other words, if it is a carnivore. The situation is particularly serious if it is a closed system, a lake for example, says Ferrán García, coordinator of the *No te comas el mundo* (*Don't eat the world*) campaign, which in 2006 analysed the case of Lake Victoria in the study *La deuda asociada a la perca del Nilo* (*The debt associated with the Nile perch*).
- Text: Europe is one of the main consumers of Nile perch. In 2003 imports were around 45 million kilos, according to FAO data; the study also states that Barcelona is one of the main ports of entry, with two million kilos being put on the market through Mercabarna in 2004. However, García points out that in 2009 this had gone down by a half. The reason is by no means reassuring: the import of Vietnamese panga has taken off. This is a similar fish and the situation is also alike in terms of production conditions and extremely low wages. The perch and the panga together add up to the two million kilos, he explains.



PERCH



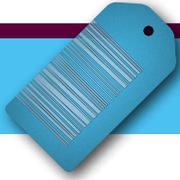
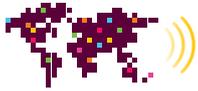
Activities

1. All these news articles talk about different problems concerning fish. Firstly, and individually, make sure that you understand the meaning of each article and the vocabulary they use. You can do this by talking about them with your classmates.
2. Summarise each article and give each one your personal headline.
3. You should all then share the headlines and summaries you have written for each article.
Come to an agreement on a single headline and a single message for each of them.
4. In small groups and using the previous exercise as a basis, try to define what you know and do not know about each of the subjects.
5. As we are working on the subject of fish, we have been given a task to do for our school's cultural week. We have decided to work on the theme of food and how we obtain it and we have been asked to design explanatory posters on our study topic.

Each member of the group (or pair) will be given responsibility for one of the problems we have been working on with the news articles and will have the responsibility of explaining their research conclusions to the rest of the class.

Before starting work, it is important that everyone in the group discusses what steps should be followed to carry out the work.

>>



PERCH



Activities

Your posters (1.5 m x 1.5 m) must include images and graphics to illustrate the information.

For each of the themes, we have been asked to explain:

- a) What is the problem? How serious is it?
- b) Who are the main characters involved?
- c) What are the causes? Why has the problem arisen?
- d) How can it be solved? Are any actions already in progress? If yes, indicate what exactly.

Here are some links which might help you with your work.

The state of world fisheries and aquaculture:

<http://www.fao.org/docrep/016/i2727s/i2727s.pdf>

A. On the overexploitation of fish.

<http://factsanddetails.com/world.php?itemid=2196&catid=53&subcatid=340>

<http://ocean2012.eu/>

<http://www.greenpeace.org/international/en/campaigns/oceans/overfishing/>

B. B. On the Nile perch.

<http://www.gisl.co.uk/megapesca/nileperch.html>

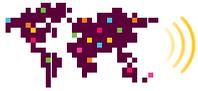
<http://www.issg.org/database/species/ecology.asp?si=89&fr=1&sts=&lang=EN>

C. On the fishing industry.

<http://ocean2012.eu/>

<http://www.greenpeace.org/international/en/campaigns/oceans/pirate-fishing/>

<http://worldwildlife.org/industries/wild-caught-seafood>



PERCH



Activities

FINAL CONCLUSIONS

7. Final conclusions

Look at the table below and try to fill it in after listening to your classmates' explanations.

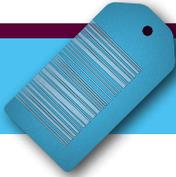
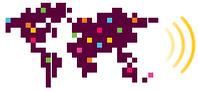
Put the name of the problem chosen by the group who worked on it.

PROBLEM 1

Could you summarise in one sentence what you have learned from this research?

Who are the main people involved? What role do they play?

In the cultivation, processing and/or marketing of the product, have you noticed any situation of inequality or of infringement of rights (human, environmental, employment, social)?



PERCH



PROBLEM 2

Put the name of the problem chosen by the group who worked on it.

Could you summarise in one sentence what you have learned from this research?

Who are the main people involved? What role do they play?

In the cultivation, processing and/or marketing of the product, have you noticed any situation of inequality or of infringement of rights (human, environmental, employment, social)?

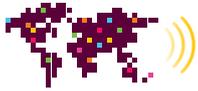
PROBLEM 3

Put the name of the problem chosen by the group who worked on it.

Could you summarise in one sentence what you have learned from this research?

Who are the main people involved? What role do they play?

In the cultivation, processing and/or marketing of the product, have you noticed any situation of inequality or of infringement of rights (human, environmental, employment, social)?



Bread in all its different varieties is the basic food for a significant part of the world's population. Its historical significance cannot be questioned: the Roman emperors, for example, knew very well that they had to offer bread and circuses to keep the population quiet; one of the main causes of the outbreak of the French Revolution in 1789 was the sudden increase in the price of bread; and after the Civil War the Franco government increased imports of yucca, a tuber similar to the potato, from Equatorial Guinea, a Spanish colony in Africa; its flour was added to bread dough to increase its volume. More recently, many experts connect the outbreak of revolts in the Arab world to price increases in basic products such as bread. But have you ever wondered about the importance of bread in our lives?

Activities

1. Firstly, would you be able to list the ingredients of bread?
2. Which of these ingredients do you think is the most important?
So, you would not think that such a simple product should be too expensive, would you?
3. How much do you think a 250 gram loaf of bread costs? Does it sound expensive to you?

Certainly for many people, a price of 80 cents or one euro does not sound too much. Even less so if we think about the price of some foods which, like meat, vegetables and fish, we eat on a regular basis. How-

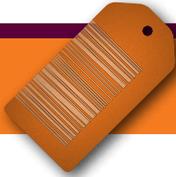
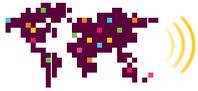
ever, you will be surprised to learn that in the last ten years the price of bread in Spain has increased by a factor of ten, while workers' salaries have not kept pace. And if we look at it on a global scale, we will see that,

given its role as a basic food for millions of people, a rise in its price could mean many people being put at risk of starvation.

Activities

4. What does this image suggest to you?
5. What do you think has caused the rise in the price of bread?





BREAD



However, if we investigate a little further, we will see that there are other things which cause the final price of a product to fluctuate widely. Here are two options to investigate a little further.

Option 1

Read the following articles and write down the issues which can also cause prices to fluctuate.

http://www.tomdispatch.com/post/175419/tomgram%3A_christian_parenti%2C_staff_of_life%2C_bread_of_death/#more

<http://www.bbc.co.uk/news/uk-19209693>

<http://www.bbc.co.uk/news/business-10866508>

http://www.grain.org/bulletin_board/entries/4323-speculation-drove-wheat-prices-up-while-supply-expanded

Option 2

Below there are a series of drawings. Try to find the relationship they have with the price of bread.



Photo: Marc Ninerola



Photo: Blog do Planalto - US Embassy Santiago, Chile



Photo: Pablo Tosco

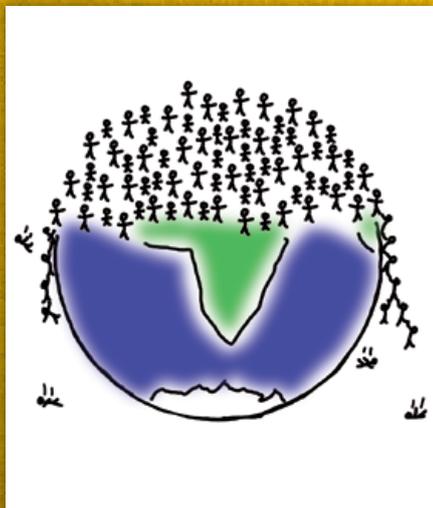
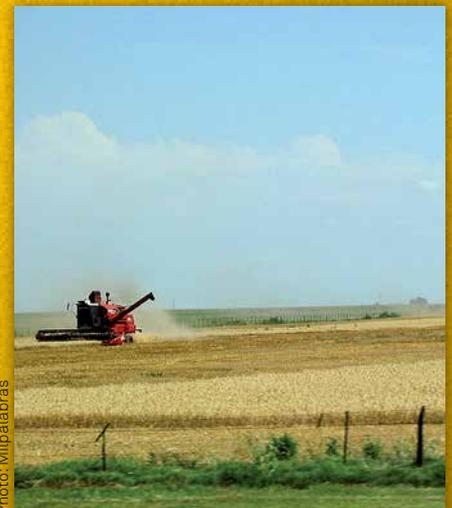
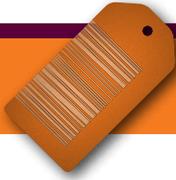
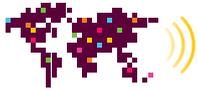


Photo: Milpálabras





BREAD



Activities

6. And finally, read the text below, bearing in mind the questions you will have to answer.

What is the strategy of some companies regarding the price of wheat? What effect does this have on the consumer?

Do you think this is a fair system? Why?

Why do you think this system is not regulated?

Do you think the consequences are the same across the world?

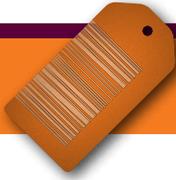
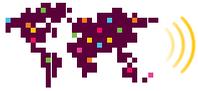
Currently, the production and marketing of wheat is governed by the strict laws of a globalised market. There are millions of farmers who sell their produce every year to companies who then distribute it across the world. Some of them, such as Cargill, can be found in more than 60 countries worldwide, with an annual turnover of \$120,000m, four times that of that of Coca-Cola, for example.

Cargill's marketing strategies are very risky from a business point of view and, without doubt, also dangerous from a social point of view. They try to control the maximum amount of wheat from the main producing countries, including the advance purchase of forthcoming harvests, which is known as the *futures markets*. Acquiring such a large amount of wheat gives them absolute control of the market. If the harvests are good, sales are made with no difficulty at all, although profits can be moderate. But if the harvest has been bad, does this then translate into big losses?

We are going to give you an example which is very revealing. In 2008 this company gambled on the probability that the bad harvests in Russia (one of the biggest producers in the world) would oblige its president, Vladimir Putin, to prohibit the export of wheat. The gamble, carefully calculated by

its analysts and cutting edge technology which predicts climatic situations, turned out very well. Cargill had previously bought large quantities of grain on the futures market from other countries, which they then stored in their warehouses. Faced with the widespread feeling that the bad harvests in Russia would result in a shortage of wheat, the markets panicked and Cargill began selling its grain at prices much higher than the previous harvest. On the one hand, this obviously resulted in big profits for the company but, on the other, an increase in the price of bread in many countries.

The Food and Agriculture Organization of the United Nations (FAO) has announced that the rise in the price of products such as wheat (84%), corn (63%) and rice (10%) is a threat to the many countries whose population depends almost entirely on these products. Although there are other parallel factors which add to this inflationary process (the rise in oil prices, climate change and the introduction of biofuel), food speculation is nowadays a fact. Many NGOs have, through their respective governments and international organisations, requested a regulation of the commodities markets. However, for the moment, speculators continue to play with food.



BREAD



Sources

<http://foro.webislam.com/showthread.php?7449-El-hombre-que-controla-la-alimentaci%F3n-del-planeta>
<http://economiaendostardes.blogspot.com.es/2011/05/especular-con-la-comida-es-bueno-o-malo.html>
<http://www.clubdarwin.net/seccion/negocios/cargill-es-acusada-de-especular-con-el-trigo>

Activities

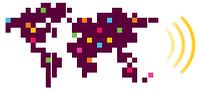
7. Final conclusions

FINAL CONCLUSIONS

Could you summarise in a phrase what you have learned from your research?

Who are the main people involved in your research? What role do they play?

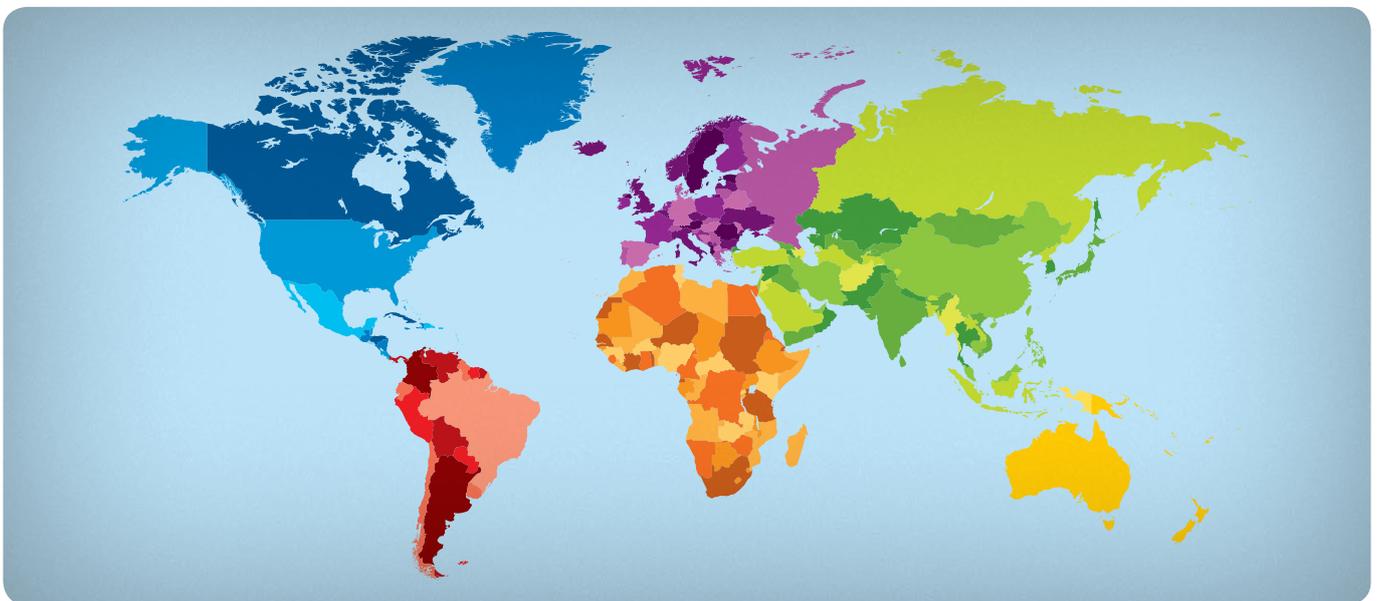
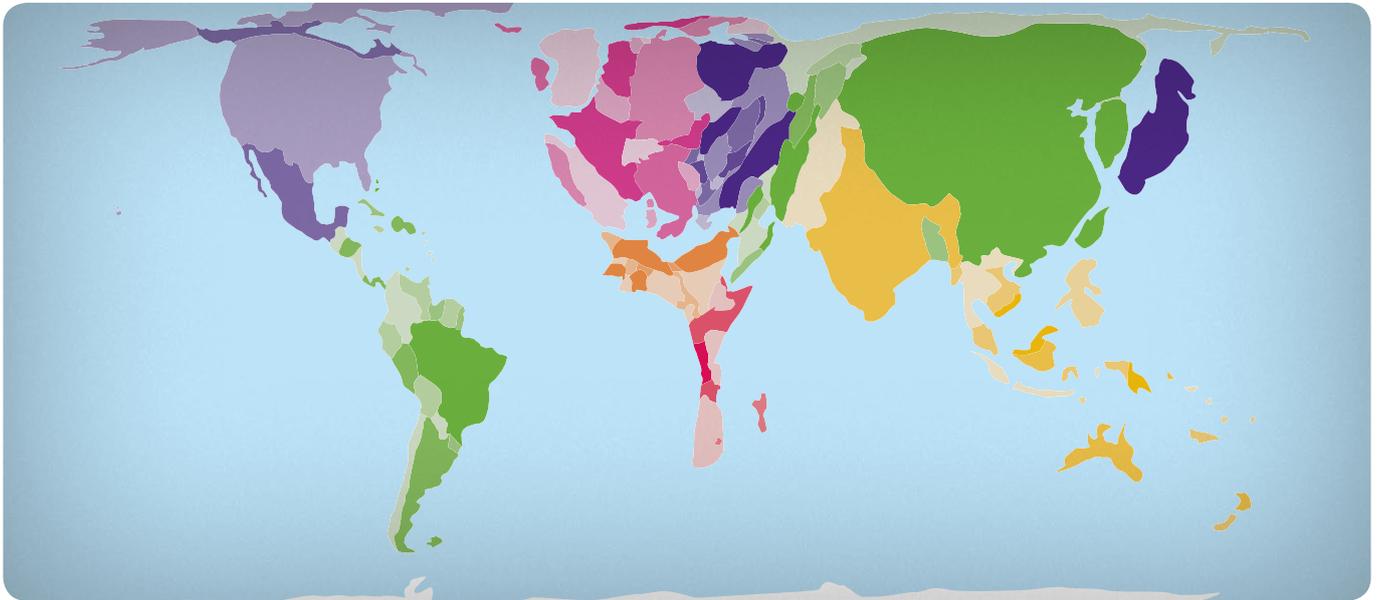
Have you been able to identify any situations of inequality or violation of rights (human, social, employment or environmental) in the cultivation, processing or marketing of the product?

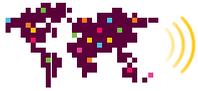


Activities

1. World meat consumption

The map below represents world meat consumption. The countries' shapes *expand* or *contract* in relation to their meat consumption. If you compare this map to a *normal* map like the one further down, what differences can you see? Where do they eat more meat?





MEAT



Activities

2. Beef or chicken burger?

It looks like quite a lot of meat is eaten in Spain. How much does it cost to produce this meat? We are going to do some calculations to find out.

To do our calculations, we will assume that the whole class is going to eat at a hamburger restaurant. How much beef does a hamburger contain?

Ask in a hamburger restaurant, because in many of them the weight of the hamburger is written on the menu. You can also look on the Internet, as most hamburger chains have all the information on their web page.

With all the information collected we can now calculate the amount of meat required to make hamburgers for everyone.

Once we know the amount of meat we need, we are going to calculate the ecological footprint of our meal in the hamburger restaurant. Producing beef uses a lot of water. More than 15,000 litres of water are needed to produce one kilo of beef.

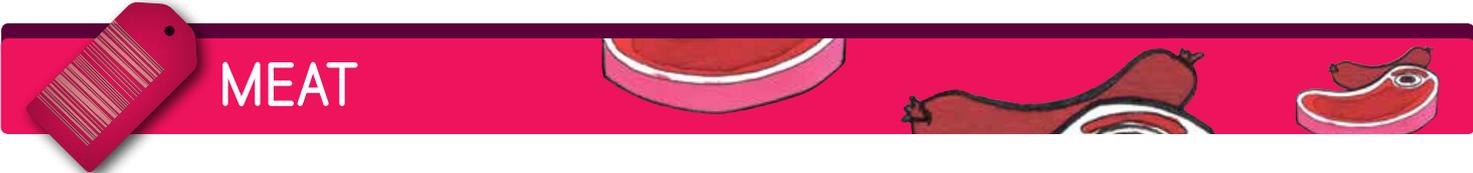
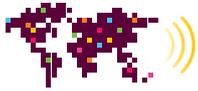
How much water was needed to produce our meal in the hamburger restaurant? Find the amount of water a person consumes per day and compare the figures.

In the table below, taken from <http://www.waterfootprint.org/?page=files/Animal-products>, you can find information on the amount of water needed to produce other foods.

		litre/kg	litre/kcal
	Vegetables	322	1,34
	Potatoes	387	0,47
	Fruit	962	2,09
	Cereals	1.644	0,51
	Legumes	4.055	1,19
	Milk	1.020	1,82
	Eggs	3.265	2,29
	Chicken	4.325	3,00
	Butter	5.553	0,72
	Pork	5.988	2,15
	Lamb	8.763	4,25

How much water would have been needed if we had asked for chicken burgers?

And how much to produce the fried potatoes we also ate?



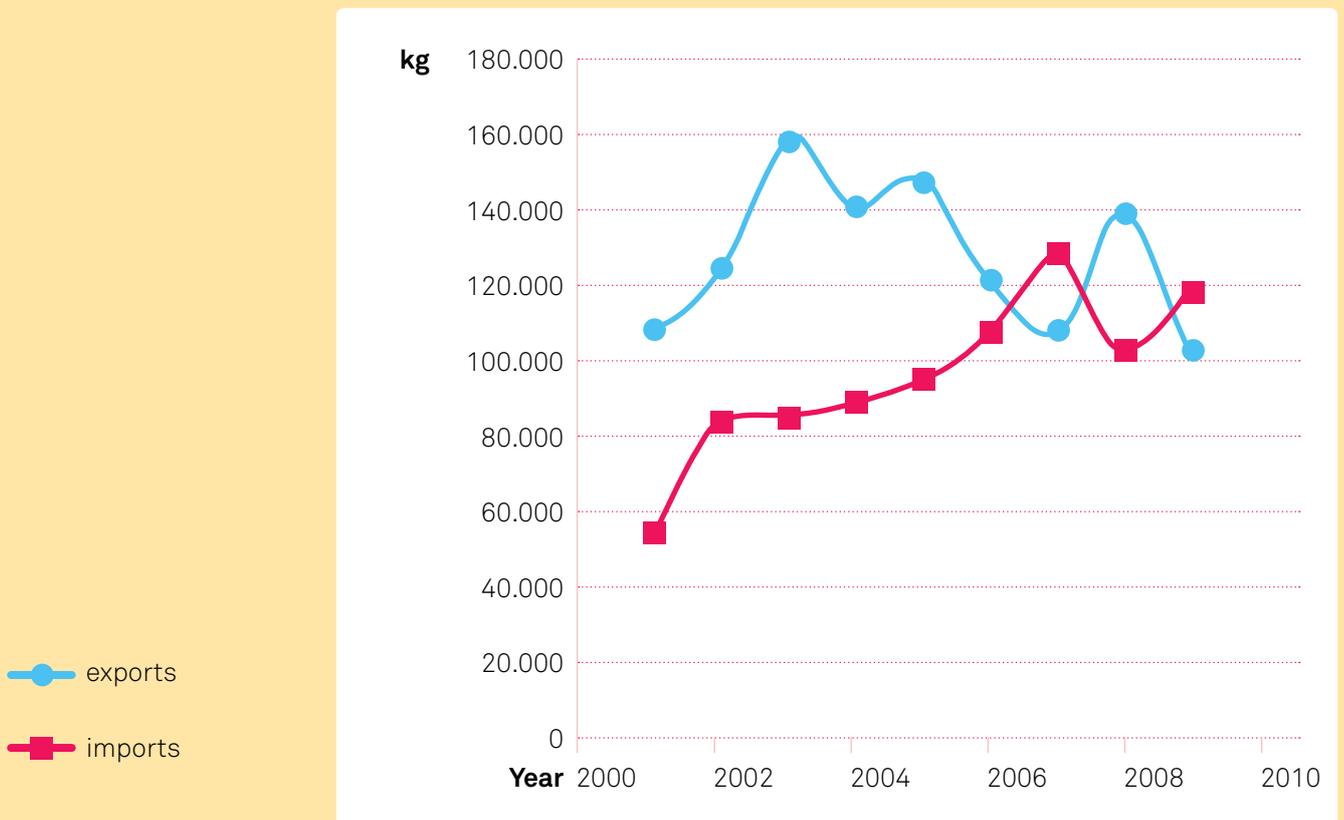
Activities

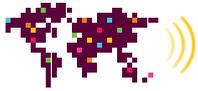
3. We consume meat... and energy resources!

As well as water, the production of meat also consumes a lot of energy. For every kilo of beef up to 1470 kcal calories are used for machinery, transport, etc. So we can calculate how many calories it has cost to produce our meal. Is it a large or small amount? As is always the case when we do calculations, we need to compare them with something else. We will use two comparisons:

- Calculate the calories contained in the hamburgers we ate in the meal. Again, you can find this information on the web pages of the hamburger chains. Compare the calories we have gained by eating the hamburgers with those needed to produce the meat.
- Diesel produces energy amounting to 7,320 kcal per litre. How many litres of diesel is equivalent to the energy required to produce our meal? How far could we travel in a car with this amount of energy?

One of the causes of this consumption of calories is the need to transport the meat. The following chart represents the amount of beef imported and exported by Spain in recent years. What does the chart suggest to you? Is there anything which does not fit, in your opinion?





MEAT



Activities

4. Cows eat too

The burger bun is made from wheat flour. Have you ever stopped to think that cows also eat wheat? Read the text below and talk about it with your classmates.

As an example, a field measuring one hectare will feed 22 people a year if potatoes are grown, 19 if rice is cultivated, two if it used to feed lambs and one if it used to feed calves. A meat-heavy diet requires around 4,000 m² of crops, while a diet which is basically vegetarian requires 1,000 m². On a global level, 50% of wheat, 70% of corn and 95% of soya goes towards feeding livestock. In 1999 the area devoted to pasture in the world was more than double that of crops.



That is why malnutrition in the South is related to the food and agricultural policies designed to satisfy the North's diet, which is much more meat-based.

Adaptation of a section of the article: Consum conscient de carn: aquí hi ha tall

Number 19 of Opcions (CRIC)

<http://opcions.org/sites/default/files/revistas/19Carn.pdf> (in Catalan)

In which countries do you think the wheat, soya and corn used to feed the animals, whose meat we then eat, are cultivated?

What is the main diet in these countries?

Had you realised that our diet had such a close relationship with the situation described in the last sentence of the text above?



MEAT



Activities

5. By way of a conclusion

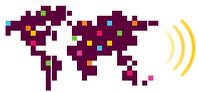
We have done a lot of calculations in this activity, which has allowed us to find out how much it costs to produce meat, especially beef. We are going to try and summarise everything we have learned so far by seeing if you can answer these three questions:

FINAL CONCLUSIONS

Could you summarise in one sentence what you have learned in your research?

Who are the main people involved in your research? What role do they play?

Have you been able to identify any situations of inequality or violation of rights (human, social, employment or environmental) in the production and marketing of meat?



Activities

In this research we are going to do a role-play; in other words, we are going to put ourselves in the shoes of the people in the situation we are going to read below, which is about whether genetically modified (GM) crops can be grown in a town, or whether it should declare itself a GM Free Zone.

Your objective is to forget your own ideas and opinions about genetically modified crops and accept and research those of the person allocated to you, as well as being clear about the points you are going to argue to make sure your point of view prevails. We will give you some arguments that you can develop to persuade the others.

OK, let's get to work!

Situation

Pinospuente is an overwhelmingly agricultural village where the countryside is the main source of wealth. There has been a significant loss in the competitiveness of its products and the community is now faced with the dilemma of whether to convert the sector by changing its traditional production methods, either by introducing genetically modified corn, or by moving over to organic cultivation, knowing that these are incompatible. The decision as to whether some of the farmers in the area can

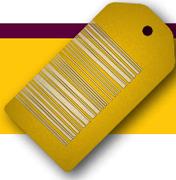
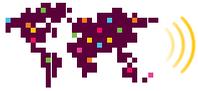
start growing genetically modified crops (OGMs*), or whether their district should declare itself a GM Free Zone, will be taken at a plenary session at the town hall.

You will all be given some time to prepare your arguments and the opinion you are going to defend, depending on the role you have been given in the plenary session. It is very important that you put your own ideas on the subject to one side and instead take on the role you

have been allocated, assume the arguments your character would use to defend his/her interests and develop good reasons to convince the others.

You will have to take a well-reasoned decision based on consensus (which a spokesperson will then explain to the group/class). You can nominate a mayor to act as moderator and to ensure that well-argued conclusions are arrived at.

* A genetically modified crop, or Genetically Modified Organism (GMO), is a living organism which has been artificially created by manipulating its genes. The genetic manipulation consists of isolating segments of DNA (the genetic material) of a living being (virus, bacteria, vegetable, animal or even human) in order to introduce these segments into another organism.



CORN



Characters



Mr. Smith

Arguments:

- 1) FAO (Food and Agriculture Organization) states: [...] that genetic engineering can play a part in raising production and productivity in agriculture, forestry and fishing.

Source: FAO. *FAO Statement on Biotechnology*

<http://www.fao.org/biotech/fao-statement-on-biotechnology/en/>

- 2) MON810 corn is a genetically modified variety of corn into which a gene from a bacterium (*Bacillus Thuringiensis*) has been introduced; this produces a toxin which acts as an insecticide. The aim is to increase the resistance of corn crops to insect attack and ensure their successful production.

<http://www.monsanto.co.uk/>

Mr. Smith, representative of Monsanto, a multinational which sells genetically modified corn seed, who will try his very best to convince them of his goodwill. Obviously, he will receive a very nice commission for the contract. (He will have to have learned the arguments in favour of GMOs very well).

Other ideas:

To counter the ecologists' objections

<http://dmedia.ucsc.edu/~bsharris/film%20170a/proj3/monsanto/biotech-gmo/asp/about.html>

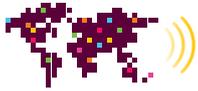
<http://dmedia.ucsc.edu/~bsharris/film%20170a/proj3/monsanto/biotech-gmo/asp/default.html>

The indisputable merits of genetically modified products

http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Genetically_modified_foods

Arguments to demolish the alleged risks associated with genetically modified products

<http://www.neoliberalismo.com/transgenicos-1.htm>



CORN



Ana



Ana, representative of the village farmers' association. Over the last ten years the farmers have witnessed profound changes in the agricultural sector which have resulted in their losing a great deal of competitiveness in an increasingly difficult market, in which the big distribution companies set conditions which are more and more difficult to comply with. Ana knows the countryside well and can see that farmers in other districts are in a similar situation. The association is well-informed about the corn sector and how genetically modified corn is gaining ground. The challenges Ana faces and the responsibilities of her job oblige her to look for a solution which allows them to maintain their production levels and lifestyle.

Arguments (situation of the sector):

- 1) The serious situation in the countryside, where the most important problems are: a) the gradual loss of profitability in agricultural production; b) environmental problems: climate change; ground and water pollution; c) the high level of dependency on fertilizers and pesticides with their rising prices, which is also a problem with the diesel for machinery; and d) the fact that it is becoming more and more difficult to sell their produce at prices above the cost of producing them.

<http://familyfarmingahap.weebly.com/family-vs-corporate-farming.html>

<http://www.ifad.org/events/agriculture/doc/papers/hazell.pdf>

http://www.ehow.com/list_6714075_problems-faced-small-farmers.html

http://www.ehow.com/list_6701354_problems-small-farmers.html

- 2) The dependency on the seed market; there are only a few companies active in this sector worldwide – some of which are linked to the marketing of genetically modified products – and inevitably they are increasingly dominant, and the consequent dependency on fertilisers, pesticides... and the environmental consequences (soil impoverishment which means the land needs more fertiliser and has lower production capacity; and the subsequent water pollution).

Report on the world agricultural situation:

<http://www.fao.org/docrep/014/al978s/al978s00.pdf> (in Spanish)

Other ideas:

Small farmers suffocated by the big distribution companies

<http://www.greenpeace.org/international/en/campaigns/agriculture/solution-ecological-farming/>

http://ec.europa.eu/agriculture/organic/organic-farming_en

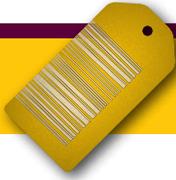
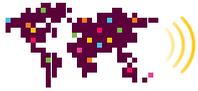
The farming subsidies (CAP) favour big landowners

http://www.youtube.com/watch?feature=player_embedded&v=dz_rMvIPEDI

Agricultural production dominated by a small number of companies
Can organic farming be an alternative?

http://ec.europa.eu/agriculture/organic/organic-farming_en

As her association's representative, she has the responsibility of deciding what will best suit the interests of her associates, thereby ensuring the sector's survival.



CORN



María

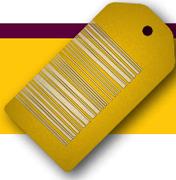
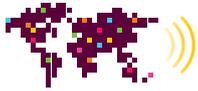


María, mayor of Pinospuente.
We suggest making her a bad character (example: mayor)

The mayor, who has held the post over three mandates and has quite a lot of influence in her party at regional level, is looking for recognition to further her political career. In the dilemma, she takes the position that genetically modified crops are an opportunity for the rapid creation and development of wealth for the village. Some even say that the company which produces genetically modified seed has offered her a very nice commission if her town goes ahead with the planting of these crops.

Arguments:

- 1) Emphasises the substantial economic benefits and the growth opportunities that genetically modified crops could bring to the town.
- 2) Argues that GMOs are the future and you cannot stand in the way of progress, pointing out that large-scale production could put them at the forefront of innovative agriculture and that the opportunity to be among the towns which first establish the use of these crops should not be missed.
- 3) Advantages of GMO
<http://www.pgeconomics.co.uk/page/33/global-impact-2012>
<http://www.guardian.co.uk/environment/2012/oct/13/gm-food-crops-genetic-modification>
- 4) Arguments to counteract the alleged risks posed by genetically modified products
<http://www.who.int/foodsafety/publications/biotech/20questions/en/>



CORN



David: belongs to an environmental group which fights against the introduction of genetically modified crops, especially genetically modified corn. His association has a whole range of arguments, which he will need to prepare very carefully for this crucial council session, where the future of the district will be decided.

David

Arguments:

- 1) Current scientific knowledge is not sufficiently advanced to accurately predict the consequences of these modifications, nor how they will evolve or interact with other living organisms once a GMO has been released into the environment.

The production of genetically modified organisms is mostly the creation of multinational companies who are only interested in generating enormous profits with the lowest possible costs.

In France, the cultivation of Monsanto's MON810 genetically modified corn has been banned.

- 2) In the case of corn, new varieties have been produced which are designed to resist the indiscriminate use of the herbicides produced by the same multinational companies (Monsanto, Novartis, Du Pont, etc.). Resistance to herbicides allows the plants to be sprayed with large amounts without being killed, or allows them to resist insecticides which are even more toxic than usual.

Other ideas:

The business of agrochemical corporations

<http://www.greenpeace.org/international/en/campaigns/agriculture/problem/Corporate-Control-of-Agriculture/>

Consequences for health

<http://www.stopgm.org.uk/whats-wrong-with-gm/gm-health-risks.html>

Other consequences:

Pollution and environmental deterioration

<http://www.greenpeace.org/international/en/campaigns/agriculture/problem/genetic-engineering/>

Displacement and socioeconomic situation of their cultivation

http://www.ecoport.net/Temas_Especiales/Transgenicos/Soja_transgenica_Milagro_o_maleficio._Las_dos_caras_de_una_misma_cosecha (Genetically modified soya: miracle or curse. The two faces of the same harvest. In Spanish)

Problem of coexistence of genetically engineered crops, or not

<http://www.greenpeace.org.uk/gm/coexistence>



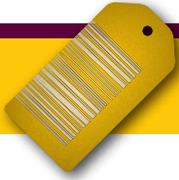
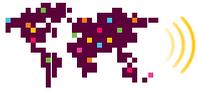
Genetically engineered crops do not feed the world: 99.5% of farmers do not grow them.

<http://www.greenpeace.org/international/en/news/Blogs/makingwaves/why-the-eu-should-not-follow-ge-path-to-agric/blog/42775/>

You could also include information about what has happened in other regions where crops have been intensively planted.

Raquel Vásquez, coordinator of the Assembly of Rural Women.

It is affecting us because the monoculture crops are African palm, cane, pineapple... It affects us because of pollution, because the entire production is treated with chemicals, and then there is the diversion of rivers to these fields. When there are heavy rains, the change in river courses results in flooding. Now we are experiencing very bad pest infestations. The planes spray and this poison, which is supposedly for the plantations, drifts across the rest of the countryside and causes illnesses, skin spots, allergies... If we do not vaccinate the animals, they die. (...) if they eat the grass, sometimes they are infected. This goes against food security. Last year a pest infestation caused the loss of the corn and then the floods meant everything else rotted. We ended up with rotten corn that could not be eaten. As we did not have corn, we were obliged to buy imported corn, which was often rotten as well, or contaminated. We are also proposing to the government that if there is corn there should be guarantees and this food should be reserved. In addition, as I said before, the land has been badly damaged; it does not produce as it did in the past. And so people are obliged to buy products which are not 'ours'. We are bombarded with products which do not come from our own baskets. We do not want to depend on imported products. Those of us who have land, what we want to do is to produce, we do not want to experiment with strange things, like beans for example, which are also possibly genetically modified... Because here we know what we want to sow. Instead of bringing us products which are not ours, why don't they help us reactivate production in a way that fits with the wishes of the community?



CORN



Activities

Are we all ready now?

This is the moment when you start the town council's plenary meeting, so you must follow and respect the golden rules of dialogue: taking turns to speak and listen; only speaking when the moderator, in this case the mayor, gives you the floor; and finding the best arguments to put forward.

Final conclusions

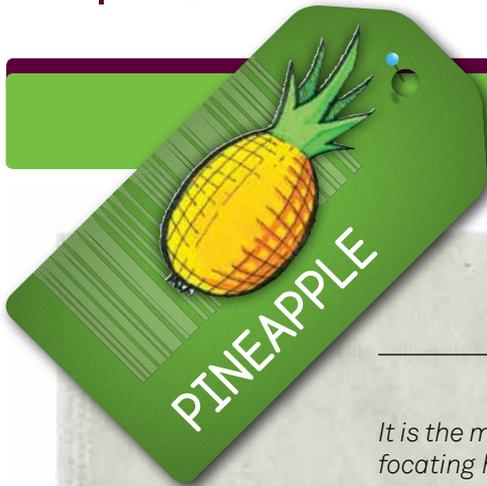
Once the meeting is over, you must summarise the conclusions of the debate and select the four or five most important arguments for and against.

FINAL CONCLUSIONS

Could you summarise in one sentence what you have learned in your research?

What are the positions which play a part in your research? What is their role?

Have you been able to identify any situations of inequality or violation of rights (human, social, employment or environmental) in the cultivation, processing and/or marketing of the product?



It is the middle of the morning and the suffocating heat of the Costa Rica rainy season has turned the air over the plantations leaden. On the horizon, where the spikes of thousands of pineapple plants merge into a grey-green fog, sits a spraying machine. Settled and silent for now, like a giant insect which has just landed in search of prey. Its large articulated arms are folded

back above its head, while its belly, a tank on the trailer behind the machine marked with the skull and crossbones warning, is being refilled with its next toxic load. Suddenly the whine starts up again, the arms unfold, the spray nozzles open, and the insect starts implacably to spit out its poison around it.

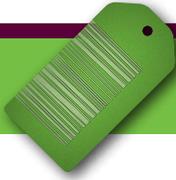
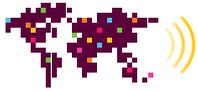
(adapted from The Guardian):

<http://www.guardian.co.uk/business/2010/oct/02/truth-about-pineapple-production>

Activities

1. This is the web page of the fruit company **Fyffes** (www.fyffes.com), which produces and markets fruit around the world. What feelings is the company trying to inspire with its design?





PINEAPPLE



Activities

2. We all know that pineapple is one of our favourite fruits and many of its properties are beneficial for our bodies. As well as providing vitamins and minerals, pineapple aids digestion and blood circulation and eliminates toxins. Some studies show anti-carcinogenic and anti-inflammatory effects. However, did you know that the pineapple can also be very harmful to human beings? Look at the list below of the effects pineapple has on the body and decide how this is possible:

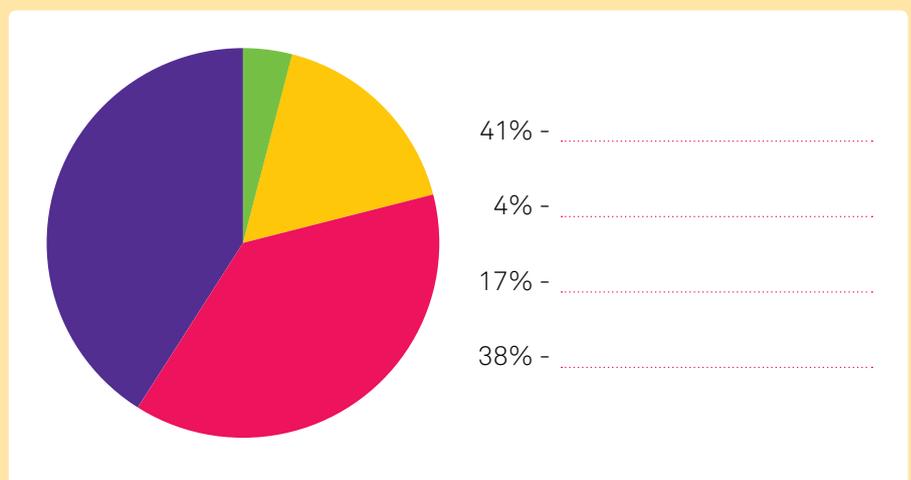
- Eye damage and loss of vision
- Nausea and vomiting
- Skin irritation
- Depression
- Exhaustion
- Injuries and cuts
- Throat irritation
- Lung damage

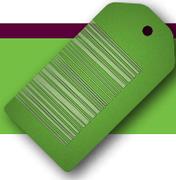
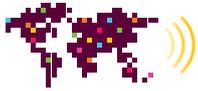
3. As you will have certainly guessed, it is not about the effects of eating pineapple, but of its **cultivation**. In fact, working on the plantations is very hard, exposes the workers to difficult environmental and employment conditions, and to the many different chemicals used as pesticides. We suggest you investigate how the pineapple arrives on our tables from the countryside, and answer the following questions.

- Where do most of the pineapples we eat come from?
- Who controls the pineapple business? How much has the pineapple business grown in recent years?
- How are the profits generated by the pineapple business shared among the (1) workers, (2) multinational distributors, (3) retail businesses and (4) plantation owners?

Sources you can consult:

<http://www.frutasjustas.org>
<http://www.guardian.co.uk/business/2010/oct/02/truth-about-pineapple-production>





PINEAPPLE



Activities

4. Many NGOs, associations, trade unions and (a few) media organisations are echoing the demands of the workers in the sector, but the vested interests which have emerged are silencing these voices to stop the truth about pineapple production reaching the consumers. However, a documentary produced by *The Guardian* newspaper two years ago has had a certain amount of impact in the sector and a number of companies have felt obliged to implement measures to clean up their act in order to pacify the many people who, tired of contributing to employment and environmental exploitation in Costa Rica and other pineapple-producing countries, are protesting about the situation.

We suggest you watch the video and take notes so that you can summarise what it says, and then answer the following questions:



- Who are the main people affected by the pineapple business?
- What are the main problems that concern them?
- What difficulties do the people affected when they try to complain or find solutions to their problems?
- Does the video offer a solution to their problems?

<http://www.guardian.co.uk/environment/video/2010/nov/10/pinas-coast-rica>

Summary:

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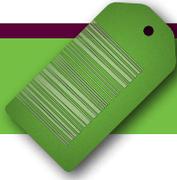
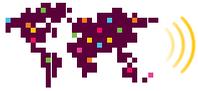
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PINEAPPLE



Activities

5. In the international pineapple business and in the fruit industry in general, it is women workers who suffer the worst working conditions. Read the article below and have a class discussion about the aspects which most catch your attention:

Respect and dignity for women ...

http://www.bananalink.org.uk/respect-and-dignity-women-agricultural-workers-0

Respect and dignity for women agricultural workers

In Honduras, melons represent 11% of agricultural exports. They are grown mainly by women, who represent two thirds of workers. Human rights violations in the industry are widespread and include insecure contracts, long working days, wages below the national minimum level, discrimination, and almost non-existent access to health services.

Fyffes (www.fyffes.com), one of the biggest multinational companies in the fruit sector and traditionally a banana producer and exporter, has extended its business to include melons and pineapples; these now represent a third of its income. Fyffes is proud to supply the first-class fruit it obtains, whilst respecting the environment and its producers. However, the women who work on the melon plantations which belong to its Honduran subsidiary, Suragro, wonder about the amount of respect they receive.

In August 2011, COSIBAH, a coalition of trade unions, initiated a research into the conditions the workers from 600 households work under in the main production areas.

The research revealed that the women are mainly young single mothers with 4-5 children to provide for. The melons are grown in greenhouses on a seasonal basis, from April to September, and all the women are employed on seasonal contracts. Only men have management contracts, the only opportunity for permanent employment in the sector. With little knowledge of women's rights, the unions are unable to organise themselves to defend them in this kind of insecure work, and business owners actively suppress the right to join a union.

Workers are paid less than 70% of the national minimum wage, which in itself is well below what could be considered a decent wage. The working day is very long – sometimes the women have to wake up at 3 a.m. to get to their place of work and do not get home until between 8 and 10 p.m. – and they are not paid overtime.

The overwhelming majority of women do not have access to effective social security cover. However, accidents at work (particularly those related to the use of machinery) and health problems caused by intensive use of agrochemicals (respiratory diseases, skin problems and sight) are common and made worse by the lack of appropriate protection equipment.

>>



PINEAPPLE



Although access to the national social security system is supposed to be guaranteed, workers often do not pay their contributions, so women are denied access to services, especially health services. Where access to private medical services is an option, the medical services are too far away to respond in time to accidents on the plantations.

Tot i que l'accés al sistema nacional de seguretat social hauria d'estar garantit, sovint els empresaris no paguen les contribucions, i per tant neguen a les dones l'accés als serveis, en particular als serveis de salut. Allà on hi hagi accés a l'atenció mèdica privada, els serveis mèdics són massa lluny per respondre a temps als accidents a les plantacions.

Adapted from: <http://www.bananalink.org.uk/respect-and-dignity-women-agricultural-workers-0>

Activities

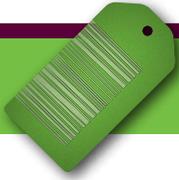
6. Grupo Acon, one of the pineapple-producing companies, wrote to *The Guardian* defending itself from the accusations. These are the main points they used in their defence:

- The pineapple business earns Costa Rica more than 700 million dollars.
- The industry creates more than 25,500 direct jobs and thousands more indirect ones.
- The workers and companies generally have a good relationship; proof of this is the low level of union activity and an extremely low level of conflict.
- Pineapple workers on the whole earn more than the Costa Rica national minimum wage, 73 euros weekly, as opposed to 62.
- The companies provide their workers with the tools and the safety equipment needed to protect their health.

However, the question is:

have they really listened to what their workers are saying?

Do they believe that these arguments and the idyllic vision of the fruit on the web page of the initial activity correspond to the *whole* reality?



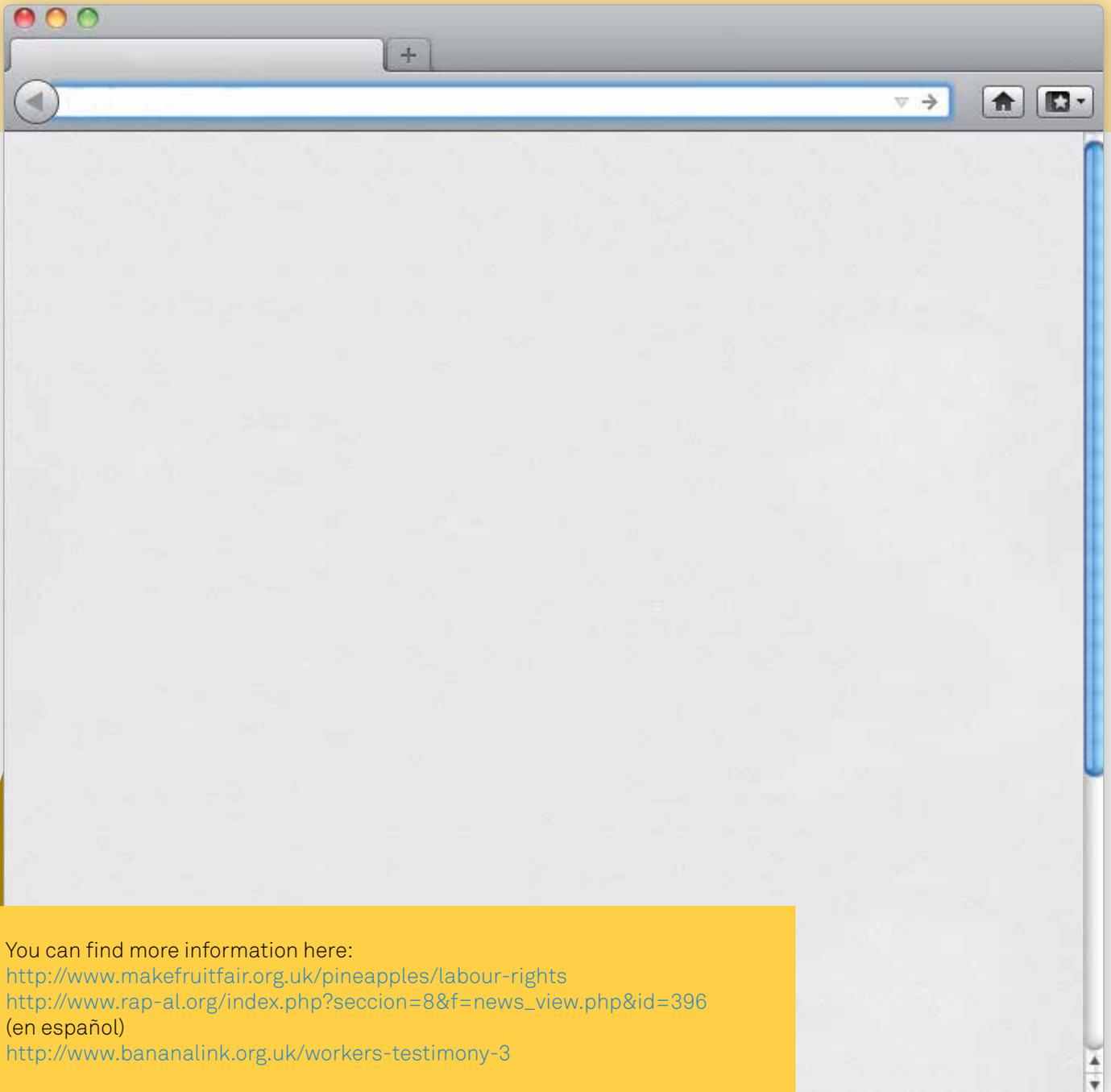
PINEAPPLE



Activities

NOW IT IS OUR TURN TO ANSWER THE FRUIT COMPANIES

We suggest you redesign the Fyffe's company web page, giving a more realistic and critical view of what the fruit business is hiding. Do not forget to include drawings or photos, the links you would include and some eye-catching slogans. It is only a rough draft; it is not a real web page.

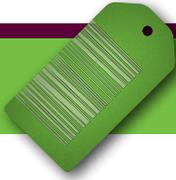
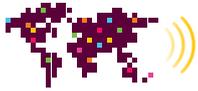


You can find more information here:

<http://www.makefruitfair.org.uk/pineapples/labour-rights>

http://www.rap-al.org/index.php?seccion=8&f=news_view.php&id=396
(en español)

<http://www.bananalink.org.uk/workers-testimony-3>



PINEAPPLE



Activities

7. Final conclusions

FINAL CONCLUSIONS

Could you summarise in a phrase what you have learned in your research?

Who are the main people who took part in your research? What role did they play?

Have you been able to identify any situations of inequality or violation of rights (human, social, employment or environmental) in the cultivation, processing or marketing of the product?



Sharing conclusions

The big day has arrived: our research teams are meeting at the Annual Congress of Food Research. All of the teams will explain the conclusions of their research to the rest of the class.

What conclusions can we make about the food system, now that we have listened to our classmates?

You can share your conclusions on the Food for Thought blog (www.classforchange.org)

Alternatives: the choices you make when you eat could change the world

Far from just being individual consumers, which is something we are often led to believe, we are active agents, with a critical and informed attitude, and with the ability to organise ourselves collectively; this is the essential formula to be able to construct alternatives to our current food system.

To make sure that people cannot now say there are no alternatives, we have provided you with some suggestions below:

1. Fair trade



This is an alternative form of trade promoted by a number of NGOs, social movements and the UN to establish a transparent and fair trading relationship between producers and consumers. It acts as a guarantee to consumers that the products they buy have been processed in decent conditions, without exploitation, with fair wages and which are marketed without intermediaries or distribution chains which impose abusive rules.

<http://www.fairtrade.net/>

2. Cooperatives and consumer groups

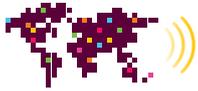


Photo: Donostia - San Sebastian 2016

In organic consumer cooperatives consumers meet and have direct contact with producers to buy their food and share responsibilities, promoting a production system which is socially fairer and respects the environment, and avoiding the energy consumption associated with adding extra links in the distribution chain.

<http://www.co-operativefood.co.uk/welcome/>

<http://www.chicagofoodcoop.org/>



3. Neighbourhood shopping and small businesses, giving priority to local produce

Photo: Casa FdE Porto Alegre



According to the Centro de Investigación e Información en Consumo (CRIC) (Centre for Consumer Research and Information: in Catalan), we could keep a light bulb switched on for 800 hours with the energy we consume by going to do the shopping in the car. In addition, we can support small businesses, favouring the local economy and establishing closer contact with the seller. Local shopkeepers usually know where the food has come from.

4. Organic food



This is less intensive in its energy consumption than conventional produce. If the food is fresh, locally-produced and seasonal, the energy costs associated with its distribution and maintenance are also reduced and a more humane food system in harmony with the environment is reinforced.

<http://www.agricultura-ecologica.com/> (in Spanish)

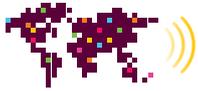
5. Urban and social allotments

Photo: Israel García



Social and urban allotments are initiatives promoted by associations, sometimes even by town councils, to develop horticulture with the aim of bringing awareness-raising activities and food production systems to the community outside the usual system of buying it in supermarkets, putting them forward even as an alternative way of producing and consuming.

<http://www.fruitfullschools.org/>
<http://thelondonorchardproject.org/>
<http://cityfruit.org/about/about-city-fruit/>



6. Let's be responsible and well-informed consumers



A responsible consumer is someone who buys only what is necessary and is concerned with whether the products are environmentally sustainable and socially fair.

<http://www.goodplanet.info/eng/Economy/Responsible-consumer/Ethical-consumerism/%28theme%29/277>

<http://www.ethicalconsumer.org/home.aspx>

7. Mediterranean diet

The Mediterranean diet is rich in fruit, vegetables, cereals, legumes and fish, low in meat and does not include ready-made food.

<http://www.youtube.com/watch?v=JWwkiaY1yVg&feature=g-logo-xre>

