

How much does meat cost?

The debate on the motion 'The future cost of meat is more than we can afford', organised by the Oxford University Society of Luxembourg, ended in a vote which very clearly supported the motion (33 votes to 3). The speakers in favour, Dr John Ingram of Oxford University's Environmental Change Institute and Dr Jane Feehan, Natural Resources Expert at the European Investment Bank, argued that 'cost' covers much more than the money we pay for our meat – there are also the costs of meat production's impact on land use, water supply, climate, human and animal health, biodiversity and ethics. It has been estimated that the cost of one hamburger now, if all these external costs were taken into account, would be \$200. This cost to the environment is likely to rise as more people in the developing world aspire to emulate the rich world's diet. Meat production is basically an inefficient way of converting plants into edible food for humans, and one which creates a lot of greenhouse gases (GHGs). Half of all cereals grown in the UK are fed to animals, and animals are also fed on imported soya, which drives deforestation. Even if the animals are reared on pasture, most grass is fertilised with nitrogen, which uses energy for its production, and cows are a major source of methane. It has been estimated that meat production causes 18% of all GHGs, and production of one kg of beef emits 16kg of CO₂, compared with 0.8kg CO₂ for one kg of wheat. Meat production is also implicated in other problems, such as loss of forests, eutrophication of water, antibiotic resistance, disease in intensively-reared animals, and human obesity.

There is also the ethical problem that while most people in the developed world are eating more meat than they need, thus contributing to obesity – even China has an obesity problem – food of all kinds is becoming less affordable in the poorest countries. We were startled to hear the statistic that Luxembourg has the highest per capita meat consumption in the world, 136 kg per person per year, ahead of the USA – though this may be partly explained by the number of commuters from other countries who eat lunch here. We need to change our eating habits, but we don't all have to become vegetarian. Dr Ingram showed graphs demonstrating that reducing wastage and grain fed to animals by 67% would go a long way to making more grain available to the poorest people, and this could be achieved if everyone in the rich countries had two meat-free days a week, together with a drastic reduction in the considerable amount of waste that currently occurs at all stages from farm to domestic kitchen.

Those opposing the motion, Mr John Brook, Regional Director, US Federation of Meat Exporters, and Dr Sandra Cellina, Sustainable Development Expert at Luxembourg's Administration de la Nature et des Forêts, cast doubt on the 18% figure for GHG emissions, pointing out that dairy farming also produces CO₂ emissions, that the grassland grazed by cattle is a useful carbon sink, and that chickens convert grain to meat much more effectively than do cattle. They maintained that meat-eaters probably cause more CO₂ emissions from their transport choices than their diet. They also sang the praises of grass-fed, sustainably produced meat from animals grazing in areas that cannot be used for other crops, and pointed out that many breeds of meat-producing animals do not need supplementary feeding, including Luxembourg's own venison and wild boar. They agreed, however, that some changes are needed, particularly waste reduction. Smaller portion sizes in the USA would be a start. Dr Cellina argued that the cost to the consumer of organic meat is only slightly more than intensively-reared meat, and that the UNEP's International Assessment of Agricultural Knowledge, Science and Technology for Development says organic agriculture can produce enough food to feed the world.

There was time for a number of questions and comments from the floor, which elicited some further clarifications from the speakers. Concerns raised included the US political system, which gives farmers and ranchers, many of whom are climate change sceptics, disproportionately large political influence; doubts as to whether there would be enough land for all meat to be produced non-intensively; the difficulty of predicting the future: perhaps meat would become affordable only

for the rich, but possibly farmers would make every effort to keep meat affordable by rearing animals more intensively, which would put further pressures on natural resources. It might be unlikely that people would choose the more expensive option of sustainably-produced meat; on the other hand it was pointed out that change is possible in response to animal welfare concerns: in the UK there are no longer any eggs produced from caged birds. The question was raised whether we have the right to exploit animals at all for food; generally it was felt that the important thing was for the animals to be treated well and not reared intensively.

What was remarkable was the degree of consensus, regardless of what side of the debate people were on. It seemed that everyone agreed that meat production involves environmental costs, that too much food is wasted, that organically produced meat is better for the environment and also for the people eating it, and that if everyone who currently eats meat nearly every day was prepared to cut their consumption, perhaps by having two meat-free days per week, this would help both the environment and the global food supply. There was some discussion about how this could be brought about, since people are resistant to change and hate being told what to do by governments. It was pointed out that currently EU governments subsidise meat production through the CAP, which encourages people to eat more meat. People accept coercion through the tax system, and therefore governments could, if they had the will to do so, make changes that would improve public health and make meat production more sustainable.