

Air Freight Green Paper: a basis for discussion

Should the Soil Association tackle the environmental impact of air freight in its organic standards?



Standards consultation
May 2007



Soil Association

1. Executive summary

The ability to air freight food thousands of miles around the world in a matter of hours has put a wider variety of products on our shelves all year round. More recently, as awareness of climate change has grown, concerns have been raised about the damage caused to the environment by meeting these demands. To mitigate climate change we need to urgently reduce greenhouse gas emissions and become less dependent on fossil fuels. However, when reducing our impact on the world's climate we must carefully consider the social and economic benefits of air freight for international development and growth of the organic market as a whole.

- Some highly perishable organic fresh fruit and vegetables are imported all year round by air. This represents a very small but growing proportion of the carbon emissions from food distribution. The majority of CO₂ emissions from food distribution occur on UK roads.
- The cost of air freighting food is extremely high and likely to rise. Consequently the vast majority of imported organic food comes by ship or road. Businesses avoid air freight when ever possible.
- Supermarkets strive for continual availability of even the most perishable and exotic produce all year round. Air freight also enables importers to respond to unexpected shortfalls in supply or surges in demand to maintain continuity of supply.
- There are a range of existing air freight initiatives: Tesco and Marks & Spencer have started labelling air freighted food; some organic box schemes have 'no air-freight' policies; and shipping alternatives are being developed through innovations in technology and supply chain management.
- Air freight is the fastest growing form of food transport. UK consumer demand for all year round fresh produce has seen air freight more than double since 1992 and growth is predicted to continue. Air freight has become an integral part of the aviation industry.
- Air freight has the highest global warming potential of any form of transport. It is less than 1% of the total UK food miles but is responsible for 11% of the CO₂ emissions from UK food transport. Air freight can generate 177 times more greenhouse gas than shipping.
- Air freight enables producers in some of the poorest regions of the world to supply high value fresh fruit and vegetables to Europe, creating jobs and opportunities to add value.
- There are a range of options available to the Soil Association for addressing the environmental impact of air freighting organic food with risks and benefits to each. These options range from taking no action, through labelling and carbon offsetting, to introducing a partial or general ban.
- An environmentally sustainable food distribution system, in line with organic principles, will require significant changes and improvements. We are asking if we should address air freight in the Soil Association's organic standards as part of the strategy for achieving this.

2. Introduction

2.1 Organic principles

Organic farming is founded on principles of health, ecology, fairness, care for the environment and care for the well-being of current and future generations. Of particular relevance to the air freight debate, the key Soil Association principles are that organic food and farming should:

- minimise pollution and waste,
- incorporate social justice and rights as integral parts of the whole organic food production chain,
- develop ecologically responsible production, processing and distribution chains emphasising local systems.

Effectively applying these principles requires a holistic approach to food production that has positive impacts on:

- biodiversity,
- animal welfare,
- human health,
- and socio-economic benefits for the local community (Green, 2006).

When analysing the sustainability of our food supply in the context of these principles it is important to recognise differences between farming methods and forms of transport. Organic farming is widely recognised as being more environmentally friendly than non-organic food production and is the top reason for consumers choosing organic. Eating food that is seasonal, local, and organic has the greatest overall benefit for the environment. Where this is not possible, importing organic food by road or sea is generally better for the environment than food produced non-organically in the UK. Defra's Food Miles report suggests the benefits of organic farming outweigh the impacts of importing organic food by road and sea freight. However, these benefits do not outweigh the environmental impact of air freight (Defra, 2005).

One of the issues raised most frequently with the Soil Association by organic consumers, Soil Association members and licensees is the contradiction they see between air freighting organic food and some core elements of the organic principles.

2.2 Organic standards

The Soil Association Organic Standards are the prescription that puts sustainable agriculture principles into practice. Standards (and their implementation through certification) give purchasers trust and confidence in organic production by maintaining and, where possible, enhancing the integrity of the system they define. Standards enable and empower both purchasers and producers to support sustainable practice in the market place, and so help to expand the organic market, and therefore to spread organic farming.

To achieve all this, standard setting must encompass high standards of governance; and be accountable to those with an interest in the standards. This is why the Soil Association has established a Standards Board under independent chairmanship. The Standards Board is responsible for making recommendations for new and changed standards, after proper consultation with interested parties.

Standards adhere as closely as possible to the principles of sustainable agriculture; respond to changes in the environment in which they are used; and come as close to consumers' aspirations as is reasonably and practically possible.

Air freight is an important and complicated issue, posing a range of environmental and social challenges.

For all the above reasons the Standards Board believes an open debate about the issues is the best way to consult on the future relationship between organic standards and air freight. This paper is intended to provide a basis for discussions with all those interested in this issue, about the possible options for addressing air freight and the implications of each one.

3. Scale and nature of organic air freight

The ability to transport food thousands of miles around the world in a matter of hours has put a wider variety of organic and non-organic products on our shelves all year round. Air freight has helped maintain continuity of supply and stimulate consumer demand for out of season fresh produce.

However, the cost of air freight is a major consideration for any supplier. It can be as much as half the total cost of producing, packing and delivering the product, making transport the dominant cost in the supply chain. Consequently, the vast majority of imported food (organic and non-organic) comes to the UK by sea; businesses only air freight when there is absolutely no viable alternative.

Notwithstanding this, there seems to be a widespread misconception that the variety and volumes of produce being air freighted is much greater than it actually is. Although fresh fruit and vegetables are the largest air freighted commodity they represent less than 1% of the total volume of food imported into the UK (DfT, 2003; Defra, 2005).

Figures for organic air freighted imports are not available, but less than 0.5% of Soil Association licensees use air freight. However, air freight is a significant part of some large-scale Soil Association licensed businesses.

The reasons for air freighting organic food are broadly:

- Top-up – supplementing unpredictable shortfalls in the normal supply.
- Business as usual – produce is routinely air freighted to market because there is no alternative.

3.1 Top-up

Importers supplying the major retailers come under pressure to air freight produce when the normal supply is insufficient. The speed of delivery afforded by air freight allows suppliers to respond quickly to sudden changes. Unexpected shortfalls in supply or surges in demand can happen at any time of year and for a broad range of products. For importers of fresh produce licensed by the Soil Association, top-up air freight accounts for less than 1% of their business. In these cases, the produce is ordinarily transported by ship or road.

The majority of Soil Association certified top-up air freight is salads, such as lettuces, spinach and celery grown in the USA, the remainder comprises small amounts of organic produce from a wide variety of countries. The probability of having to supplement supply with air freighted produce is greater for specialist products and those that have a relatively small supply base. This is particularly relevant to organic foods where there has been rapid growth of the market and yields can be unpredictable, occasionally creating problems for suppliers.

The cost of air freighting produce in this situation is often greater than the retail price. However, in the long term suppliers consider it preferable to fill the gap because of the potential damage to their future business if they lose the shelf space. If there is a period when a product is not available, sales can take some time to build to their previous level once supply is resumed.

3.2 Business as usual

A small number of Soil Association licensed importers and overseas producers routinely air freight organic food (see table 1). This supplies the supermarkets with a small minority of their out of season fresh produce. In terms of volume, this forms the largest part of air freighted organic food. (Fish is the second largest category of air freighted food, although the Soil Association does not certify any fish imported into the UK by air.)

- **Highly perishable fruits and vegetables** constitute the majority of products air freighted. For those products that can be grown either in the UK or in Europe at certain times of the year, air freighted produce largely supplies the out-of-season market. However, at certain times of the year they do compete with fruit and vegetables produced locally or regionally.

Organic products air freighted	Country of origin
Green beans	Egypt, Zambia, The Gambia, Kenya
Baby sweetcorn	Thailand, Zambia
Asparagus	South Africa, Thailand
Podded peas	Egypt, Zambia, The Gambia, India
Limes	Dominican Republic, Mexico
Avocados	Mexico
Spring onions	Egypt, Thailand
Pineapple	Ghana
Sweet potatoes (early season only)	USA
Grapes (early season only)	Egypt, Mexico, South Africa

Table 1. A list of organic products licensed by the Soil Association that are regularly air freighted and examples of the countries where they are produced. This is not a comprehensive list, collecting reliable information on air freighted organic food is an ongoing and involved process.

- **'Early season'** produce accounts for the second largest quantity of air freighted organic produce. Broadly this is where air freight extends the existing season. This can be at the start of Europe's season or, for produce that is normally shipped, at the beginning of the Southern Hemisphere's season. Importing products by air at the start or end of the season enables suppliers to fill a gap in the market when there is no competition from shipped or local produce. As a result a premium can be charged and consequently the cost of air freighting is less prohibitive.
- **Corruption and poor infrastructure.** There are a small number of cases where air freight is the only viable route to the European market. For producers in countries with poor infrastructure or acute problems of corruption at ports and borders, air freight can be the only means of exporting their goods. The produce is not necessarily highly perishable. Exporters can avoid check points and border controls where goods might be lost and bribes demanded. This is particularly true of land-locked countries in sub-Saharan Africa.

4. Air freight is the fastest growing form of food transport

The air freight of organic and conventional food to the UK grew by 140% between 1992 and 2002 (Defra, 2005). The 2.1 million tonnes of carbon dioxide equivalents (CO₂e) emitted by air freighting food is just 0.2% of the UK's total emissions from all sectors (for how to calculate CO₂e, see box 1). However, air freight's rapid growth is expected to continue with limited prospects for improvements in efficiency in comparison to surface transport.

Currently over 60% of air freight goes in the hold of passenger flights, often referred to as belly hold freight. Air freight generates on average 15% of an airline's revenue making belly hold freight an integral part of the aviation industry. The forecast not only predicts air freight to continue growing at 6% per year but also expects the steady move away from belly hold towards dedicated freight carriers to continue (DfT, 2000; Boeing, 2006).

The Government's aviation White Paper suggests the increase in air freight has put pressure on existing airport capacity. For this reason, air freight is highlighted as being a driver of airport expansion and increased air traffic (FoE, 1999; FoE, 2001; DfT, 2003).

The exclusion of the aviation industry from Kyoto reduction targets is considered by environmentalists to be a serious flaw in the European Union's strategy for mitigating climate change. The EU has set targets for reducing greenhouse gas emissions with the aim of limiting global warming to 2°C. If all areas of the aviation industry grow as predicted whilst Kyoto targets elsewhere are met, by 2035 aircraft emissions from the UK could equal the total amount of greenhouse gas emissions from all sectors, leaving no room for emissions from any other part of the UK economy. (See fig. 1. These predictions take account of technologically feasible improvements in efficiency. RCEP, 2002; Anderson, 2006).

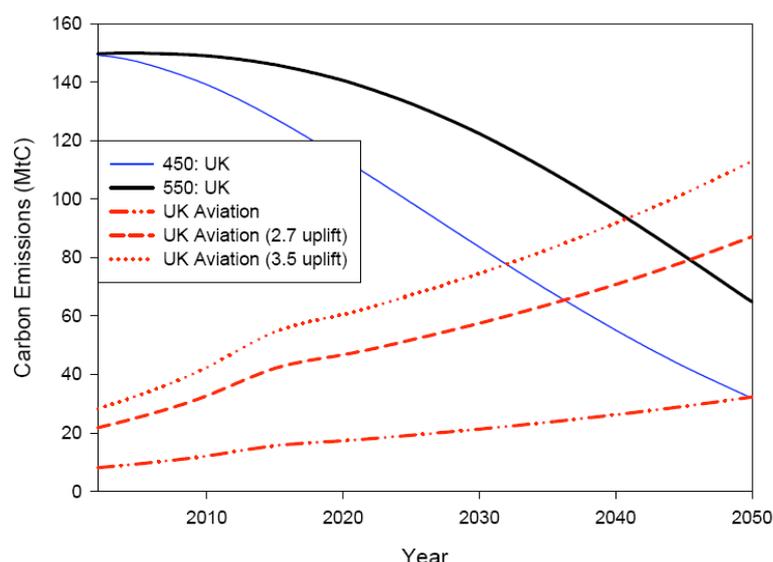


Fig. 1 UK aviation emissions forecasts and scenarios against carbon reduction targets of 550ppmv and 450ppmv. (The 2.7 and 3.5 uplift refer to the enhanced global warming potential of aviation emissions or radiative forcing, see box 1.) Taken from Anderson, 2006.

Recently, the European Parliament proposed stringent measures to internalise the cost of the environmental damage caused by aircraft with the aim of restricting growth. According to Defra, the price of air freighted goods would increase significantly if the environmental damage of air transport is reflected in the fuel price (Defra, 2005). Considering the cost of air freight is already extremely expensive relative to other forms of food transport, the market in air freighted fresh fruit and vegetables could easily be undermined by cost increases. Fuel prices increases would jeopardise the long term viability of businesses reliant on air freight.

Box 1 Not just CO₂ – calculating the global warming potential of air freight

Simply looking at the CO₂ emissions from air freight under-estimates its contribution to climate change by ignoring the effect of other greenhouse gases. When nitrous oxides, methane and water vapour are emitted by aircraft at high altitude, directly into the most sensitive strata of the atmosphere, the global warming caused is greater than the CO₂ emissions alone indicate. In 1992 the Intergovernmental Panel on Climate Change (IPCC) found that CO₂ accounts for only a third of the global warming potential of aircraft. Subsequent research by Sausen (2005) supports this but the figure could increase to around 3.5 once the contribution from aviation-induced cirrus cloud formation is reliably quantified.

The potential impact of air freight on the environment is conservatively calculated by using the IPCC’s radiative forcing index of 2.7 which takes account of other greenhouse gases. By multiplying the CO₂ emissions by 2.7 you end up with CO₂e (carbon dioxide equivalents), which gives a more accurate global warming potential of aircraft emissions. Using CO₂e makes it easier to compare the impact of greenhouse gas emissions from air freight with different forms of transport.

5. The impacts of air freight

5.1 Climate change

Aircraft emissions produce far more greenhouse gases per ‘food mile’ than any other form of transport. Although air freight represents less than 1% of food miles (tonne Km), it contributes 11% of the carbon emissions from UK food distribution. In contrast, food imported by ship, the most efficient transport mode, accounts for 65% of the food miles yet is responsible for just 12% of the CO₂ emissions (see fig.2. Defra, 2005).

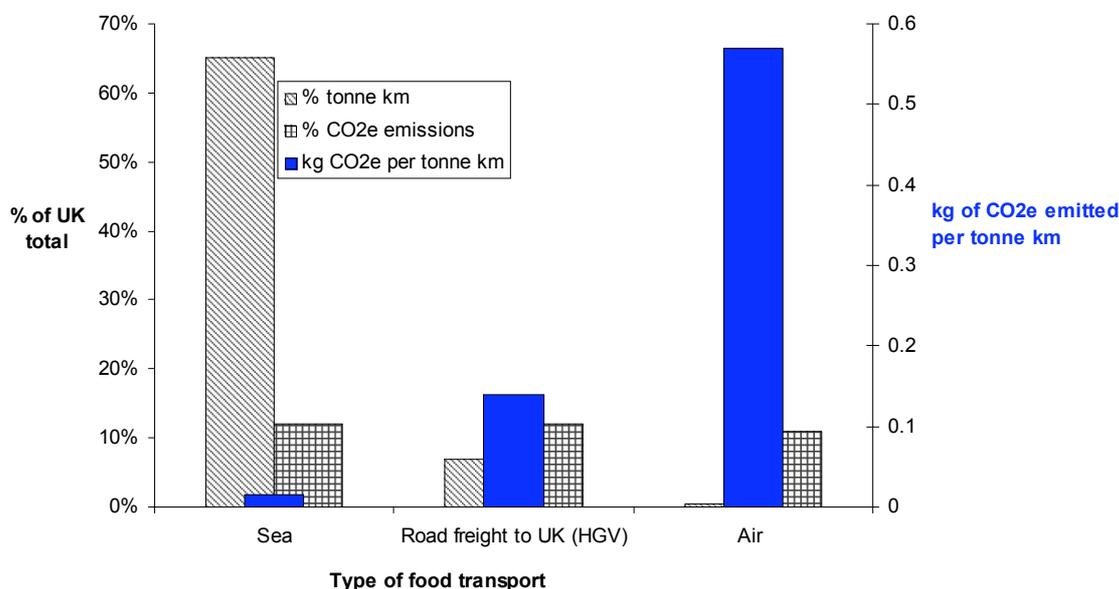


Fig. 2 The amount of CO₂ emitted per food mile in tonne km for air, sea and road freight and the corresponding % of the UK’s total food tonne km and food transport related CO₂ emissions. The remaining 65% of CO₂ emissions, not shown, occur on UK roads. (Derived from data generated by Defra, 2005)

Looking at the whole life cycle of a product reveals a different perspective on carbon emissions and sustainability. The International Institute for Environment and Development (IIED, 2006) compared the carbon emissions for transporting one kilogram of produce by road, sea and air freight.

- Air freight from South Africa generates 15kg of CO₂e per kilogram of produce.
- Sea freight from South Africa generates 0.1kg of CO₂ per kilogram of produce.
- Road freight from southern Spain, although a shorter distance, generates 0.1kg of CO₂ per kilogram of produce.

Another life cycle study was carried out for green beans grown in Kenya and Guatemala and imported by air. The global warming potential for the air freighted green beans was 20 and 26 times greater, respectively, than the potential estimated for UK green beans grown outside (Sim, 2006).

5.2 Our oil dependence

There are major concerns about future energy security in light of rising costs and declining supplies of fossil fuel. Many analysts suggest that we are about to reach the point of 'peak oil', the point at which half of the Earth's available oil has been consumed and production goes into irreversible decline leading to steadily rising prices. It is clear that we have already passed the peak of discovery of new oil resources with the size of newly discovered oilfields now generally declining year on year. The UK Green Party Member of the European Parliament, Caroline Lucas, considers the re-localisation of our food supply to be the most important element of guaranteeing food security in a future without cheap oil (Lucas, 2006).

The air freight stage of a supply chain represents a disproportionately large fraction of the fossil fuel consumption for the life cycle of imported food. Research into green beans imported to the UK from Kenya and Guatemala found that the kerosene burnt in the air freight stage of the supply chain accounted for 80% of the non-renewable resources expended in production, distribution, storage and packaging (Sim, 2006).

5.3 The organic market as a whole

The organic market in the UK has grown rapidly in recent years. Imported organic produce has helped meet demand and possibly created a platform for UK organic producers to establish. Out of season produce maintains an organic presence in the market place all year round, increasing the likelihood that non-organic food is competing with an organic alternative.

Arguably, air freight has bolstered growth of the organic market and supported UK producers by improving continuity of supply and ensuring certain organic products are on supermarket shelves at all times of the year.

5.4 Air freight and development

Air freight has played a central role in opening up international markets in high value fresh fruit and vegetables to developing countries. The difficult task of diversifying to supply the European market with fruit and vegetables has, in some cases, only been possible through air freight. The countries that have achieved this not only benefit from the greater value of the produce in comparison to traditional commodity crops, but also from greater market stability, more opportunities to add value at source and improved participation by small and medium scale enterprises (FAO, 2004).

An increase in demand for convenience among supermarket shoppers has created opportunities for value added processing in the country where the fruit and vegetables are grown. Grading, preparing, sorting, packing and labelling can be done in the country of origin, increasing the export value of the product considerably. These processes involve little actual transformation of the product but are highly labour intensive. Pushing back these operations to the country of origin, where jobs are scarce and labour costs are lower, has advantages for developing countries and UK supermarkets (Dolan, 1999; Jaffee, 2003).

Blue Skies is one example of a Soil Association licensee that has added value at source through processing and packing of organic chopped pineapple. Groups of small-scale growers produce the pineapple in Ghana and export it to the UK by air (see box 2).

Developed nations are the primary drivers of climate change; per capita, developing countries generate far less greenhouse gases. There is an argument that developing countries with lower than the recommended carbon emissions per person are justified in increasing their overall carbon emissions through exports. Alternatively, it could be argued that for sustainable development the environment should be the first and most important consideration.

Box 2 Blue Skies – facilitating development

Blue Skies specialises in the export of pre-cut, ready-to-eat fruit transported in the hold of passenger flights. They predominantly export a sweet Sugarloaf variety of pineapple which cannot be shipped even when whole. Therefore, their entire business is totally dependent on air freight. The value of their organic pineapple is worth 38% more than the non-organic alternative and the export market is worth roughly five times as much as on the local market. The pineapples are grown by small-scale farmers in the Central Region of Ghana and processed in their fresh-cut production facility in Nsawam, in the Eastern Region.

In Nsawam Blue Skies employs over 1500 people and, through salaries alone, contributes around £2 million to the local economy. In the Central Region they have created vital jobs where unemployment is currently 70%.

Farmers are attracted by the prospect of premium prices and the low cost of producing organic food. Through working with Blue Skies and the Soil Association, they learn skills in sustainable agriculture and environmental conservation. Blue Skies provides their farmers with regular training and financial support. They have learnt how to:

- farm commercially without relying on dangerous chemical inputs
- preserve habitats by protecting trees, forests and rivers
- maintain buffer strips and natural borders
- limit soil erosion by ensuring fields follow contour lines, and
- improving the soil structure and organic matter by making and applying compost.

As a result of employing these techniques the production stage has a low and even positive environmental impact. Production elsewhere in Africa and in Europe is comparatively carbon intensive.

Currently Ghana does not have a domestic or regional market for organic products but Blue Skies believes there are many opportunities for organic farming to develop. The International Trade Centre recognises this potential but states that Ghana needs to be able to rely on foreign markets before it can develop its own.

Blue Skies' achievements are seen as a model for development. They have created opportunities to access high value export markets and add value in Ghana. In the Central Region the company has provided access to drinking water and built roads enabling farmers to trade and send their children to school. Blue Skies' success is being used in Rwanda, Tanzania and Zimbabwe to promote development that adheres to high ethical, environmental and organic standards.

6. Existing initiatives

With the acceptance of the causes of climate change, businesses are starting to realise economic sustainability and environmental sustainability closely align. Competition for resources, public perception and legislation favouring environmentally responsible practices have become powerful drivers for improving sustainability. Here are four situations where air freight is being addressed from this perspective.

6.1 'No air freight' policies

In the organic sector several businesses and Bio Suisse, the primary organic certification body in Switzerland, have 'no air freight' policies. In the UK it is predominantly organic box schemes that make the point to their customers that they don't sell air freighted fruit and vegetables. The seasonal variety of produce that box schemes supply their customers, and the fact that this variety is one of their selling points, generally means that the situations where supermarkets have to rely on air freight do not arise (see box 3).

6.2 Retailer Labelling

Some businesses have been quick to respond to consumer concerns over the impact food miles and air freight have in light of climate change. Tesco and Marks & Spencer have started labelling air freighted products and promise to minimise the amount of food they import by air in future as part of their 'eco-plans'.

Box 3 Riverford's no air freight policy – box schemes, alternative sourcing

Riverford Organic Vegetables and its sister companies at Rivers Swale and Nene have a policy of never air freighting produce, simply because with a box scheme they have always felt it is unnecessary. They aim to provide their customers with a good mix of seasonal fruit and vegetables sourcing from farms in the following order:

- local producers,
- other UK growers,
- imported produce from Europe – mostly by road and some by ship,
- imports from the rest of the world – sea freight only.

Whilst their customers expect them to maintain a high percentage of UK seasonal produce, they are constantly under pressure to keep the boxes as varied and easy to use in the kitchen as possible. They feel they achieve this without resorting to out of season produce that is so perishable that it must be flown.

Riverford communicate the changing seasons to their customers which gives them the flexibility to fill their boxes with what is available. They can then manage gluts and shortages without having to rely on air freighted goods to supplement supply.

"Our stance on this issue is very pragmatic – we don't air freight because we don't have to. Setting ourselves apart from this practice gives us an obvious point of difference, but could be considered a very purist stance. We have never been in the business of alienating our existing and potential customers. We adopted an official 'no air-freight' policy long after realising that we actually had one!"

6.3 Innovations in technology and supply chain management have enabled us to transport more products by road and sea over longer distances. Improvements in storage technology and infrastructure have opened up shipping routes where before the produce could only be transported by air. Organic Farm Foods have reduced the amount of produce they air freight by employing new technology and improving the reliability of the cold chain (see box 4).

6.4 Sowing the seeds abroad

In certain countries such as Brazil, Egypt and South Africa, export of organic food has facilitated growth of a vibrant domestic organic market. In several cases export orientated organic producers have provided the impetus for establishing local demand. Domestic organic markets could increasingly provide alternatives to export and would be much more accessible to small and medium sized enterprises.

Box 4 Organic Farm Foods – innovations in supply chain management

Organic Farm Foods import a range of fresh fruit and vegetables, the majority arrives in the UK by sea but a small proportion is air freighted. They have proactively tried to reduce the amount they air freight, not only to reduce their environmental impact but also to cut costs.

For avocados, limes, and early season grapes Organic Farm Foods are opening up sea freight alternatives through efficiency and innovations along the supply chain. They face the added challenge of not being able to use the post harvest chemicals non-organic suppliers rely on. By rigorously controlling storage conditions from harvesting the crop, right through to arriving in the UK port, they have been able to maintain quality.

For grapes from Egypt they have reduced the risk of breaks in the cold chain, and improved temperature and atmosphere regulation. They employ Modified Interactive Packaging which regulates the atmosphere inside the bags. As the grapes respire the bags allow levels of carbon dioxide to build up acting as a natural inhibitor to fungal growth. These innovations work together to reduce spoilage and increase the time the grapes can be shipped.

In addition Organic Farm Foods are exploring alternative suppliers in countries from which produce can be shipped rather than air freighted.

“We believe we can continue to reduce the amount of products we air freight year on year. However, in certain circumstances – at particular times of year or where there are infrastructure problems – air freight will continue to play an important role in enabling market development, continuity of supply and supporting organic agriculture in new production areas.”

7. How should the Soil Association Organic Standards address air freight?

We are conducting this consultation about air freight slightly differently than with our standards proposals in the past. We recognise this is both a complicated and crucially important issue and that a comprehensive consultation with an open debate is the most appropriate way forward. This paper forms the basis of discussions to explore the possible options for reducing or eliminating the environmental impact of air freighting organic products licensed under Soil Association organic standards. The discussions and comments will inform any standards proposals which we propose. In the event that we do make proposals, they would be detailed in a white paper in early 2008, on which we would consult again.

We are asking you whether you think the Soil Association Standards Board should take action to reduce the number and/or nature of organic products that are air freighted. Here are some options, together with some of the risks and benefits, any suggestions beyond these options are very welcome.

7.1 Take no action

The Soil Association would continue campaigning for local, seasonal and organic food but the Standards Board would not develop standards limiting or prohibiting air freight.

RISK: This option poses significant risk to the integrity of organic food. Air freight's contribution to climate change is clearly at odds with the Soil Association's environmental principles and the expectations of consumers who buy organic for environmental reasons. Indications are that businesses relying on air freight are environmentally and economically unsustainable, therefore allowing continued growth could be irresponsible.

BENEFIT: International trade in organic food has helped the UK's organic market grow and can be a catalyst for organic movements elsewhere in the world. Certain organic products will be on the shelves all year round, competing with their conventional counterpart. In addition, air freight enables producers in developing countries to access high value export markets, providing vitally needed jobs and opportunities to add value.

7.2 A general ban introduced over a number of years.

RISK: A general ban could potentially inhibit growth of the organic market and attract criticism from the countries affected and from development organisations. Focusing on air freight could be considered disproportionate and unfair when the majority of the CO₂ emissions from UK food transport occurs on UK roads.

BENEFIT: The projected growth of the aviation industry is a threat to efforts to mitigate climate change. To tackle climate change effectively we need to urgently reduce emissions from all sectors. Banning air freight would send a clear message that transporting food by air is unsustainable. This could be part of a strategy for encouraging developing countries to establish patterns of sustainable agriculture. This approach could be more in line with the expectations consumers have of organic food.

7.3 A selective ban (i.e. with exemptions) introduced over a number of years.

RISK: We might be considered to be acting inequitably. We would need to communicate clearly when and why we are allowing air freight. The practicalities of implementing a selective ban could be considerable involving social or political judgements that are extremely difficult for an organic certification body to make.

BENEFIT: Whilst recognising air freight contributes to climate change we would have the flexibility to allow air freight in justifiable situations. For example these could be for maintaining continuity of supply or where there are development benefits in the producing country.

7.4 Labelling air freight

RISK: A label does not distinguish between air freight in different situations. Successfully altering consumer habits by labelling is highly dependent on informing consumers of the complexities of the debate.

BENEFIT: Labelling products could give people in the UK the choice to eat out-of-season produce whilst bringing to their attention the environmental impact of doing so.

7.5 Carbon offsetting

RISK: Carbon offsetting is criticised for detracting from the pressing need to reduce emissions. The ability of some carbon offset schemes to actually bring about a net reduction in green house gases in the atmosphere has been questioned. No national standard for offsetting yet exists, although Defra is currently considering regulations for carbon offset schemes.

BENEFIT: A government approved carbon offset scheme might be a useful tool for mitigating the environmental impact of aircraft. This option could be more effective if complementary to measures aimed at reducing air freight.

8. We would like you to consider these questions:

Have we identified the key issues and do you have any other relevant or useful information to help in our discussions?

Is it right to focus on the environmental impact of air freight against the impacts from other forms of food transport?

Do you think we should be addressing air freight within the organic standards and if so:

- 1. Where along the spectrum, from a complete ban to taking no action, do you think we should pitch our standards?**
- 2. If you feel neither a complete ban or taking no action is appropriate, what combination of measures should we introduce?**
- 3. What timescales should we set for the introduction of the approach you suggest?**

Please respond by the **28th September 2007** at www.SoilAssociation.org/airfreight

Or by mail to: Air freight Consultation,
Soil Association Standards dept.
South Plaza,
Bristol
BS1 3NX

9. Complementary Soil Association initiatives relating to climate change and the environment

In addition to the option of addressing air freight within organic standards the Standards Board are:

9.1 Developing standards for catering – to help food handlers outside the retail sector to implement sustainability standards in their food service.

9.2 Developing organic glasshouse standards – A move away from air freight could potentially increase glasshouse production in Europe. Generally, sourcing food locally produces far less greenhouse gases. However, the sustainability of heated glasshouse production in Europe, where the heat is supplied from fossil fuel sources, raises similar concerns for the environment. There are some examples of conventional flower production in Holland which use more energy inputs than flowers air freighted from sub Saharan Africa. Increasingly, large-scale producers in Holland are using more efficient or renewable sources of energy. Other research found organic tomatoes grown in heated greenhouses in the UK emit four times less CO₂ than air freighted organic tomatoes grown outdoors in Kenya (Vringer, 2000; van Hauwermeiren, 2006). The Soil Association is concerned about the sustainability of heated greenhouse production. With our glasshouse standards we aim to reduce the climate impact of organic protected cropping.

More generally, there are other initiatives the Soil Association is already taking to improve the sustainability of our food.

9.3 Promoting local, seasonal produce – supporting local food networks, organic box schemes, farmers' markets and community involvement in local food production, along with imports of produce (by sea, train or if necessary road) that cannot be grown in the UK. Encouraging people to eat less but better quality meat.

9.4 Encouraging retailer communication with consumers – from farm shops to large supermarkets, retailers should inform consumers of the different seasons and use consumer communication as part of supply management. Explaining why some products are not available at certain times of the year is preferable to aiming for year-round supply.

9.5 Establishing a forum for multiple retailers and fresh produce importers – to discuss alternative solutions to problems with supply. There are opportunities for finding alternatives to air freight by co-operating and sharing innovations in supply chain management.

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