

# STOPPING THE GREAT FOOD SWAP - RELOCALISING EUROPE'S FOOD SUPPLY

Dr Caroline Lucas MEP

Written by Dr Caroline Lucas MEP, based on background research and support provided by Andy Jones and Vicki Hird of Sustain: The alliance for better food and farming, and by Colin Hines, author of Localisation: A Global Manifesto, Earthscan 2000

Caroline Lucas is a Member of the European Parliament for the Green Party and sits on the Parliament's Trade Committee. She is a former trade policy adviser for a major UK development NGO.

Caroline Lucas, MEP Green Party of England and Wales  
Green MEP's Office  
Suite 58, The Hop Exchange  
24 Southwark Street  
London SE1 1 TY  
Email: [carolinelucas@greenmeps.org.uk](mailto:carolinelucas@greenmeps.org.uk)

Published by The Greens / European Free Alliance, European Parliament, March 2001  
European Parliament (Brussels)  
Rue Wiertz, 1047 Brussels, Belgium  
Email: [clucas@europarl.eu.int](mailto:clucas@europarl.eu.int)  
Website: [www.europarl.eu.int/greens-efa](http://www.europarl.eu.int/greens-efa)

*Design: Ian Tokelove*

## Foreword

I warmly welcome this Report's very important contribution to the debate about how to fundamentally change the direction of European agriculture, following the BSE and Foot and Mouth disasters.

In addition to the vital call for more organic production, better animal welfare and less intensive agriculture, this document launches the much-needed debate about how to prioritise local food production and consumption. This will result in increased self-sufficiency within the countries of Europe and less cross-border trade in livestock and food products.

Such an approach is crucial, not only to help revitalise local rural economies but also to reduce the long distance transport of food and animals. Addressing the transport issue is also essential if we are to reduce carbon dioxide emissions in order to tackle climate change. This is therefore a key issue for debate not just in Brussels, but also in the World Trade Organisation and in environment and agricultural ministries everywhere.

**Friedrich Wilhelm Graefe zu Baringdorf**, Chairman of the Committee on Agriculture and Rural Development of the European Parliament, and a member of the Greens / European Free Alliance group.

## Preface

"Is it a coincidence that we had classical swine fever in East Anglia last year of an Asian origin, and Foot and Mouth now, also of an Asian origin? It raises questions about freer world trade"

Ben Gill President of the National Farmers Union suggesting that globalisation of trade might be responsible for the British Foot and Mouth outbreak.(1)

"Britain imports 61,400 tonnes of poultry meat from the Netherlands in the same year that it exports 33,100 tonnes of poultry meat to the Netherlands. Britain imports 240,000 tonnes of pork and 125,000 tonnes of lamb while exporting 195,000 tonnes of pork and 102,000 tonnes of lamb.(2) Why?"

The Common Agricultural Policy (CAP) stands accused of overseeing a system of European agriculture which causes enormous damage to the environment and rural livelihoods. It encourages larger, more intensive farms at the expense of smaller, more sustainable ones, leads to inhumane treatment of animals, and generates apparently cheap food at enormous hidden expense to all of us – through the health budget, the environmental clean-up budget, and now the compensation to farmers in response to BSE and Foot and Mouth Disease (FMD). It also generates huge amounts of unnecessary transport, both within the EU and beyond, and therefore plays a significant role in exacerbating the causes of global warming.

This Policy is now under scrutiny as never before. The crisis facing European agriculture today is unprecedented. But so is the opportunity it presents. Even Tony Blair says he now wants to know how to make modern farming safe: "We need to sit down with the industry and really work out what is the basis on which we want sustainable farming for the long term", he said. Perhaps for the first time, the future of global agribusiness is in doubt.

The Greens/European Free Alliance in the European Parliament, the fourth largest political group, is demanding a fundamental transformation of agricultural policy in the EU. At a time when a member of the Green Party, Renate Kunast, has just been appointed as Minister for Agriculture in Germany, and when the Agriculture Commissioner Franz Fischler is himself indicating that he is receptive to new ideas, there are signs that discussion of such a transformation is now on the agenda.

This Report is a vital contribution to that debate. It demonstrates how:

The CAP has resulted in a heavily subsidised agriculture leading to food surpluses, farmers being paid to set aside land, and prairie-style farming. Yet the EU remains one of the largest importers of food in the world.

Imports of food products by the EU15 have increased by between 4% and 279% over the last 30 years. Over the same period exports by EU member states increased more dramatically, by between 164% and 1340% (Figure 2).

The UK is a net importer of food. In 1980 the UK trade gap in food, feed and drink was £3.5 billion, which increased to £5.9 billion in 1990 and to £8.3 billion in 1999.(3)

Beef in Britain is now imported from as far afield as Argentina, Brazil, Namibia, Botswana, Zimbabwe and Australia. A recent report for the Ministry of Agriculture, Fisheries and Food reveals that chicken has been imported from Thailand and Brazil, and exported to Hong Kong, Russia and South Africa.(4)

This is regarded as entirely admirable by the international meat industry, which sees globalisation as a great force for good. The British Meat and Livestock Commission claims that an expanding export market for pork, lamb, and beef is essential to a healthy British meat industry. The Commission wants to see world trade increase, and British farms expand. "Production in 2010 is likely to come from far fewer farms than 10 years earlier, with a larger average size. This will be associated with increasing efficiency through economies of scale and increased technical efficiency." (5)

Yet this is a truly absurd position, which mostly rewards a few already very wealthy farmers, the supermarkets and multinational food companies, at the expense of small and medium scale farmers in developed countries, and – via the dumping of CAP surpluses – those in developing countries as well.

Increasingly it makes no economic sense either. The key question that has to be asked about the Foot and Mouth crisis is why is it that a disease that does no permanent harm to humans and from which most animals recover in a matter of weeks, has virtually shut down the countryside, downgraded vaccination in favour of massive slaughter of healthy animals, and crippled our tourist industry? The answer is that all this has occurred to ensure that we can continue to export meat in a world where politicians treat international trade and globalisation like a god.

**Yet this Report, Stopping the Great Food Swap – Relocalising Europe's Food Supply, shows that, according to the National Farmers Union, all the UK earns from meat and dairy exports is £630 million per year. One estimate of the cost of the Foot and Mouth epidemic in terms of losses predominantly to tourism, but also to farming, was put at £9 billion. Even this huge sum was based on the optimistic assumption that the problem would have peaked by the end of the month. In effect that means that it will take more than 14 years of exports to compensate for the mayhem and damage done in a few weeks of the present 'cull to eradicate' approach to Foot and Mouth.**

This crisis must result in a radical rethink of the need for ever more international food trade, which exacerbates climate change, forces down food and animal welfare standards, and contributes to such disasters as Foot and Mouth and BSE.

The Report, based on background research by Andy Jones and Vicki Hird of Sustain: The alliance for better food and farming and by Colin Hines, author of Localisation: A Global Manifesto, not only details the rise in exports in and out of European countries, but also points out how – absurdly – this often involves simultaneous exchange of the same products. It asserts that European countries could reduce imports and compensate for this by more local production. That would result in safer food, better animal welfare and a dramatic reduction in carbon emission, thus helping to tackle climate change. Its findings include:

In 1998, Britain imported 61,400 tonnes of poultry meat from the Netherlands in the same year that it exported 33,100 tonnes of poultry meat to the Netherlands. Britain imported 240,000 tonnes of pork and 125,000 tonnes of lamb while it exported 195,000 tonnes of pork and 102,000 tonnes of lamb.(6)

In the UK in 1997, 126 million litres of liquid milk was imported into the UK and at the same time 270 million litres of milk was exported out of the UK. 23,000 tonnes of milk powder was imported into the UK and 153,000 tonnes exported out.(7)

In 1996 the UK imported 434,000 tonnes of apples, 202,000 of which came from outside the EU. Over 60% of UK apple orchards have been lost since 1970.(8) Even if all the UK's home-grown fruit was consumed domestically, the UK could at present be only 5% self-sufficient in fruit.(9)

Trade-related transportation is one of the fastest growing sources of greenhouse gas emissions and is therefore significant in terms of climate change.(10) Although most food is distributed by road and ship, the airfreight of foodstuffs is increasing. For example, UK imports of fish products and fruit and vegetables by plane between 1980 and 1990 increased by 240% and 90%, respectively.(11) UK air freight (imports and exports) grew by about 7 per cent a year in the 1990's and is expected to increase at a rate of 7.5 per cent a year to 2010.(12)

As more consumers, farmers and workers are feeling the downside of destructive globalisation, now is the time to consider how we replace this with a localisation that protects and rebuilds local economies around the world. As a member of the Parliament's Trade Committee, I am committed to working to achieve this. It is the race for ever greater international trade and competitiveness that should go up in smoke, not animals and the future of our farmers and countryside.

**Dr Caroline Lucas MEP**

---

## Contents

### **PART 1: The Food Miles Facts 1**

Food travelling further than ever before 1

Europe – Ever more food production, but ever more imports and exports 2

Misery miles 4

Milk miles 6

Far-flown fruit 8

Food self-sufficiency 10

### **Part 2: The consequences of the great food swap 12**

Environmental impact 12

Animal health and human health 14

Animal welfare 19

Rural and farming Communities 20

### **Part 3: Vision for a new food and farming future 22**

### **Part 4: Changing the menu for a more localised food system 25**

## Part 1: The Food Miles Facts

### *Food travelling further than ever before*

In industrialised countries such as Britain, the public has come to expect the availability of an extensive range of foodstuffs all year round. Food production, distribution and retailing systems have undergone great change over the past 50 years to make this availability and choice possible; and as a result there are fundamental differences between today's food system and the food system of 50 years ago. Four developments have led to this situation: the intensification of agriculture; a commitment to free trade; the provision of transport infrastructure and low transport costs; and the emergence of the multiple retailers which increasingly co-ordinate the production, processing, distribution and marketing of food products. As a result of these developments, the food system is now based on complicated supply chains and large volumes of international trade.

**Figure 1** World food production and trade, 1968-1998 (13)

(Note: figures for international trade are based on data for exports).

	Production			International Trade		
	Million	Metric Tons	Increase (%)	Million	Metric Tons	Increase (%)
	1968	1998		1968	1998	
Cereals	1064.6	1883.7	76.9%	106.3	271.7	155.6%
Starchy Roots	537	647.3	20.5%	8.7	30.5	250.6%
Sugar crops	744.7	1510.8	102.9%	0.2	0.1	-50.0%
Sweeteners	80.1	164	104.7%	20.5	45.9	123.9%
Pulses	42	56	33.3%	1.8	7.7	327.8%
Treenuts	3.3	6.7	103.0%	1.1	2.6	136.4%
Oil Crops	149.2	453.4	203.9%	20.1	59.9	198.0%
Vegetable Oils	25	86.2	244.8%	5.1	36.8	621.6%
Vegetables	251.1	625.1	148.9%	8.7	38.1	337.9%
Fruit	223.8	430.9	92.5%	21.8	81.3	272.9%
Stimulants	6.5	13	100.0%	5.6	12	114.3%
Spices	1.9	4.6	142.1%	0.3	1	233.3%
Meat	94.8	222.4	134.6%	5.6	23	310.7%
Offal	7.7	14.9	93.5%	0.3	1.9	533.3%
Animal Fats	21.9	30.8	40.6%	4.5	7.2	60.0%
Milk	389.5	557	43.0%	25.4	69.2	172.4%
Eggs	18.6	51.9	179.0%	0.5	1.2	140.0%
Seafood	59.9	120.6	101.3%	23.3	42.6	82.8%
Totals	3721.6	6879.3	84.8%	259.8	732.7	182.0%

Figure 1 shows that there was an 84% increase in world food production between 1968 and 1998. However, over the same period there was a move to production for export, which has resulted in even larger increases in international flows of food products. In 1968, 6.9% of all food produced was exported, which increased to 10.6% by 1998. International trade in food almost trebled over this 30-year period, with trade flows doubling for almost every food category. In the case of cereals, root crops, vegetable oils, vegetables, fruit, meat and milk, trade increases were at least double those in world production levels.

### *Europe – Ever more food production, but ever more imports and exports*

Agriculture in the European Community has undergone a tremendous change in the last 30 years. The reduction in the number of agricultural holdings and their expansion in physical size, the increasing specialisation of agricultural production, the changes in the structure of herds and the concentration of livestock farming have resulted in a reduction in the number of farms and farm workers. The move to large-scale and more specialised production has also had an impact on levels of international trade in agricultural products. As a result there have been increases in the trade flows of foodstuffs between EU member states and with third countries. Imports of food products by the EU15 have increased by between 4% and 289% over the last 30 years as shown in figure 2. Over the same period exports by EU member states increased more dramatically, by between 164% and 1340%.

**Figure 2** Intra- and extra-EU15 trade, 1968-1998 (14)

	Imports			Exports		
	Million Metric Tons		Increase (%)	Million Metric Tons		Increase (%)
	1968	1998		1968	1998	
Cereals	38.2	46.7	22%	17.7	66.5	276%

Starchy Roots	6	19.2	220%	2.4	11.5	379%
Sugar (raw)	4.5	4.7	4%	2	9.5	375%
Oil Crops	10.3	26.6	158%	0.5	7.2	1340%
Vegetable Oils	2.7	10.5	289%	1.1	9.1	727%
Vegetables	4.3	16.3	279%	4.1	16.9	312%
Fruit	12.6	34.8	176%	5.5	23.6	329%
Meat	3.2	8	150%	2	9.9	395%
Animal Fats	2.3	2.9	26%	1.1	2.9	164%
Milk	12	32.8	173%	14.7	42.6	190%
Eggs	0.2	0.6	200%	0.2	0.7	250%

In terms of the UK and Spain, Figures 3 and 4 demonstrate the expansion in trade for most food groups between 1968 and 1998. Although UK imports of cereals and animal fats halved between 1968 and 1998, due to increased domestic production of the former and probably due to healthier dietary changes for the latter, imports of other products increased and there was a large expansion in food exports (Figure 3).

**Figure 3** Imports and exports of food products by the UK, 1968-1998 (1000 tons) (15)

	Imports					Exports				
	1968	1978	1988	1998	1968-98	1968	1978	1988	1998	1968-98
Cereals	8497	7270	3980	4055	-52%	917	2853	5503	6920	655%
Starchy Roots	1022	1406	1381	1566	53%	78	172	145	251	222%
Oil Crops	917	1717	1149	1832	100%	12	23	182	357	2875%
Vegetable Oils	565	616	903	1115	97%	53	136	202	382	621%
Vegetables	1137	978	2041	2915	156%	35	128	154	277	691%
Fruit	2830	2743	4041	5382	90%	65	134	145	246	278%
Meat	1501	1340	1183	1408	-6%	28	221	360	649	2218%
Animal Fats	1014	947	541	350	-65%	34	95	151	252	641%
Milk	3007	1510	2353	3029	1%	570	2180	1937	2266	298%

The UK is a net importer of food. In 1980 the UK trade gap in food, feed and drink was £3.5 billion, which increased to £5.9 billion in 1990 and to £8.3 billion in 1999. A large proportion of the overall trade gap is accounted for by imports of fruit and vegetables. For example, in 1996 these products accounted for 50% of the UK food trade deficit.

In the case of Spain, both imports and exports of each of the food products shown have increased over the last 30 years. During this time trade at least doubled for all food groups and for most there were even greater increases. For example, Spanish exports of meat increased from 3,000 tons in 1968 to 496,000 tons in 1998 and over the same period exports of milk products jumped to over half a million tons (Figure 4).

**Figure 4** Imports and exports of food products by Spain, 1969-1998 (1000 tons) (17)

	Imports					Exports				
	1968	1978	1988	1998	1968-98	1968	1978	1988	1998	1968-98
Cereals	2510	5241	3543	6947	177%	865	218	2654	1791	107%



FIN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUS	164,421	582	8,905	2,090	152,794	0	0	0	7	0	0	0	0	43
	6,877,062	586,139	569,011	2,575,978	983,847	10,652	109,553	238,509	1,366,348	401	25,001	354,665	3,839	43

## Milk miles

At the turn of the century dairy farming was undertaken on a small scale, with mixed farms perhaps keeping only a few cows to produce milk, butter and cheese for the farm's own needs or for local markets.(23) The move to mechanisation and specialisation in dairy farming, together with developments in refrigeration technology for storage and distribution have changed the whole structure of the dairy sector.

The extent of food movements within the EU and with third countries is shown in Figure 6. Milk and cream, which were until relatively recently sourced on a national if not local scale, are now transported in large quantities within Europe. Over 7 million tons of these products were moved between EU member states in 1999. Additionally, imports and exports from outside the EU amounted to 98,000 tons and 1.3 million tons, respectively. (24)

The food swap scenario is starkly illustrated by what happens in the UK. In 1997, 126 million litres of liquid milk was imported into the UK and at the same time 270 million litres of milk was exported out of the UK. 23,000 tonnes of milk powder was imported into the UK and 153,000 tonnes exported out. (25)

In terms of Food Miles, the result has been a large increase in the distance between producer and consumer and in the environmental impacts associated with transport-intensive sourcing and distribution. This situation is compounded by the fact that the EU imports large quantities of cattle feed. It is estimated that for every acre farmed in the UK, two more are farmed overseas in order to meet the feed requirements of intensively farmed livestock, including dairy cattle. Imported feed, such as cassava, soya beans and soya cake, makes up about 30% of all European animal feed. An estimated 5.6 million acres in Brazil are devoted to soya bean production, as are around 1.2 million acres in Argentina, 560,000 acres in Paraguay, 190,000 acres in Canada and 8 million acres in the US.(26)

**Figure 6** Internal and external trade of the EU in milk and cream, 1999 (metric tons) (27)

Recipient down left hand side Source along top

Recipient	Source														
	F	N	Ger	I	UK	Ire	Den	Gre	P	Sp	Bel	Lux	Swe	Fin	Aus
France		25202	181927	11595	53837	5760	556	4014	4025	115889	610723	39704		29	209
Netherlands	34419		596239	1794	28552	25276	5994	84	773	1128	210562		56	789	379
Germany	84184	157130		364	35003	4013	4814	157	243	180	126215	81009	13300	270	303
Italy	406696	5933	1631293		530	6770	8533		2317	4761	19918	3349		73	377
UK	23413	9409	24916	104		127836	22514	176	347	7159	12216		811	22	571
Ireland	125	825	47		219259					349	245				
Denmark	206	673	11157	22	51	174		3	25		332		6017	398	77
Greece	23370	51149	74305	1007	308	1486	1490			3678	5943		47		417
Portugal	15105	777	3249	197	27	141	82			37174	389				
Spain	218632	4149	22587	227	3076	614	2609	5	151930		14519			150	137
Belgium	200641	191525	378204	259	49174	6911	1087	60	1206	2255		17705	101	3	49
Lux	6981	111	5554	2			3		9		15340				
Sweden	330	299	1143	1	87	85	2637	16		39	36			1079	
Finland		366	422		10		778				13		242		
Austria	762	435	16452	361			33	1			178				

Intra-EU	1014864	447983	2947495	15933	389914	179066	51130	4516	160875	172612	1016629	141767	20574	2813	689
Extra-EU	276213	388623	230584	2420	97998	65747	92765	5865	2354	53950	63154	1	10008	20474	556

## Far-flown fruit

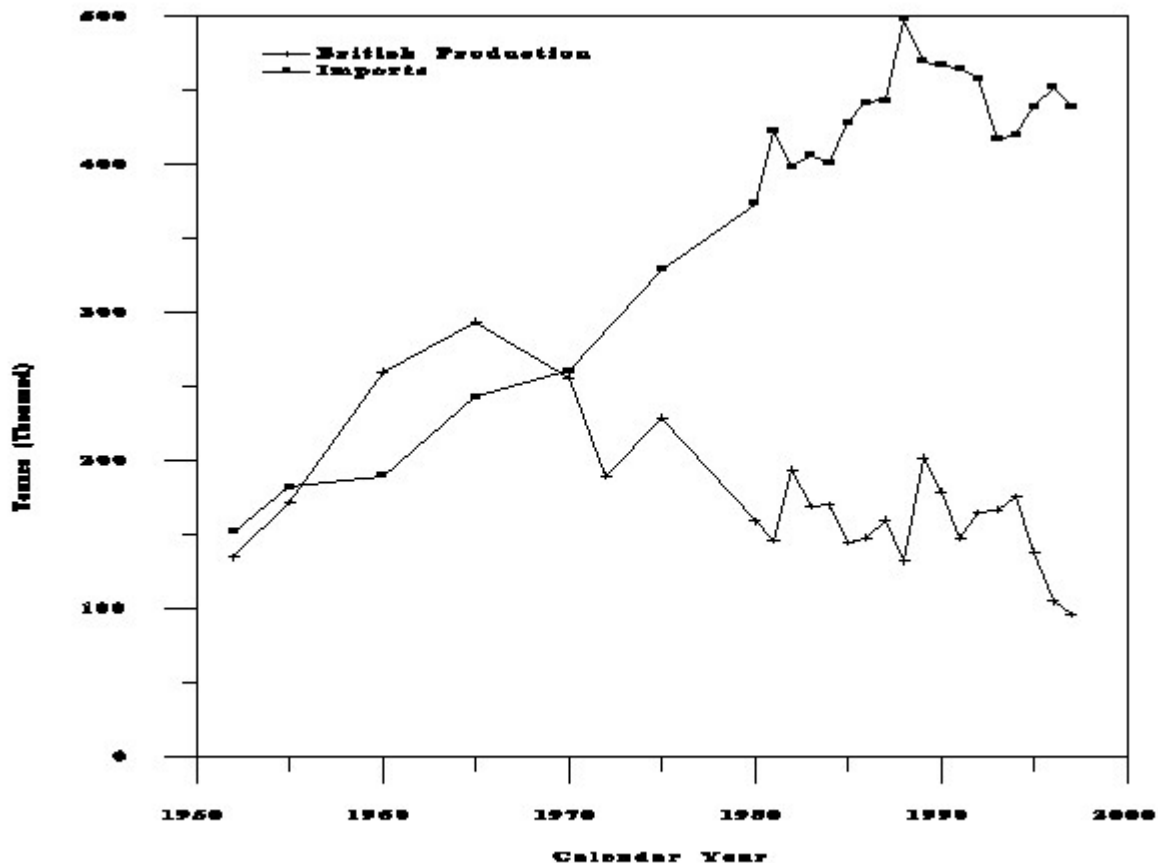
In the EU, the availability, range and source of fresh fruits and vegetables has been extended in recent decades, with exotics such as star fruit, mangoes and okra, as well as indigenous varieties which are not, or cannot be grown throughout the year, imported in large quantities. Imports of fruit products by EU countries increased by 176% between 1968 and 1998, however, exports also increased over this period by 329% (Figure 2).

In most northern European countries self-sufficiency in fruit is extremely low. In 1996 the UK imported 434,000 tonnes of apples, 202,000 of which came from outside the EU. Over 60% of UK apple orchards have been lost since 1970.(28) Even if all the UK's home-grown fruit was consumed domestically, the UK could at present be only 5% self-sufficient in fruit. (29)

The decline in UK fruit production and increases in imports is at its most extreme in the fresh apple sector since the 1960's (Figure 7). Imports of dessert apples doubled between the crop years of 1965/66 and 1997/98 and over the same period the UK cropped area of dessert apples fell by over 60 per cent and UK apple production fell by two-thirds.(30) UK apple producers have been paid to cease production by receiving a European Union grant to 'grub-up' orchards, in order to reduce European overproduction. In Britain, imports now represent over three-quarters of the dessert apples consumed each year.

Not all European politicians support this trend. The Greens in the European Parliament have opposed these developments for many years. In 1994 they began to reverse this emphasis by successfully introducing a new European Regulation setting up a European Programme for the Conservation and Utilisation of Genetic Diversity in Agriculture, which promotes diversity of crops, trees and animal species.

Figure 7 British apple production and imports for the calendar years 1952-1997 (31)

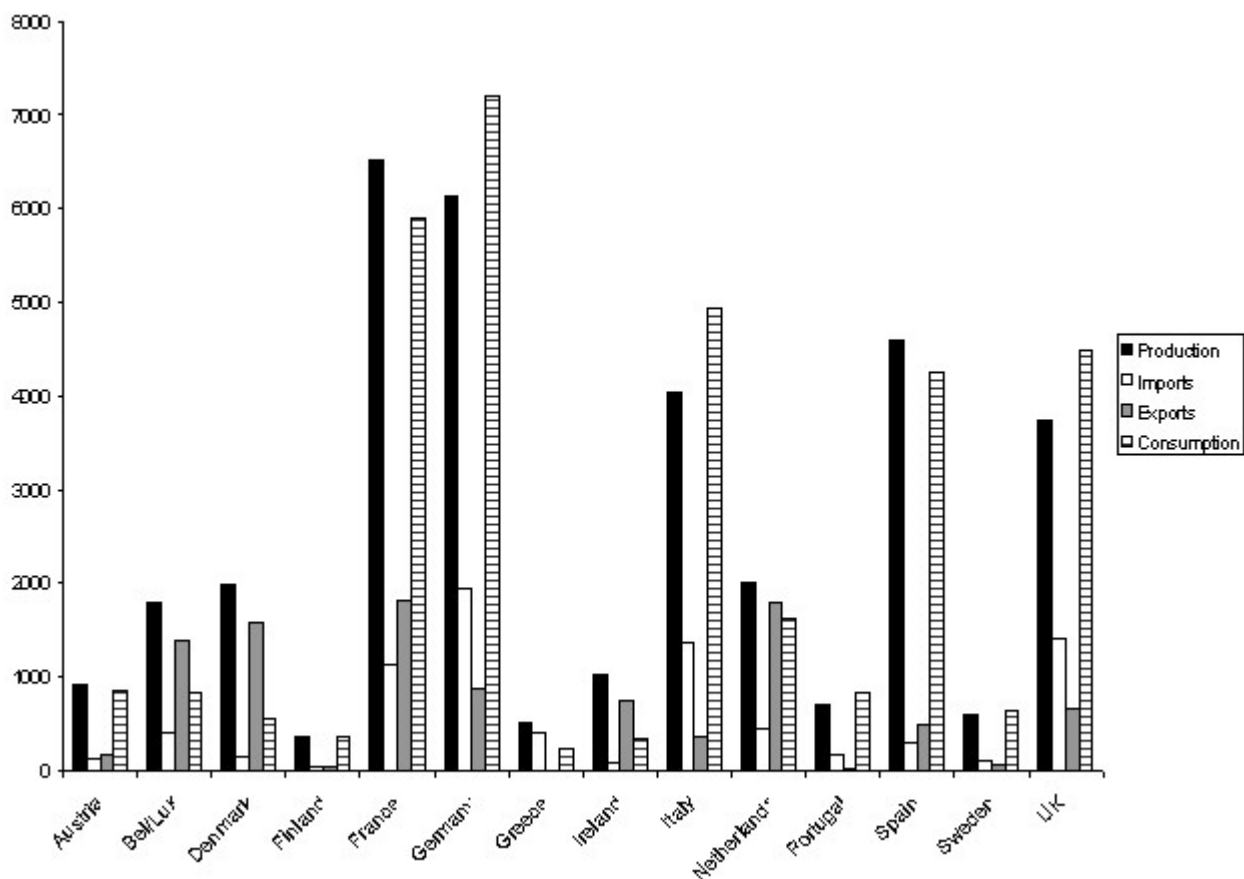


UK imports of apples gradually increased between 1952 and 1997 from 152,000 to 439,000 tons. It has been calculated that this move away from national self-sufficiency in apples has resulted in a 2.9-fold increase in fossil fuel energy consumption to transport apples.(32)

## Food self-sufficiency

There is great potential for import substitution by each EU member state. The appendix demonstrates that for many food categories there is not a large difference between current production and consumption levels in each country. Figure 8 and the Appendix show that at present even when this is the case, there are often significant quantities of imports and exports.

Figure 8 The potential for reducing international trade in food products (33)



Most EU countries are capable of moving towards national self-sufficiency in milk, for example, with only 2 countries producing less than 80% of national consumption in 1998 (Appendix). Unlike the dairy sector, issues such as seasonal availability and the consumption of exotic varieties that cannot be produced in certain European countries, apply to the production, sourcing and distribution of fruit products. A move away from the consumption of exotics to seasonal and a greater diversity of locally sourced fruit would reduce the environmental impacts of fruit supply considerably.

In the case of meat products, the quantities produced and consumed in most EU member states are very similar, apart from Belgium, Denmark and Ireland and the Netherlands which export large quantities (Figure 9).

Figure 9 Meat production, trade and potential self-sufficiency in the EU (1000 metric tons) (34)

	Production	Imports	Exports	Consumption	Production as a % of consumption
Austria	909	116	166	859	105.8%
Bel/Lux	1801	400	1379	821	219.4%
Denmark	1987	148	1567	549	361.9%
Finland	353	34	32	355	99.4%
France	6522	1123	1809	5891	110.7%
Germany	6139	1932	871	7201	85.3%
Greece	508	402	3	895	56.8%
Ireland	1026	76	744	327	313.8%
Italy	4044	1359	362	4931	82.0%



Netherlands	2995	444	1784	1627	184.1%
Portugal	690	169	21	838	82.3%
Spain	4600	304	496	4254	108.1%
Sweden	594	99	59	634	93.7%
UK	3733	1408	649	4492	83.1%

So given the capacity to produce an abundant and diverse range of foodstuffs it is possible for Europe to restructure its farming to become self-sufficient in many products. This would require considerable changes in the pattern of farming in some areas, as well as investment in building soil fertility to generate conditions for developing alternative crops and a more mixed farming system. But without such a change crises such as BSE and Foot and Mouth may continue to be generated, affecting society with increasing frequency.

## Part 2: The consequences of the great food swap

As revealed by the figures above, Europe is clearly capable of providing considerably more of what its population needs than it currently does provide. Sadly, it is also clearly capable of orchestrating an entirely illogical food swap into and out of member states and into and out of Europe. The global and local impact of this great food swap is immense:

- Environmental
- Animal and human health
- Animal welfare
- Rural communities

### Environmental impact

The external environmental costs of food distribution (transportation) include air pollution, the loss of biodiversity and amenities through road construction and the environmental impacts associated with the extraction and use of crude oil and other resources required for air, sea, rail and road transport fuel, vehicle construction and transport infrastructure. Similarly, intensive agricultural production and food packaging systems consume resources and produce solid and liquid wastes and air pollution which can result in negative ecological and human health impacts.

Climate change, which is perhaps the greatest threat to sustainable development, is caused by emissions of greenhouse gases, particularly carbon dioxide from burning fossil fuels.(35) Globally, temperatures are rising and are forecast to increase further. This is predicted to cause major adverse effects on the world's ecosystems, including increased incidence of extreme weather events (such as storms, droughts, floods), sea level rise affecting coastal and low lying areas, and loss of habitats and species.(36) Comparing CO2 emissions for one product alone is revealing – the distribution of a kilogram of apples from New Zealand to the UK consumer results in 1kg of CO2 emissions whereas the distribution of a kilogram of locally sourced apples through a home-delivery fruit and vegetable box scheme results is less than 50g CO2.(37)

Trade-related transportation is one of the fastest growing sources of greenhouse gas emissions and is therefore significant in terms of climate change.(38) Although most food is distributed by road and ship, the airfreight of foodstuffs is increasing. For example, UK imports of fish products and fruit and vegetables by plane between 1980 and 1990 increased by 240% and 90%, respectively. UK air freight (imports and exports) grew by about 7 per cent a year in the 1990's and is expected to increase at a rate of 7.5 per cent a year to 2010.(39) By weight, fruit and vegetables (13 per cent) form the largest category of UK airfreight imports.

Freight transportation by sea is approximately 5-times more energy efficient than road freight and 37-times more energy efficient than international airfreight (Figure 10). Apart from low energy efficiency, air freight causes very high levels of pollution, for example, a 2 minute DC10 take off produces the same quantity of nitrogen oxides as driving 21,539 cars one mile at 30 miles an hour.(40)

**Figure 10** Energy use of different forms of transport (41)

	Energy consumed (kilojoules per T-Km)	Emissions of carbon dioxide (g/ T-Km)	Emissions of hydrocarbons(g/ T-Km)	Emissions of nitrogen oxides (g/ T-Km)	Emissions of carbon monoxide (g/ T-Km)
Rail	677	41	0.06	0.2	0.05
Boat	423	30	0.04	0.4	0.12
Road	2,890	207	0.30	3.6	2.40
Air	15,839	1,206	2.00	5.5	1.40

T-Km = tonne-kilometres of good transported g/ T-Km = grams per tonne-kilometre

Although the transport involved in international trade has been estimated to account for one eighth of world oil consumption, there have been very few calls for a reduction in international air, sea and road freight transport. (42) However, when imports constitute a large fraction of domestic consumption (as in the case of food products in several EU countries) there are important implications for sustainable development. Firstly, traditional measures of national energy consumption and emissions become inadequate as indicators of environmental performance. This is because the environmental impacts associated with production, in the country exporting the product, and the transportation of the product to each EU country are not accounted for. National figures could show a

decline in the fossil fuel energy consumption and air emissions, as well as other indicators relating to the food system such as pesticide use and nitrate levels in water supplies, simply because of increasing imports. In reality the environmental impacts of food supply could be increasing due to increases in international transportation associated with food imports.

Secondly, in terms of commitments to reduce greenhouse gas emissions, the transport-related carbon dioxide emissions associated with international trade by sea and air are not included in national inventories and targets. There is therefore no incentive to reduce emissions from international transportation. However, if the most sustainable food production, distribution and marketing options for meeting nutritional needs are to become more widespread, then import substitution will have to be considered.

#### **One nation's costs**

A study carried out by Professor Jules Pretty in the UK calculated that the total hidden or "external" cost of non-organic farming in the UK to the environment and to human health was £2.34 billion per year (based on 1996 data), or £208 per hectare.(43) This is in addition to the costs of the CAP subsidy. Not all of this results from production destined for export, yet the need to drive down costs and produce as cheaply as possible to compete with overseas suppliers is a factor. Organic farming has, by contrast, only one third of the hidden costs of non-organic agriculture.(44) Organic farming therefore reduces the external costs of agriculture by £1.6 billion, or £120 - £140 per hectare. The UK government has not given strong enough support to reduce these costs. In 1999, the UK was 15th, bottom of the league in terms of support for green farming (including organic) and rural schemes, spending 18.7euro/ha (£12/ha) compared to 264.8euro/ha (£158/ha) in Finland and 67.9 euro/ha (£40/ha)in Portugal. (45)

## **Animal health and human health**

The global trade in foodstuffs has, for centuries, given some of us access to the world's abundant and diverse food supply. However, as illustrated above, that trade has increased significantly over the past decades and is set to grow further if free trade in food and feedstuffs is allowed to grow unfettered. This has significant and direct implications for animal and human health in a number of key areas:

#### **Trade can spread animal and human disease**

FMD: The current Food and Mouth Disease epidemic is paralysing the UK and some parts of the European countryside. There are few regions of the country without the disease. If nothing else this serves to show how transporting animals (often as a result of lost abattoirs and supermarkets demands) around one country can cause immense problems. France now has confirmed incidences and measures to control the disease spreading throughout Europe include an unprecedented freeze on all farm animal movements. There can be little doubt that international trade in meat and livestock will spread diseases further. Whilst some countries such as the US have managed to control and regulate imports to stay Foot and Mouth free it remains to be seen how long before they, too, succumb to this highly infectious disease.

The cause of the current outbreak is thought to be imported feeds or meat used for pigswill, although this has yet to be confirmed. Yet, even the producers acknowledge that globalisation may be causing problems: 'Supermarket greed and the drive for globalisation at all costs has turned this country into a cesspit for the world's cheapest meat and meat products' Digby Scott, UK National Pig Association.(46) Ben Gill, Executive Director of the UK's National farmers Union has stated publicly that he believes globalisation may be at the heart of this and other problems the livestock industry is facing: "Is it a coincidence that we had classical swine fever in East Anglia last year of an Asian origin, and Foot and Mouth now, also of an Asian origin? It raises questions about freer world trade" (47)

Increased global food trade is thought to be responsible for some recent outbreaks of Foot and Mouth in many countries. Japan had previously not had an outbreak since 1908 yet was recently affected. A recent outbreak in South Africa may have been caused by the illegal import of food waste from Asia to make pigswill. It is likely that infected sheep are responsible for the export of Foot and Mouth from the UK to the European continent.(48) In 1993 there were 55 disease outbreaks in Italy following imports of cattle of obscure origin.(49)

Europe must examine whether the cost of losing a Foot and Mouth free status and reducing output from an industry already producing surplus to requirements outweighs the cost of the potential slaughter of millions of animals and the loss of export markets. The UK earns £630 million a year from meat and dairy exports. Yet one estimate of the cost of the Foot and Mouth epidemic in terms of lost tourism, government compensation etc was put at £9 billion. This was based on the optimistic assumption that the problem would have peaked by the end of March.(50) In effect that means that it will take more than 14 years of exports to compensate for the damage done in a few weeks of the present 'cull to eradicate' approach. Export markets are in any case now lost to us until the disease is eradicated. Should that occur then under the present increased global trade in animals, the question needs to be asked how long before it returns.

Refusing to allow vaccination as an option for controlling the disease (as used in South American countries) must also be questioned as the costs, both in financial and emotional terms add up. But ultimately it will take reform of the whole food system to solve these recurrent problems. It must be reoriented away from production and processing for long distance trade in order to reduce not only problems of disease spread but also reliance on distant markets.

BSE: Between November 1986 and December 2000, approximately 180,000 cases of BSE have been confirmed in cattle in the UK. It is likely that the number of cases is higher. Since 1989, approximately 1300 native BSE cases have been reported in France, Ireland, Portugal, and Switzerland and to a lesser extent in Belgium, Denmark, Germany, Italy, Liechtenstein, Luxembourg, the Netherlands, and Spain. A few cases have also been reported in Canada, the Falkland Islands, and Oman. The number of New Variant CJD cases in the UK stands at 87, three in France and one in Ireland. The volumes of feeds and feed ingredients traded between countries have undoubtedly contributed to the global spread of the disease. The UK Government has admitted that is was completely in the dark over how much BSE contaminated feed was exported in the early 1990s (Britain exported 170,000 tonnes of meat and bone meal to around 70 countries between 1990 and 1996). (51)

Food born diseases: Since the mid-1980s there have been numerous food safety crises – salmonella, E coli, BSE, swine fever, dioxin contamination of animal feeds and now Foot and Mouth. Their intensity and impact are increasingly being linked with the rise in food imports and exports and the complex food chains that have been built up.

Reported incidence of food borne diseases in Europe in 1998 (52)

Salmonella	188,387
Campylobacter	129,544
Yersinia	9,176

Brucellus	701
Listeria monocytogens	657
Echinococcus	510
Toxoplasma	381
Trichinella spiralis	299

In 1997, 1,912 human verocytotoxic E.coli (VTEC) infections were recorded. All these reported cases represented only the tip of the iceberg. In one recent example of concentration of the food chain and disease spread – 16 million pounds of poultry from a US Cargill plant have been recalled from distribution in the US, Iceland and Venezuela after 28 cases of listeriosis including four deaths and three miscarriages.(53)

Measures to prevent contamination or pathogen development and reduce pathogen levels must be taken from farm to table to ensure safety. This will include: regulations backed up by strong and adequately resourced enforcement (particularly in terms of imports and exports); incentives to reduce food chains and long distance transport of live animals in particular; and research to reveal how structural changes impact on the spread of disease. This latter should influence Governments' position which currently tends to support large scale food production, processing and retail over smaller scale in the belief that it reduces food contamination risks. The package of measures must also include ways to reducing reliance on imported food and feeds which are probably contributing to the problem both in terms of swapping diseases between countries and increasing livestock stress and also of reducing food traceability. Other major issues for food safety include the use of anti-biotics and hormones in livestock production. The EU has held out against the US hormone –fed beef despite a decision at WTO against the EU stance. Countries are threatening action under international agreements to lower food safety standards by accepting imports that do not meet that country's sanitary requirements. The WHO has recommended in 1997 that anti-biotics used to treat humans should not also be used to promote animal growth. Yet the US Office of Trade Representatives has told the European Commission that the EU's ban on the use of human use antibiotics as growth promoters in livestock feed may be illegal under international agreements.(54) The EU has recently banned six major anti-biotic growth promoters, leaving four for use.

The growth in the international food trade is creating new food safety problems that in the short term should be addressed at international level. The existing agreement (namely the Sanitary and Phytosanitary Measures of the WTO) does little to address the challenges – it merely represents a method by which nations can create exemptions to each other's food safety laws to advance trade. The logical conclusion is that we need an International Food Safety Agreement (rather than Trade Agreement) but also that each country needs to reverse its emphasis on increasing food imports.

#### **Trade is not the answer to food poverty**

There is a complex relationship between food supply and trade and the food security status of those in most need around the world. There is a clear requirement for appropriate food aid and emergency supplies in times of crises. However the main cause of hunger is poverty. In the famine of the 1980s, Ethiopia was a net exporter of grain. Nearly 80% of malnourished children in the South live in countries that have food surpluses.(55) Where hunger exists, what is often lacking is not food, but access to it – either having the money to buy it or the land to grow it on. (56)

Food Poverty is also an issue in richer countries. For instance in the UK the poorest 10 per cent of households in Britain are poorer in relative terms than they were at the start of the 1980s. It is estimated that between 13 and 14 million people live in poverty in the UK and one third of all children are born into poverty. The Tories' established a Low Income Project Team which found 10-15% of consumers couldn't afford healthy diets, for instance they lack the minerals and vitamins and fibre to maintain good health and in particular the development of unborn babies and children. The reasons poor people have poor diets is due to three main factors: financial access, physical access and access to information.

Yet to suggest we need a cheap food policy to tackle these problems is inappropriate. It is also insulting to suggest that the food poor want food produced as cheaply as possible because the result is a rise in ill-health, further cruelty to animals, an increase in animal diseases, more environmental damage and greater problems for rural communities as farm jobs are lost. Indeed a UK National Opinion Poll a few weeks after the beginning of the Food and Mouth outbreak showed that 82% of people across the whole range of social groups were willing to pay more for a return to traditional farming.

What is needed is a policy that addresses the inequalities of incomes, ensuring adequate financial access. This includes setting a revised minimum income standard such that tax and other benefits are properly linked to what is required for a decent standard of living and a good diet. Current standards on which benefits are based fall far short of what is required. Policies that improve physical access will include measures to control and manage retail developments, to promote local food production, and enhance community food projects such as community orchards and allotments. Finally we need policies that increase access to information about what constitutes a healthy diet and the best way to achieve this.(57)

The solution to hunger does not lie with a technical fix or with increased production and unfair trade in food. There is enough food to feed the world; action needs to be taken to change systems of production and distribution of food and to alleviate poverty to ensure that everyone has adequate access to food. In the UK, tackling the problems of food poverty cannot rely on a cheap food policy and increasing trade.

#### **Increased use of agrochemicals for export oriented crops**

World food production relies heavily on use of artificial pesticides and herbicides to maximise production. Where countries are developing new crops for exports (such as high value fruit, vegetables and flowers), and exporters demand high cosmetic standards for the produce, there will be a strong incentive to use chemicals in production.

A recent study has shown that small farmers using simple, low-cost techniques with local inputs can increase production dramatically. These farming practices are approaching 'sustainable agriculture' because they aim to reduce water use, regenerate soils by using manure, prevent erosion through shallow ploughing and minimise the use of agro-chemicals. The study found that for the 4.42 million small farmers practising 'sustainable agriculture' on 3.58 million hectares of land, average food production increased by about 73% per household. For those that were growing important staple crops such as potatoes and cassava, the increase was about 150% whilst larger farms in Latin America increased total production by 46%.(58)

Export led, input intensive farming has to be questioned in terms of both safety and value for the producers and workers. International financial institutions must move away from supporting restructuring which relies on this type of production for export and instead build on the capacity of the land and people to provide for themselves and a more local market.

## *Animal welfare*

One of the most harrowing aspects of both the BSE and Food and Mouth crisis is the footage of animals being shot and burned in great pyres or incinerators. Such mass slaughter represents animal suffering on a huge scale as most of these animals were not able to live their lives out according to normal commercial life expectancies. Yet it has also highlighted the current practice of not only moving animals around the country for fattening up and for slaughter but also the continued export of live animals (over a million sheep and lambs each year) to the continent and beyond. In addition to the likelihood of increasing spread of disease this exacerbates animal welfare problems through longer journey times and increased handling. [see Misery Miles above and Appendix 2]. The figures are startling: in 1998 the UK exported 109,533 pigs whilst importing 203,174 live pigs. Despite considerable public outcry at the practice we also exported 654,141 live sheep. (59)

In one case two lorry loads of lambs on their way from Britain to Greece had been left baking in the sun for 48 hours. They had been 'literally cooked alive' according to the inspector who investigated. Such illegal instances must be stamped out, but it is the food system itself, which relies on such trade, that is flawed in design and must be completely reformed. (60)

It is likely that we are also importing welfare problems by importing cheap meat from overseas where standards may also be poor. We import thousands of tonnes of chicken meat from outside Europe (imports from Thailand alone increase 135% between 1998 and 1999). After such a huge rise in imports questions inevitably arise about the quality and standards applied in the broiler houses, abattoirs and storage facilities used. All chicken produced in the United States is banned for sale in Europe. The European inspected US abattoirs and declared that they did not meet all requirements of the appropriate Community legislation.(61)

Live exports are supported through export subsidies (i.e. taxpayer's money) out of Europe. Export refunds of around £400 per animal are given to exporters of live cattle out of the EU to 'compensate' for the higher EU prices – in 1996, half a million live cattle were exported. Intensive livestock production is enhanced by headage payments and exacerbated by quotas, which reward those producing at maximum yields with minimum costs. Much livestock produce is exported.

Europe has recognised the need to act on animal welfare – introducing legislation on phasing out battery egg production for instance - and must keep welfare priorities on the WTO negotiating table. Closer to home it must enforce its own welfare standards where they exist, and introduce far better welfare standards for animals not already covered by EU legislation. There should be an immediate ban on the export of live animals. Supporting farmers in the transition to more humane and sustainable forms of agriculture must be a priority.

## *Rural and farming Communities*

Do farming and rural communities genuinely benefit from an increased food trade? In a large number of cases the answer is no. UK farmers are now calling for a re-think of globalisation in response to both the possible threat of disease imports, but also as they find their main markets i.e. the supermarkets willing to import rather than pay what they would consider fair prices. The downward pressure on farmgate prices has been well documented by the media, but teasing out who gains the lions' share of the profits from what the consumer pays is less clear.

Job losses are often associated with farm amalgamations. Changing population dynamics, lifestyles and job opportunities have reduced on-farm employment. As workers have increasingly left the countryside through reduced job opportunities, so other support services have declined. In the UK, the total agricultural labour force has declined by 20% over the past 20 years and fell by nearly 20,000 people in 1999 alone.(62) Towards the end of the 1990s, rural decline was becoming acute. 42% of rural parishes had no shop, 43% had no post office, 83% had no doctor, 49% had no school and 75% had no daily bus service.(63) The situation is being paralleled in regions across Europe: as trade in food products increases, small and medium sized farms are disappearing. In the EU as a whole, at least 500,000 farm jobs are lost each year. With the prospect of EU enlargement, and the entry into the EU of countries like Poland, where farming still accounts for more than 27% of the workforce, this situation is likely to get worse.

In the UK for instance, according to a farmer who did not want his name revealed, supermarkets ask their dairy suppliers why they should purchase local milk at 21p/litre when production of dairy products – butter, cheese, skimmed milk products – can be purchased overseas at 15-17p/litre. Cornwall producers of new (early) potatoes hope to achieve £100/tonne. Yet the same product can be bought from Egypt at £70/tonne, thus forcing local prices down.

While the supermarket owes nothing to the farmers, farmers often find themselves locked into selling food to the supermarket, simply because the collapsing wholesale market has left them with no choice. The supermarket can gradually reduce the price it pays until the farmer's business folds, whereupon it switches to a new supplier, who is less aware of the hidden cost of the relationship. A survey by the Daily Mail revealed that apples in the superstore were marked up by as much as 198%, while eggs commanded prices up to 439% higher than were paid to farmers. Some of the big chains ensure that the producer's options remain limited: in some cases manufacturers have been warned that if they also supply goods to the discount clubs, they will lose their trade with the superstore.(64) Despite claims of supporting the British farmers, the superstores will happily source overseas if they do not get the produce at the price they want here.

---

## **Part 3: Vision for a new food and farming future**

The current system is moving quickly towards mass production for cheap processing and retail. This relies on cheap imports, complex chains for holding and feeding animals for slaughter, often in crowded conditions, further intensification and an increasingly undervalued farming community.

It is clear from the data that for many products such as fruit, vegetables and dairy produce, we can actually feed ourselves better, particularly if we change consumption patterns and invest in new and traditional varieties and breeds suited to climates and land types.

For those products where we are currently unable to feed ourselves we can consider the following options:

### **Reducing consumption**

It is not necessary or healthy to consume some products in such quantities eg sugar, and livestock products.

**Sugar:** The damaging EU Sugar Regime and the associated Sugar Protocol ensures that the European Union is contributing significantly to the growth in world oversupply. The EU regime habitually fosters the annual production of approximately 30% more sugar than the annual average consumption of around 12.75mt. (65) Reduced consumption would be beneficial in dental and obesity terms as well as increasing self-sufficiency. A recent EU Court of Auditors Report revealed production at 130% of demand and the cost of the regime to consumers – at 6.5bnEuros – showing the high level of support given to this sector.(66)

**Livestock:** Dietary related diseases including coronary heart disease, cancer and obesity are on the increase in both the developed and developing world.(67) To combat these we should be reducing consumption on certain livestock products yet CAP subsidies encourage overproduction of some meat and dairy products and fail to support extensive pig and poultry production.

#### **Increasing Production For the Domestic Market**

This will require incentives and re-skilling in order to increase the range of products available and to make agriculture less intensive and increase animal welfare. Good products for such an appraisal would be fruit and vegetables.

**Fruit and vegetables:** Some countries, such as the UK, have lost much of their fruit and vegetable capacity and rely heavily on imports of produce they could grow (see Far Flung Fruit above). Fruits and vegetables are increasingly traded around the world yet the UK is not consuming enough fresh fruit and vegetables. Subsidies should be used to reinvest in production and reskilling growers and workers in sustainable production methods.

#### **Assessing the Consequences of the Imports on the Exporting Countries.**

This would include the effects on farmers, workers, the environment, and society. Good products to assess here would be soya feedstocks, intensively produced vegetables.

**Soya:** In Brazil alone, an area of 13 million hectares is devoted to growing soya. This large scale, highly mechanised production replaces both small-scale production and rainforest areas and displaces thousands of rural communities. The UK imports 7000 tonnes of soya every day and over half of this is fed to animals.(68)

**Livestock:** 37% of India's arable land has now been diverted to grow crops to feed animals (beef, veal and buffalo) for the export trade, leading to massive top soil erosion, fuel use and animal welfare problems. India consumes 25% of the meat it produces.(69)

**Horticulture:** Horticulture production in many developing countries does not provide a particularly lucrative or reliable income, it may compete with subsistence crops for use of scarce land and does not tend to involve the poorest farmers. An estimated one million people in ACP countries depend on peas and bean exports to the EU for their livelihoods but this market is a fickle one and they could lose it overnight. It also involves considerable use of scarce land and water resources and the use of chemical pesticides and fertilisers.

There are positive advantages in social and environmental terms of a trading system based on fair trade and localisation. These need to be investigated and promoted and the obstacles removed.

Research in Holland found that sourcing fresh peas locally required 9 megajoules/kilogram, whereas when imported the energy consumption is 25 megajoules/kilogram.(70) The energy consumed when carrots are imported from Italy to Sweden could be halved if substituted by domestic carrots.(71) Kiwi fruit transported by freight carrier plane from New Zealand to Europe results in 5kg of CO2 emissions per kilogram of fruit carried.(72) To import 1kg of asparagus from California to Europe requires four litres of fuel. A switch to domestic produce would require 900-times less fuel.(73)

**Apples:** these make a good example of the changes that local sourcing would require, because of the changes in their distribution described above. If Britain were to become self-sufficient in apples, a replanting programme would be required in which sustainable cultivation techniques are applied. Different varieties would have to be chosen to suit local conditions and to provide a range, together with traditional and modern storage techniques, which would ensure year-round availability. Local sourcing requires the cultivation of apples in and around towns and cities as well as the re-introduction of fruit cultivation on farms that have ceased production over the past thirty years.

The increasingly complex food chains, which result in multiple and often adverse impacts on society, must be challenged, and a new direction set, so that we shift towards much more localised and logical food production and delivery. Making that shift will involve major action at a personal, local, national, and international level. It will require imaginative solutions and in certain cases it will be necessary to reconsider the systems and practices that have become widespread. The expectation of year-round availability of an extensive range of imported foodstuffs will have to be addressed as well as an assessment made of the present and potential availability of local produce.

---

## **Part 4: Changing the menu for a more localised food system**

The current farming crisis across the EU offers us a vital opportunity to completely re-think the direction of agricultural policy, shifting it away from intensive, industrialised methods, which are dependent on ever increasing transport and international trade, towards a more localised food system that is both socially and environmentally sustainable.

To achieve this, measures to be considered include the following:

- Encourage local production for local consumption - shorter food chains, more local abattoirs and local processing through policy initiatives and incentives. Internalising the environmental costs of transport via, for example, a carbon tax, thus raising the price of fuel, would be an important step in this direction. Policies could include measures to: promote farmers markets and direct buying schemes; develop regional sourcing co-operatives by farmers and retailers; support new and existing local small scale processing facilities including abattoirs and cutting plants, and provide economic disincentives for long distance food haulage.
- Work with other European countries to replace the outdated, harmful and expensive European Common Agricultural Policy (CAP) with a Localist Rural and Food Policy. (see below). This new Policy would enhance more local consumption patterns and reduce reliance on trade. It would support the rural environment and economy, promote shorter food chains, protect animal welfare, secure safe, healthy, affordable food and enhance (rather than damage) sustainable development both in the EU and around the world.
- Work to ensure that organic farming becomes a major sector of European farming to reduce reliance on imports. The EU should set ambitious targets for organic farming and devise integrated action plans, with adequate resources for the transition period, to

ensure that the targets are reached. A start has already been made by Green Member of the Scottish Parliament, Robin Harper, who has recently published a bill setting a target for 20% of Scotland's farmland to be converted to organic production in the next 10 years. Organic farms currently constitute less than 2% of farms in Scotland. A similar initiative was launched in 1999 in England and Wales.(74)

Regulate the retailing sector. The loss of independent retailers and wholesalers and increase in market share of the major food retail multiples has given rise to problems. These include not only suppliers being compelled to sell at whatever price to the multiples and having to comply with unfair standards and demands (75) but also leads to the loss of food options for low income families.(76) Policies could include limiting market share through competition rules. The UK Government must act to ensure farmers get a fair deal for their produce by implementing a strong, legally binding code of practice. It must also work to ensure the survival and start up of small-scale community led retailing initiatives. Examples of these include food-buying co-operatives, community run shops, farmers markets, school, college and community cooking clubs, transport to shop schemes, and community cafes.(77)

Improve the nation's diet by ensuring all sectors of society have access to healthy foods, encouraging better eating habits and cooking skills, and adopting minimum nutritional standards for school meals and hospitals (providing the resources these institutions need to achieve them and reduce reliance on cheap food sources). This would require setting a revised minimum income standard so that tax and other benefits are properly linked to what is required for a decent standard of living and a good diet.

Immediately ban live animal exports on a permanent basis.

End the dumping of exports in developing countries, which has hugely destabilising effects on local markets, exacerbates poverty, and frustrates efforts towards sustainable development

### **Towards a Localist Rural and Food Policy**

Today, the Common Agricultural Policy is held in increasing disrepute. Not only does it cause enormous environmental damage, it is no longer even fulfilling its main objectives, and the income of the majority of farmers is no longer safeguarded. Its promotion of large-scale, intensive systems, with scant regard to rural livelihoods, environmental protection, or animal welfare, is coming under increasing scrutiny. The encouragement of long distance trade and its adverse effects on climate change also need more critical analysis and localisation policies need to be proposed

It is rarely realised that consumers are now paying more than ever for agricultural products, once the expensive side effects of industrialised farming are taken into account. This can be clearly demonstrated by the mounting costs of BSE, water pollution from pesticide use, and now the growing Food and Mouth crisis. The CAP budget is within a hairsbreadth of going bankrupt. The BSE crises in Germany, Austria, Italy and Spain starting in November last year have pushed the CAP budget to the brink.

The reform of the Common Agricultural Policy, including "Agenda 2000" passed in Berlin in 1999, essentially created a limitation to agricultural spending, a reduction in the guaranteed prices, and an increase in the competitiveness of the farming industry on the world markets. Inadequate attention was given, however, to quality of agricultural products, animal welfare concerns, environmental protection and the sustainable development of rural areas.

The Green Party of England and Wales is therefore advocating a transition away from the old CAP and towards a new Localist Rural and Food Policy which must create a framework of conditions to promote sustainable agricultural, environmental, social, and animal-friendly policies. This means the reduction of market interventions and the transferral of the monies into policies which

(a) give priority to short supply routes and regional markets by measures that would include introduction of ecotaxation to internalise some of the environmental costs of damaging and unsustainable production methods;

(b) promote the production of healthy foodstuffs by providing assistance in reorganising and marketing to ensure that intensive systems are replaced by more extensive ones, and that organic farming is actively promoted;

(c) end the long distance transport of animals;

(d) restrict the concentration and market power of the major food retailers;

(e) encourage rural regeneration and employment.

On an international level, it is essential that we take agriculture and food outside of trade liberalisation rules

It is clear that increased globalisation of food production, trade and consumption, as driven by the WTO's Agreement on Agriculture, undermines sustainable agricultural practices. This leads to a reduced capacity to meet national and local needs for employment and food security. Policies which promote and protect food security and sovereignty, sustainable farming, humane farming practices and local food chains must be exempt from constraints from international trade rules. One proposal is for a new International Food Security and Food Safety Agreement (IFSFA), which would be based in the United Nations, and which would ensure these new objectives thereby providing the basis for food trade rules. All stakeholders, including small scale farming interests, would have a say in developing this new mechanism which secures key societal goals whilst regulating trade (including banning all dumping, eliminating export subsidies and implementing the precautionary principle).

Food security is too important to be driven by the quest for international market share. In the short term, a number of concrete proposals have been presented for amending the WTO Agreement on Agriculture to promote food security in developing countries. These fall within the broad areas of reducing production-promoting subsidies to Northern agriculture, ensuring fair terms of trade for developing country exports of tropical products to Northern markets, and enabling developing countries to pursue import and export strategies that allow them to put their own food security needs above WTO obligations. This will also require the reorientation of the aid and trade rules of the developed countries so that they contribute to the rebuilding of local economies and local control worldwide.

Indeed, food security should become paramount for rich and poor countries, so that they are free to make their own decisions about whether and what they choose to import. International trade rules should be changed to allow them to do this.

## **Conclusions**

As we begin the new Millennium we face some stark choices about the sort of future we are creating. We are currently witnessing an unprecedented process of ever greater concentration of economic and political power into the hands of agribusiness corporations and

huge food retailers. This is not happening by accident. Neither is it inevitable. It is the result of an agricultural system that puts short term economic gain for a few above longer term sustainability for the majority.

Yet opposition to this ever more intensive food production process is growing as consumers increasingly demand that food be produced locally in ways that maximises animal welfare, adequately protects the environment and provides safe food, whilst giving a fair deal to local farmers and smaller producers. Although some in the countryside are just beginning to change their methods to provide for this new market, this can only occur on the scale necessary if substantial government assistance is provided.

However today the emphasis of the vast majority of those in the food industry as well as politicians is on the provision of cheap food. Indeed cheap is the word that has been used to justify this whole absurd and increasingly obscene agricultural system. BSE and Foot and Mouth have put this system under the spotlight as never before. A UK National Opinion Poll a few weeks after the beginning of the outbreak showed that 82% of people across the whole range of social groups were willing to pay more for a return to safer food.(78)

### **Localising Beyond Food**

With BSE, Foot and Mouth disease and GMOs causing concerns in both rich and poor countries, it is not surprising that the adverse effects of forcing agricultural systems to prioritise increased international trade in ever cheaper food are increasingly under scrutiny. However Seattle and subsequent protests illustrated that there are broader concerns about such a free trade emphasis. These included anxieties about increased environmental threats, unemployment and insecurity, the erosion of democratic control over economies and rising inequality world-wide.

The reactions and policy suggestions that are beginning to emerge in response to these problems, as with food, stress the need to protect and rebuild local economies globally, in a way that encourages maximum social cohesion and environmental sustainability. This replaces the present emphasis on insisting that the major purpose of all economies is to increase their international competitiveness and exports.

This is an ambitious agenda, but one which must begin to be debated and discussed, if we are serious about moving our economies onto a more sustainable basis, and about genuinely addressing the multiple crises that face us. The present agricultural crisis is due in no small part to the industry's emphasis on ever more long distance trade, that in turn worsens the ever growing threat of global warming.

The Greens are taking on this challenge. We are demanding an end to an agricultural system which is recklessly destroying the livelihoods of many in the rural community, often in order to maximise export earnings for a privileged few. At all levels of government, Greens are beginning a radical pan- European debate about how to achieve the fundamental changes in the way we feed ourselves that is necessary not just in Europe, but world-wide.

---

## **References**

- (1) Vidal, J. 'Global disease on the rise- finger pointed at illegal trade' The Guardian 23rd February 2001
- (2) Based on data from the report – Economic evaluation of farm animal welfare policy. Final Report to MAFF by R. Bennett et al. Department of Agricultural and Food Economics, University of Reading. December 2000 and Eurostat data.
- (3) MAFF. 2000. MAFF overseas trade data system (MOTS), Ministry of Agriculture, Fisheries and Food. Updated 25/8/2000.
- (4) Based on data from the report – Economic evaluation of farm animal welfare policy. Final Report to MAFF by R. Bennett et al. Department of Agricultural and Food Economics, University of Reading. December 2000 and Eurostat data.
- (5) Edwards, R. 'Slaughter of the Innocents Part 11' Sunday Herald 6th March 2001
- (6) Based on data from the report – Economic evaluation of farm animal welfare policy. Final Report to MAFF by Bennett, R. et al. Department of Agricultural and Food Economics, University of Reading. December 2000 and Eurostat data.
- (7) Lobstein, T, and Hoskins, R, The Perfect Pinta Food Facts No. 2. The SAFE Alliance, 1998.
- (8) Food Miles-Still on the Road to Ruin, 1999, Sustain.
- (9) FAO Food Balance Sheet Database, 2001
- (10) Simms, A, Kumar, R, and Robbins, N. Collision course: free trade's free ride on the global climate. New Economics Foundation, London, 2000.
- (11) DoT. 1991. UK airfreight 1980-1990. Department of Transport. HMSO, London.
- (12) Department of Environment, Transport and the Regions, The Future of aviation: the Government's consultation document on air transport policy. DETR, London, 2000.
- (13) FAO Food Balance Sheet Database, 2001
- (14) FAO Food Balance Sheet Database, 2001
- (15) FAO Food Balance Sheet Database, 2001
- (16) MAFF. 2000. MAFF overseas trade data system (MOTS), Ministry of Agriculture, Fisheries and Food. Updated 25/8/2000.
- (17) FAO Food Balance Sheet Database, 2001
- (18) Paxton, A (1994) The Food Miles Report: the dangers of long distance transport of food, SAFE Alliance
- (19) Eurostat, Statistical Office of the European Community.
- (20) Eurostat, Statistical Office of the European Community.
- (21) 'Action Plan for Reform of Modern Agriculture' Compassion in World Farming, March 2001)
- (22) Eurostat, Statistical Office of the European Community.
- (23) Lobstein, T, and Hoskins, R, The Perfect Pinta, Food Facts No. 2. The SAFE Alliance, 1998.
- (24) Eurostat, Statistical Office of the European Community.
- (25) Food Miles-Still on the Road to Ruin, Sustain.1999
- (26) Lobstein, T, and Hoskins, R, The Perfect Pinta, Food Facts No. 2. The SAFE Alliance, 1998.
- (27) Eurostat, Statistical Office of the European Community.
- (28) Food Miles-Still on the Road to Ruin, Sustain.1999
- (29) FAO Food Balance Sheet Database, 2001
- (30) MAFF. 1998. Basic Horticultural Statistics for Great Britain. Ministry of Agriculture, Fisheries and Food. various years between 1939 and 1998, HMSO, London.

- (31) MAFF. 1998. Basic Horticultural Statistics for Great Britain. Ministry of Agriculture, Fisheries and Food. various years between 1939 and 1998, HMSO, London.
- (32) Jones, J. A. 1999. The environmental impacts of distributing consumer goods: a case study on dessert apples. PhD Thesis (unpublished). Centre for Environmental Strategy, University of Surrey, Guildford, Surrey, UK.
- (33) FAO Food Balance Sheet Database, 2001
- (34) FAO Food Balance Sheet Database, 2001
- (35) Department of Environment, Transport and the Regions, Quality of life counts. Department of the Environment Transport and the Regions, HMSO, London, 2000.
- (36) Department of Environment, Transport and the Regions, Quality of life counts. Department of the Environment Transport and the Regions, HMSO, London, 2000.
- (37) Jones, J. A. 1999. The environmental impacts of distributing consumer goods: a case study on dessert apples. PhD Thesis (unpublished). Centre for Environmental Strategy, University of Surrey, Guildford, Surrey, UK.
- (38) Simms, A, Kumar, R, and Robbins, N. Collision course: free trade's free ride on the global climate. New Economics Foundation, London, 2000.
- (39) Department of Environment, Transport and the Regions, The Future of aviation: the Government's consultation document on air transport policy. DETR, London, 2000.
- (40) Sustain Food miles-still on the road to ruin? Sustain, 1999.
- (41) Whitelegg, J. Transport for a sustainable future: the case for Europe. Belhaven Press, London, 1993.
- (42) Lang, T. and Hines, C. (1993) The New Protectionism. Earthscan, London.
- (43) Pretty, J, N, Brett, C, Gee, D, Hine, R.E, Mason, C.F, Morison J.I.L, .Raven, H, Rayment, M.D, Van der Bijl, G, An assessment of the total external costs of UK agriculture, *Agricultural Systems* (65)2 (2000) pp. 113-136, UK, 2000
- (44) Pretty, J, The true cost of intensive farming, *Living Earth*, Bristol, Soil Association, No 208 Oct – Dec 2000
- (45) CPRE Press release 'Governments Future Vision for farming is a hollow promise', 27.9.99. CPRE, London
- (46) 21 February 2001. [www.npa-uk.net](http://www.npa-uk.net)
- (47) Vidal, J. 'Global disease on the rise- finger pointed at illegal trade' *The Guardian* 23rd February 2001
- (48) Henley, J., 2001. First case identified in France. *The Guardian*, 14th March. Vidal, J., 2001. Global disease on the rise. *The Guardian*, 23rd February. Bowdler, N., 2001. Virulent new strain sweeps the world. *The Independent*, 25th February.
- (49) Impact of FMD on worldwide Trade, *Agra Europe* March 9, 2001.
- (50) Mark Atkinson and Tania Branigan 'Cost of outbreak put at £9bn' *The Guardian* 17th March 2001
- (51) *Agra Europe* Feb 2 2001
- (52) *Consumer Voice*, DG Health and Consumer protection No3. 2000
- (53) *World Food Law Journal*, January 2001, *Agra Europe*, London
- (54) See *Food and Drug Law Journal*, volume 55 number 4 2000
- (55) Meadows, D, Can Organic Farming Feed the World? *Organic Gardening Magazine*, USA, May 2000
- (56) Food and Agriculture Organisation (FAO) of the United Nations, *The State of Food Insecurity in the World*, 2000
- (57) *Food Poverty – What are the policy options*, NFA 1998 – currently being updated by Sustain, 2001.
- (58) Pretty, J., and Hine, R. 2000. Feeding the World with Sustainable Agriculture: A Summary of New Evidence. SAFE-World Research Project, University of Essex.
- (59) Eurostat, Statistical Office of the European Community.
- (60) Slaughter of the innocents Part ii *Sunday Herald* 6 March 2001.
- (61) *Fowl Deeds*, Sustain 2000.
- (62) *Agriculture in UK*, MAFF, 1999, 2000
- (63) The Countryside Agency, 1999. *The State of the Countryside: Summary of Key Facts*. Cheltenham, Gloucestershire.
- (64) George Monbiot, *Captive State: The Corporate Takeover of Britain*, 2000, p.184
- (65) *Sweet and Sour*, Sustain, 2000 also *Agra Europe* 6 October 2000
- (66) Consumers paying EU800m too much' Quoted in *October 6th Agra Europe*
- (67) see Cannon, G. 'Feeding the world a healthy diet' in *Meat is Murder*, eds Tansey, G. and D'Silva, J. Earthscan, 1999
- (68) *Soya: the ubiquitous bean*, SAFE Alliance, 1998
- (69) Maneka Ghandi 'Factory Farming and the meat industry in India' in *Meat is Murder*, eds Tansey, G. and D'Silva, J. Earthscan, 1999
- (70) Kooijman, J. M. (1993) *Environmental Assessment of Packaging: Sense and Sensibility*. *Environmental Management*, Vol 17, No 5, p 575-586.
- (71) Carlsson, A. 1997. Greenhouse gas emissions in the life-cycle of carrots and tomatoes. IMES/EESS Report No. 24, Department of Environment and Energy Systems Studies, Lund University, Sweden.
- (72) Simms, A, Kumar, R, and Robbins, N. Collision course: free trade's free ride on the global climate. New Economics Foundation, London, 2000.
- (73) Simms, A, Kumar, R, and Robbins, N. Collision course: free trade's free ride on the global climate. New Economics Foundation, London, 2000.
- (74) *Organic Targets Bill* see [www.sustain.org](http://www.sustain.org)
- (75) The DTI and Competition Commission enquiry into monopolies in the food retail sector confirmed this in their report 'Supermarkets A report on the supply of groceries from multiple stores in the United Kingdom', 2000, The Stationery Office, London
- (76) See 'A Battle in Store – a discussion of the social impact of the major UK supermarkets', Sustain, 2000
- (77) for many examples see *Making Links – a toolkit for local food projects*, Sustain 2000.
- (78) Smith, D. 'Our fading appetite for modern farming' *Sunday Times*, March 18th 2001

---

## Appendix



	<b>1000 metric tons</b>					<b>Production as a percentage of consumption</b>
--	-------------------------	--	--	--	--	--

		Production	Imports	Stock Changes	Exports	Consumption	
<b>AUSTRIA</b>	Cereals	4771	625	358	999	4756	100.3%
	Starchy Roots	647	114	0	18	743	87.1%
	Sugar Crops	3314	0	0	0	3314	100.0%
	Oil Crops	260	166	0	82	344	75.6%
	Vegetable Oils	95	189	14	87	211	45.0%
	Vegetables	607	350	0	108	848	71.6%
	Fruit	1042	773	38	501	1351	77.1%
	Meat	909	116	0	166	859	105.8%
	Animal Fats	259	21	0	53	227	114.1%
	Milk	3278	524	48	860	2990	109.6%
	Eggs	99	23	0	6	117	84.6%
<b>BEL/LUX</b>	Cereals	2625	6269	-19	3839	5036	52.1%
	Starchy Roots	2438	3868	388	2625	4069	59.9%
	Sugar Crops	5366	52	0	0	5418	99.0%
	Oil Crops	33	2931	1	563	2403	1.4%
	Vegetable Oils	654	1009	-31	1080	551	118.7%
	Vegetables	2178	1509	0	1745	1942	112.2%
	Fruit	652	4825	0	3995	1482	44.0%
	Meat	1801	400	0	1379	821	219.4%
	Animal Fats	500	496	5	413	588	85.0%
	Milk	3682	3486	80	3664	3584	102.7%
	Eggs	238	54	0	113	179	133.0%
<b>DENMARK</b>	Cereals	9334	831	-119	2294	7753	120.4%
	Starchy Roots	1456	155	135	358	1389	104.8%
	Sugar Crops	3414	1	-66	0	3349	101.9%
	Oil Crops	334	314	-30	57	561	59.5%
	Vegetable Oils	174	380	0	203	350	49.7%
	Vegetables	308	277	2	70	516	59.7%
	Fruit	82	539	0	154	468	17.5%
	Meat	1987	148	-19	1567	549	361.9%
	Animal Fats	412	168	-30	235	316	130.4%
	Milk	4668	351	2	2749	2271	205.5%
	Eggs	84	24	0	15	93	90.3%
<b>FINLAND</b>	Cereals	2773	523	492	735	3052	90.9%
	Starchy Roots	590	239	150	13	966	61.1%
	Sugar Crops	897	0	0	0	897	100.0%
	Oil Crops	70	261	0	1	331	21.1%
	Vegetable Oils	98	74	8	106	74	132.4%
	Vegetables	215	161	0	26	350	61.4%
	Fruit	22	421	0	56	387	5.7%
	Meat	353	34	0	32	355	99.4%

	Animal Fats	100	12	0	37	75	133.3%
	Milk	2447	233	86	513	2253	108.6%
	Eggs	64	0	0	10	54	118.5%
<b>FRANCE</b>	Cereals	68410	2566	-5802	31080	34095	200.6%
	Starchy Roots	6053	1055	508	1560	6056	100.0%
	Sugar Crops	31156	1	0	8	31150	100.0%
	Oil Crops	5805	1294	480	3277	4302	134.9%
	Vegetable Oils	1246	1200	-130	814	1503	82.9%
	Vegetables	8089	2478	3	1575	8995	89.9%
	Fruit	10202	5356	80	2299	13339	76.5%
	Meat	6522	1123	55	1809	5891	110.7%
	Animal Fats	1257	482	0	442	1297	96.9%
	Milk	25476	3249	-409	7891	20424	124.7%
	Eggs	1009	77	0	80	1006	100.3%
<b>GERMANY</b>	Cereals	44575	4171	-3322	9640	35784	124.6%
	Starchy Roots	11712	1248	979	2836	11102	105.5%
	Sugar Crops	26787	0	0	2	26786	100.0%
	Oil Crops	3636	5996	252	515	9369	38.8%
	Vegetable Oils	2836	1852	-124	2135	2428	116.8%
	Vegetables	3066	5004	0	592	7478	41.0%
	Fruit	4987	8814	-206	3068	10527	47.4%
	Meat	6139	1932	0	871	7201	85.3%
	Animal Fats	2140	381	89	502	2108	101.5%
	Milk	28400	5940	0	11738	22603	125.6%
	Eggs	856	315	0	75	1097	78.0%
<b>GREECE</b>	Cereals	4499	1343	-519	386	4937	91.1%
	Starchy Roots	878	209	0	21	1066	82.4%
	Sugar Crops	1996	0	0	0	1996	100.0%
	Oil Crops	2714	427	41	185	2997	90.6%
	Vegetable Oils	606	139	-41	193	511	118.6%
	Vegetables	4210	121	2	835	3498	120.4%
	Fruit	3510	305	2	1418	2399	146.3%
	Meat	508	402	0	15	895	56.8%
	Animal Fats	99	42	0	5	136	72.8%
	Milk	1899	1393	0	103	3189	59.5%
	Eggs	119	5	0	1	124	96.0%
<b>IRELAND</b>	Cereals	1865	901	-310	498	1958	95.3%
	Starchy Roots	482	205	93	19	761	63.3%
	Sugar Crops	1400	1	0	0	1401	99.9%
	Oil Crops	17	167	0	6	179	9.5%
	Vegetable Oils	29	144	0	19	153	19.0%
	Vegetables	229	181	0	51	359	63.8%

	Fruit	22	296	0	71	247	8.9%
	Meat	1026	76	-30	744	327	313.8%
	Animal Fats	317	44	-7	227	127	249.6%
	Milk	5148	496	-118	3241	2285	225.3%
	Eggs	33	2	0	1	34	97.1%
<b>ITALY</b>	Cereals	20267	8735	-1401	4509	23092	87.8%
	Starchy Roots	2206	949	-175	305	2676	82.4%
	Sugar Crops	13343	7	0	0	13351	99.9%
	Oil Crops	4376	1354	-127	49	5554	78.8%
	Vegetable Oils	1160	1144	-11	502	1791	64.8%
	Vegetables	14765	1077	0	3931	11911	124.0%
	Fruit	17718	1980	-65	3850	15783	112.3%
	Meat	4044	1359	-110	362	4931	82.0%
	Animal Fats	583	304	-13	134	740	78.8%
	Milk	12236	6925	475	1313	18323	66.8%
	Eggs	783	28	0	14	797	98.2%
<b>NETHERLANDS</b>	Cereals	1406	6136	265	2039	5768	24.4%
	Starchy Roots	5249	4737	0	3267	6719	78.1%
	Sugar Crops	5504	53	0	11	5546	99.2%
	Oil Crops	10	6894	199	1830	5273	0.2%
	Vegetable Oils	1310	2304	-71	2364	1179	111.1%
	Vegetables	3560	1202	0	2968	1793	198.5%
	Fruit	715	3818	0	2504	2028	35.3%
	Meat	2995	444	-28	1784	1627	184.1%
	Animal Fats	565	411	-25	436	515	109.7%
	Milk	11200	4539	153	7226	8665	129.3%
	Eggs	624	59	0	359	324	192.6%
<b>PORTUGAL</b>	Cereals	1323	3246	-133	122	4314	30.7%
	Starchy Roots	1171	974	30	23	2152	54.4%
	Sugar Crops	168	0	0	0	168	100.0%
	Oil Crops	351	821	40	28	1183	29.7%
	Vegetable Oils	251	185	-45	118	273	91.9%
	Vegetables	2334	213	0	456	2090	111.7%
	Fruit	1281	523	0	95	1710	74.9%
	Meat	690	169	0	21	838	82.3%
	Animal Fats	129	19	0	22	127	101.6%
	Milk	1914	363	0	279	1999	95.7%
	Eggs	112	6	0	4	114	98.2%
<b>SPAIN</b>	Cereals	22210	6947	-1092	1791	26274	84.5%
	Starchy Roots	3277	3657	468	244	7158	45.8%
	Sugar Crops	9171	0	0	0	9171	100.0%
	Oil Crops	5164	3967	112	249	8994	57.4%

	Vegetable Oils	2070	617	-199	981	1507	137.4%
	Vegetables	11806	388	0	4285	7909	149.3%
	Fruit	13626	929	200	5296	9459	144.1%
	Meat	4600	304	-154	496	4254	108.1%
	Animal Fats	610	200	0	62	747	81.7%
	Milk	6650	1896	0	552	7993	83.2%
	Eggs	633	10	0	30	614	103.1%
<b>SWEDEN</b>	Cereals	5618	410	386	1665	4748	118.3%
	Starchy Roots	1196	245	-169	22	1251	95.6%
	Sugar Crops	2571	0	0	0	2571	100.0%
	Oil Crops	130	192	0	8	313	41.5%
	Vegetable Oils	94	230	0	151	173	54.3%
	Vegetables	308	453	0	44	717	43.0%
	Fruit	94	891	0	56	928	10.1%
	Meat	594	99	0	59	634	93.7%
	Animal Fats	222	21	0	59	184	120.7%
	Milk	3277	405	0	284	3398	96.4%
	Eggs	106	10	0	5	111	95.5%
<b>UK</b>	Cereals	22783	4055	1323	6920	21240	107.3%
	Starchy Roots	6420	1566	353	251	8089	79.4%
	Sugar Crops	10002	17	0	0	10019	99.8%
	Oil Crops	1713	1832	0	357	3188	53.7%
	Vegetable Oils	971	1115	7	382	1711	56.8%
	Vegetables	2932	2915	0	277	5570	52.6%
	Fruit	278	5382	0	246	5414	5.1%
	Meat	3733	1408	0	649	4492	83.1%
	Animal Fats	464	350	24	252	587	79.0%
	Milk	14635	3029	52	2266	15451	94.7%
	Eggs	629	31	0	29	631	99.7%
<b>EU 15</b>	Cereals	212460	46758	-9894	66517	182807	116.2%
	Starchy Roots	43775	19221	2760	11561	54195	80.8%
	Sugar Crops	115090	133	-66	21	115136	100.0%
	Oil Crops	24612	26616	970	7207	44991	54.7%
	Vegetable Oils	11593	10581	-624	9134	12415	93.4%
	Vegetables	54607	16327	7	16963	53978	101.2%
	Fruit	54231	34852	50	23611	65522	82.8%
	Meat	35901	8014	-285	9954	33675	106.6%
	Animal Fats	7659	2950	45	2880	7774	98.5%
	Milk	124910	32827	368	42678	115427	108.2%
	Eggs	5390	645	0	740	5294	101.8%

