OUR STORIES

PROTECTING OUR PLANET IT ALL BEGINS ON OUR PLATES

by Josick van Dromme, DG DEVCO

As a Coordination Officer at DG DEVCO, I deal with reporting and planning for thematic programmes. Based on international reports and studies, here are my personal views on how we can contribute to tackling climate change through what we choose to eat.

limate change is happening – despite conspiracy theorists' assertions. In its 2014 Assessment Report, the Intergovernmental Panel on Climate Change confirms that *"human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history",* with *"widespread impacts on human and natural systems."*

In 'developed' countries, it often seems not to affect our daily lives yet – which is probably why we do not recognise its gravity and continue to live 'as usual'. In developing countries, on the other hand, the consequences are more visible and dramatic – with rising sea levels drowning low-lying island States, wider climatic events like El Niño/La Niña, floods and droughts, food and water shortages occurring more frequently and severely – with more damage to populations, economies, and political stability.

Food production's role in climate change

The second cause of global warming is the production of meat and dairy, accounting for 14.5% to 18% of greenhouse gas emissions – more than all transport (see FAO Reports on 'Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities', 2013, and 'Livestock's long shadow', 2006). Global warming has further negative impact on crops. According to the Earth Policy Institute, a 1°C increase in temperatures in the US in 2014 resulted in a 10% decrease in crop yield.

Veal, beef and lamb are the worst in terms of emissions, followed by pork and cheese. Chicken and eggs generate far fewer emissions, while beans (including soya, chickpeas, etc.), lentils, wheat and oats – all excellent sources of proteins – produce remarkably fewer emissions than beef – around 23, 51, 78 and 81 times less (calculation based on a global average of 46.2 CO₂ equivalent per kg of beef (FAO 2013 figure) – which is even higher than in the graph below, dating back to 2007). For specialised beef production, CO_2 equivalent per kg goes as high as 67.8.

And the picture does not get rosier – the consumption of meat and dairy is expected to rise by 76% and 65% respectively by 2050 (against a 2005-07 baseline), resulting in increased emissions, despite improved agricultural productivity and efforts to mitigate emissions on the supply side. This is inconsistent with the downward trend in agricultural emissions needed to keep global warming below 2°C and avoid catastrophic climate change.

Other impacts on the planet

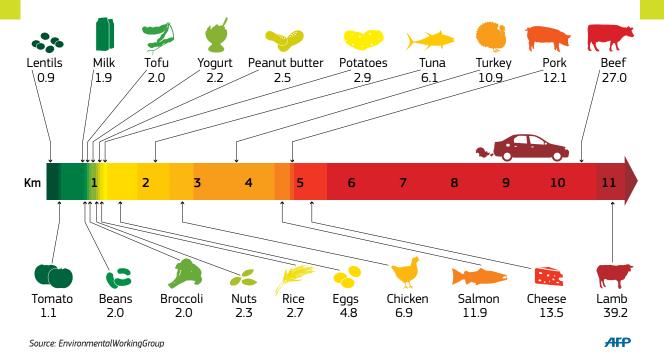
There are quite a few other impacts on the planet.

- Land use 75% of the world's agricultural land is used to raise animals (farming, ranching, and feed production), also leading to deforestation. 85% of the Amazon rainforest **deforestation** is caused by cattle ranching and animal feed production, causing more greenhouse gases to be released. In parallel, local communities' rights are often threatened by aggressive land appropriation.
- Food security 40% of all crops are fed to animals, contributing to rising grain prices and increasing risk of food scarcity in developing countries. Overfishing depriving developing countries of local fish is also related to the livestock industry, as fishmeal is fed to chicken and pigs.
- Water security producing meat and dairy accounts for 53% of the EU's water footprint, of which 40% outside of the EU – thus increasing water scarcity in vulnerable countries. For example, 15,500 litres of water are necessary to produce 1 kg of beef – the equivalent of one shower per day for a year!

Carbon footprint of what you eat

Calculations of greenhouse gas emissions from the production, processing and transportation of specific food items

- Main chart compares 110g of food against a journey in a midsized car
- Number shows kg of carbon dioxide equivalent produced per 1kg of food



- Pollution soil, freshwater and marine ecosystems are contaminated, for instance, by heavy metals, antibiotics, and nitrates – including 'green tides' of toxic algae in EU coastal areas caused by intensive pig farming.
- Biodiversity around 30% of global biodiversity loss is attributed to livestock production (deforestation, land conversion, degradation of grasslands, desertification). Overfishing also accounts for massive destruction of marine biodiversity.

The need for individual action

Despite the current scale and projected increase of emissions from the livestock sector, the issue attracts remarkably little policy attention at either the international or national level, as emphasised by the recent survey 'Livestock – Climate Change's Forgotten Sector' (Chatham House, 2014). Where policies exist – including at EU level – they mostly focus on efficiency improvements, which will not be enough, considering consumption trends. Moreover, as the Chatham House survey notes: *"The dearth of policies and funding* to tackle livestock emissions stands in marked contrast to the abundance of government support afforded to meat and dairy producers. [...] In the EU, cattle subsidies alone exceeded \$731 million, equivalent to \$190 per cow." Action, therefore, at individual level and at the work place is all the more crucial.

Consumers are often unaware of their food choices' impact. As the Chatham House survey shows, the awareness gap is particularly large for livestock compared to other sectors. Awareness-raising – among colleagues, families, and citizens – is very important. After all, we all live on the same planet and are trying to preserve it for future generations.

A win-win choice

By reducing your meat and milk consumption, not only will you have a positive impact on the planet but you will also improve your health. Recent studies show that red meat consumption increases mortality risks by 12% to 20%, while high milk consumption increases oxidative stress, which in turn affects mortality and fracture risks (see European Perspective Investigation on Cancer and the British Medical Journal study on 'Milk intake and risk of mortality and fractures').

What is 'red meat'? People often think that veal and pork are 'white' meats. But, in fact, pigs are drained of their blood, and veal's colour is obtained by injecting substances into calves or by altering their feed. Higher iron results in redder meat, which has a lower market value. Thus, red meat covers beef and lamb, but also veal and pork, as well as horse.

And when you consider the birth-to-death suffering of animals in industrial farming, reducing your consumption of meat and dairy becomes a 'triple win'.

Alternatives to meat and dairy

Alternatives to meat and dairy are easy to find, and quite tasty, especially if prepared with herbs and spices. You can find tofu products (including the very nutritious tempeh), falafels (chickpea balls or burgers), soya and almond milk in most supermarkets now. You might also want to buy at organic shops to avoid pesticides – and you might be surprised to find such foods as chickpeas, lentils, wheat, oats, and buckwheat are cheaper, often costing less per kilo, when sold in bulk. Very good sources of calcium such as kale, cabbage and broccoli – so-called 'cruciferous' vegetables – are also quite cheap. (See links below for more useful tips on plant-based nutrition.)

An institutional response?

To refrain from serving red meat and dairy products at events organised by EU services – such as seminars, conferences, trainings, or luncheons – would be a logical choice. Because such a choice would be consistent with EU policies and objectives in terms of sustainable and fair development – bridging the gap between what we recommend to the outside world and what we concretely do inside.

Some colleagues might question this on the basis of 'individual freedom'. And they would be right as far as their own home is concerned. While in the future there may be price disincentives for high carbon-footprint food (as is the case for more polluting vehicles), nobody will force them to choose what is 'right' for the planet if they do not wish to change their habits. But what is done inside a public institution – as a matter of principle, consistency or out of global health concerns – is quite a different matter. Take the example of tobacco. A few years ago, smoking in public areas and in offices was left up to individual choices. After confirmed health risks, decisions were made to protect the greater good in public places and at work. With meat and dairy production and consumption, not only our own health, family or society are affected – impacts are huge for the whole planet and even more for vulnerable populations. 'Global goods' are at stake.

This approach could also be part of a bigger campaign in the perspective of 2015 European Year for Development, not only among public institutions at EU and Member State levels but also among citizens – it would give a very concrete example of a win-win action, showing that each one of us can make a difference and contribute to sustainable development. And for those sceptical about people's will or ability to change, a majority of consumers in the Chatham House survey indicated a willingness to reduce their meat consumption when given information on the links between livestock production and climate change.

There is hope!

Chatham House Survey 'Livestock – Climate Change's Forgotten Sector' (UK Royal Institute of International Affairs, 2014)

http://bit.ly/1ykL9Sv

DG EAC's diet ethics website

http://bit.ly/1EtvJgE

Easy recipes and advice on 'meat-free days'

- www.meatlessmonday.com/
- www.jeudiveggie.be/