CORSHAM FOOD

Comments by Peter Harper



Figure The shining star locates Corsham in the so-called ‘character areas’ of north Wiltshire. A 10 mile radius embraces Chippenham, Melksham, and the outskirts of Bath.

On 26th March, Janine Davies gave a very interesting talk about local food in Corsham, and what we might do to increase our local provision.

This has long been an interest of mine, and I thought it worth taking seriously, with attempts to work out the details – with numbers!

I thought it would be helpful to put the whole thing in the context of the UK food and agriculture system as a whole, so nobody can say we were unaware of the difficulties. I’ll talk about some of the potential problems and limitations first, then how we might work around them.

Most food consumed in the UK is bought in supermarkets, and most of it is processed in some way. Often it bears little resemblance to the commodity that first emerges out of the farm gate. In fact, most food products are complex mixtures of ingredients from many different sources. Here are two interesting statistics:

* The economic value of the entire UK agriculture sector is just 0.5% of the GDP, while the value of food as consumed is about 12%. This means that (as farmers often say) ‘producing food is a mug’s game’. There’s no money in it. The ‘added value’ comes *after* the farm gate.
* If we divide foods into five big classes, as nutritionists often do, the average British diet looks like the pie-chart on the right. Most of it is processed and packaged, even bread and cheese and bacon are a long way from the wheat and milk and pigs, and there is a surprisingly high proportion of rich fatty and sugary foods, mostly snacks (mauve sector).

When we are talking about local food supplies, we are usually thinking of fresh fruit and vegetables, but you can see from this chart that the category (the green sector) is quite small in the typical UK diet, and even much of that is frozen, tinned or incorporated into compound dishes.

Now here’s another strange thing. In the UK we only produce about 23% of our own fruit and vegetables. Of course, we cannot grow bananas or avocadoes or citrus, but we could grow most of the rest if we wanted. However, it’s much cheaper to get it from abroad, and this question of cost will keep coming up. Can we *afford* to be more self-sufficient? It’s reminiscent of the Corn Laws debates of the 19th century, when farmers and landowners wanted Britain to provide its own relatively expensive food, while the poor wanted cheap stuff from overseas, and of course in the end they got their way. We still operate on this basis.

And it’s still cheap. The average UK household spends just 10% of its money on food and drink, and much of this is ‘discretionary’, that is, not essential but a matter of fun, fashion and social display. With an average income you could probably feed your family well on less than 5% of total expenditure. We have all got used to this ‘cheap food’ regime, and moving away from a cost-cutting, globalised, industrial system to a more organic, craft-based system is likely to be more expensive. It would not be welcomed by everybody.



Presumably one of the reasons we want to raise the level of local provision is *sustainability*, and of course we’d also like our food to be healthy as well. As luck would have it, there is a wealth of evidence that healthy diets also tend to have lower carbon emissions and lower impacts on biodiversity and other ecosystem services. They tend to look like the pie-chart on the right.

How different this is from the ‘average’! You can see that there is a much large proportion of fruit and vegetables (green) and starchy foods (orange). In dietary terms, there is a shift from *energy*-rich to *nutrient*-rich diets.

But – this is only my personal view – I think even this understates the potential proportion of fruit and vegetables. From the evidence I have gathered, the most healthy and lowest-carbon diets are based principally on vegetables, with added extras to top up energy, oil and protein – and of course to create delightful meals as well.

Well now, as luck would again have it, diets with these qualities, and with these proportions of major food groups might be much easier to supply locally, especially the fruit and vegetables.

But how? How is it best done, in a practical sense, and also for sustainability’s sake?

There is a widespread idea that our newly-understood sustainable diet could involve much increased production by amateurs in gardens and allotments. It might, but in my experience, this is an erratic economic model. Most people do not want to spend their time growing fruit and vegetables for sale, not least because the financial returns are so small. They might start with good intentions, but a few years down the line they usually give up. More likely, gardeners and allotment-holders will continue to grow for themselves, but might well interact with the market by taking advantage of seasonal bonanzas to offload surpluses. Of course, everyone else is likely to have the same gluts and prices will be low, but this might be a useful part of a local-supply movement, with low costs, especially if you can store or preserve the stuff. Courgettes! Apples! Leaf beet! Runner beans!

Enthusiastic vegetable gardeners grow essentially for themselves, and do not look on the process in an economic light. It does save *some* money. I once measured the value of my annual produce and found it had saved about 5% of my modest expenditure. It could have been more if I’d worked harder, but the return per hour was less than the minimum wage. We amateurs do it for love, not for economic reasons.

In the context of Corsham food, in the long run we are likely to rely on professional or at least semi-professional producers. We can think of these at two levels: ‘growers’ and regular farmers. They grow large quantities for the market, with growers generating ‘fine’ high-priced fruit and vegetables like tomatoes, peppers, aubergines, courgettes, squash, asparagus, French beans, salads, grapes, strawberries, bush and cane fruit, perhaps orchard fruit as well, and eggs, perhaps goat’s milk and yoghurt. Meanwhile farmers will grow coarse low-priced vegetables seasonally at a field scale: potatoes, carrots, swedes and turnips, parsnips, brassicas, onions, leeks, peas, broad beans, and so on.

You can see this is theoretically possible: all these things can be produced in the Corsham area, and probably are. But usually professional producers do not grow for local needs: they want the highest price they can get and a reliable market, so they usually sell their crop to a wholesaler, and this goes off into the national system. We will need to make special arrangements to ‘intercept’ some of this produce.

Typically, farmers are part of a huge agribusiness system entirely remote from consumers. They often sign up to deals years in advance, and accept all manner of restrictions on what they grow, how and when. And let us remember that most of what farmers produce is not fruit and vegetables, but grains and livestock products that are highly processed and come back to us in the form of bread, cheese, milk, yoghurt and carefully butchered meat, forming the greater part of most diets. Britain does produce most of its own grain, meat and dairy, but very little links local producers and consumers.

Despite the existence of ‘farmers markets’ and ‘farm shops’, most farmers do not sell through them, and most of the markets and shops attempt to make higher returns by processing and thereby adding value: jam, not fruit; sausages, not offal; cheese, not milk. We would probably do the same, but we’d have to decide whether everything was local, or just some ingredients. For example, we might make many kinds of jams from local fruit, but would we insist that the sugar was local? It could be, but it’s just not something that happens in our area, and we’d have to grow the beet and set up a small sugar factory. This is possible but seems far-fetched.

To help this discussion along, I have created some tables of agricultural commodities with a view to understanding which could reasonably be produced and/or processed locally. Attached at the end.

SO…?

One way to approach all this would be to think out the ‘Corsham Diet’ that could be produced within (say) 10 miles of Corsham. This can be compared with the well-know ‘Fife Diet’ programme operating since 2007. Following the framework of the ‘healthy, low-carbon diet’ shown in the pie chart, we’d need the following basics:

* Grains and derivatives ~ 25%
* Wide range of coarse vegetables, including potatoes, ~35%
* Fine vegetables and fruits ~20%
* Meat in various forms, or substitutes ~5%
* Milk and other dairy products, or substitutes ~5%
* Oils and fats, cream, butter ~5%
* Sugar and derivatives, honey 3%
* Flavourings, herbs, condiments ~2%

Could all these things be produced locally? Of course they could, and most already are. Naturally, there are many other items that people eat that cannot be produced locally: sea fish and seafood for example, and tropical fruits, plus beverages such as tea, coffee. And chocolate! We would have to work out what to do here: whether to stick strictly to local produce, or allow a certain quota of the exotic.

Notice that most of the above items are currently produced on a farm scale by farmers and growers, who are currently attuned to remote wholesale markets. A large part of our task would be to break into these wholesale flows and divert at least some to local markets, and this already happens. The Corsham greengrocers have loads of local stuff. The butchers too. We would want to set up special relationships with some farmers in the spirit of Community Supported Agriculture. Farmers produce what we want and they get a guaranteed market. But we should not forget there are already market gardeners and farmers in our area delivering to local shops, and in some cases supplying via Box Schemes.

Possibly the biggest problem would be scale of *processing*, and whether we want to set up certain installations that do not currently exist in our area. Will we mill grains? Will we bake? Will we extract our own oil? Will we produce margarine? Will we produce sugar? Will we make hard cheese? Will we freeze produce? Can we produce substitute milks? Veggie-burgers?

And so on. And if some of these processes already occur somewhat outside our area, would we set up anyway at several times the cost? It is going to take some resolute decisions and disciplined practice to break free from the national supply systems, even if we ignore junk food. Normally ‘economies of scale’ dominate the picture, and we accept that on a national level, giant factories in Scunthorpe or Thanet or Halifax produce cheap foods for us all. Are we going to reproduce some of these on a tiny scale, producing sugar or baked beans or flour, but much more expensively?

We ought to note other food movements that are not necessarily local. For example, organic, Fair Trade, bioregional and ‘Slow Food’. Perhaps we need to think about what is the appropriate scale for each type of food? And of course, what our underlying aims really are.

Here is a map of the ‘character areas’ of Wiltshire, sort of ‘bioregions’. You can see that Corsham is placed in the Cotswolds area, but within the 15 km range includes Chippenham, Melksham and part of the Avon Vale region, and reaches into the adjacent counties of BANES and South Gloucestershire.



We are blessed to be in a nice part of the UK, with agreeable weather and good soils. We could probably roll most of our own, as I am sure happened in the 17th century. But do we really want to? And is this more sustainable than other paths we might take?

Personally, I would be very interested to conduct a (say) year-long experiment using only foods sourced within 10 km of Corsham. I would not mind if they cost more. I would be especially interested in testing the limits of scale in processing. Of course, many households cook from raw ingredients, when they could buy ready-made meals and simply microwave them, albeit at greater cost. I like to start with raw ingredients, then take it a little bit further, doing drying and preserving, pickling, freezing, making pâtés. I could do milling, flaking, rolling of grains, extraction of oils, making ‘milks’, fermentations, yoghurt, soft cheeses, pemmican. I already do a lot at home, like a 17th-century housewife, but is this more than a cool lifestyle choice?

If I started down this route, I would need to work quite hard finding local sources of foods that normally disappear into the national system, but I could probably do it.

It could be really fun. But would it take off? Would it mean anything? I ponder these matters, but in the meantime, perhaps we should just give it a go.

Any takers?

TABLE OF MAJOR FOOD COMMODITIES PROVIDING MACRO-NUTRIENTS

They are divided into groups: High energy, mostly starchy foods; fats and oils; livestock products providing protein and oils; high-protein plant foods. Most of these are produced on a farm scale, and most could be produced locally. Processing is usually done industrially, but some could be local. Notice there is a distinction between local *sourcing* and local *processing*.

|  |  |  |  |
| --- | --- | --- | --- |
| RAW PRODUCT | PRODUCE LOCALLY? Within 10 km radius | PROCESSES | LOCALLY? |
|  | GARDEN | MARKET GARDEN | FARM |  |  |
| Wheat |  |  |  | Milling to flour | ? |
|  |  |  |  | Baking |  |
|  |  |  |  | Pasta, bulghur, couscous, grits | ? |
| Oats |  |  |  | Flaking, groats, milks | ? |
| Barley |  |  |  | Milling to flour | ? |
|  |  |  |  | Malting | ? |
|  |  |  |  | Brewing |  |
| Rye |  |  |  | Milling to flour | ? |
|  |  |  |  | Baking |  |
| Buckwheat |  |  |  | Milling to flour | ? |
|  |  |  |  | Noodles |  |
| Maize |  |  |  | Milling to cornflour | ? |
| Qinoa |  |  | ? |  |  |
| Rice |  |  |  |  |  |
| Potatoes |  |  |  |  |  |
|  |  |  |  |  |  |
| Rapeseed oil |  |  |  | Oil extraction |  |
| Sunflower oil |  |  |  | Oil extraction | ? |
|  |  |  |  | Margarine | ? |
| Soya oil |  |  |  | Oil extraction  | ? |
| Olive oil |  |  |  | Oil extraction | ? |
| Nuts |  |  |  | Oil extraction | ? |
| Seeds |  |  |  | Oil extraction, pastes | ? |
|  |  |  |  |  |  |
| Beef meat |  |  |  | Slaughter, butcher |  |
| Sheep meat |  |  |  | Slaughter, butcher |  |
| Goat meat |  |  |  | Slaughter, butcher |  |
| Poultry |  |  |  | Slaughter, butcher |  |
| Eggs |  |  |  |  |  |
| Milk |  |  |  | Soft cheese |  |
|  |  |  |  | Yoghurt |  |
|  |  |  |  | Butter |  |
|  |  |  |  | Lard |  |
|  |  |  |  | Hard cheese | ? |
|  |  |  |  |  |  |
| Lentils |  |  |  | Gram flour |  |
| Coarse beans |  |  |  | Drying, hulling, pates |  |
| Coarse/split peas |  |  |  | Drying |  |
| Chickpeas |  |  | ? | Pates |  |
| Exotic legumes |  |  | ? | TVP, milks, pastes |  |

TABLE OF COMMON FOOD COMMODITIES PROVIDING MICRO-NUTRIENTS

Many provide macro-nutrients as well, but their main role in typical diets is to provide vitamins, minerals, fibre, anti-oxidants and various principles thought to protect against cancer. They are presented here in traditional garden-catalogue classes. Nearly all can be produced locally, especially at smaller scales. Usually are retailed raw for direct consumption or cooking at home, or freezing.

They can be supplemented by foraging for wild foods.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | COMMODITY | PRODUCED LOCALLY | PROCESSING | LOCAL? |
|  |  | GARDEN | MARKET GARDEN | FARM |  |  |
| ROOTS | Potatoes |  |  |  |  |  |
| Carrots |  |  |  |  |  |
| Swedes |  |  |  |  |  |
| Turnips |  |  |  |  |  |
| Parsnips |  |  |  |  |  |
| Beetroot |  |  |  | Cooking,pickling |  |
| Onions, shallots |  |  |  | Pickling |  |
| Oca |  |  |  |  |  |
| Jerusalem artichokes |  |  |  |  |  |
| Sweet potato |  |  |  |  |  |
|  |  |  |  |  |  |  |
| LEAVES | Cabbage, kale, sprouts |  |  |  | Pickling, fermenting |  |
| Spinach |  |  |  |  |  |
| Leaf beet |  |  |  |  |  |
| Lettuce |  |  |  |  |  |
| Turnip-based leaf salads |  |  |  |  |  |
| Land cress |  |  |  |  |  |
| Purslane |  |  |  |  |  |
| Cornsalad |  |  |  |  |  |
|  |  |  |  |  |  |  |
| FLOWERS | Broccoli, cauliflower, kohlrabi |  |  |  |  |  |
| Globe artichokes |  |  |  | Pickling |  |
|  |  |  |  |  |  |  |
| FRUITS | Courgettes, marrows |  |  |  |  |  |
| Sweet peppers |  |  |  | (Greenhouse) |  |
| Chilli peppers |  |  |  | (Greenhouse) |  |
| Tomatoes |  |  |  | (Greenhouse) |  |
| Cucumbers |  |  |  | (Greenhouse) |  |
| Aubergines |  |  |  |  |  |
| Green beans |  |  |  |  |  |
| Mangetout peas |  |  |  |  |  |
| Avocado |  |  |  |  |  |
|  |  |  |  |  |  |  |
| STEMS | Celery |  |  |  |  |  |
| Rhubarb |  |  |  |  |  |
| Asparagus |  |  |  |  |  |
| Spring onions |  |  |  |  |  |
|  |  |  |  |  |  |  |
| SEEDS | Broad beans |  |  |  | Freezing | ? |
| Other beans |  |  |  | Drying |  |
| Peas |  |  |  | Freezing | ? |
| Sweetcorn |  |  |  |  |  |
|  |  |  |  |  |  |  |
| FUNGI | Edible mushrooms |  |  |  | Drying, pates etc |  |
| ALGAE | Seaweeds | Collected | Drying, laver bread etc |  |

TABLE OF FRUITS, ALSO PROVIDING MICRO-NUTRIENTS

The UK imports most of its fruit, but a great deal can be grown in the UK and on a garden scale. Micro-orchards have been explored in the form of ‘forest gardens’ deliberately designed to maximise fruit yields, but the results have not been formally assessed. There is great scope for imaginative processing, and this is traditionally done at a domestic scale.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | COMMODITY | PRODUCED LOCALLY | PROCESSING | LOCAL? |
|  |  | GARDEN SCALE | MARKET GARDEN | COMM’ ORCHARD |  |  |
| TREE | Apple |  |  |  | Drying, juicing, puree |  |
| Pear |  |  |  | Drying, juicing, puree |  |
| Quince |  |  |  |  |  |
| Medlar |  |  |  |  |  |
| Cherry |  |  |  | Jam |  |
| Damson |  |  |  | Jam |  |
| Plum |  |  |  | Prunes, jam, pickling |  |
| Apricot |  |  |  | Dried, bottled, tinned |  |
| Peach |  |  |  | Dried, bottled, tinned |  |
| Nectarine |  |  |  |  |  |
| Persimmon |  |  |  | Dried |  |
|  |  |  |  |  |  |  |
| BUSH/CANE | Blackcurrants |  |  |  | Freezing, jam |  |
| Red and White currants |  |  |  | Freezing, jellies |  |
| Gooseberries |  |  |  | Jam, freezing |  |
| Raspberries |  |  |  | Jam, freeze-drying |  |
| Blueberries |  |  |  | Jam |  |
| Strawberries |  |  |  | Jam, freeze-drying |  |
|  |  |  |  |  |  |  |
| VINE | Grapes |  |  |  | Juicing, raisins, wine |  |
| Kiwi |  |  |  |  |  |
| Melons |  |  |  |  |  |
|  |  |  |  |  |  |  |
| EXOTIC | Oranges |  |  |  | Juicing, marmalade |  |
| Lemons |  |  |  | Juicing, marmalade |  |
| Limes |  |  |  | Juicing, marmalade |  |
| Grapefruit |  |  |  | Juicing, marmalade |  |
| Pineapple |  |  |  | Bottled, tinned |  |
| Banana |  |  |  | Drying |  |
| Mango |  |  |  | Drying |  |
| Papaya |  |  |  | Drying |  |
|  |  |  |  |  |  |  |
| STIMULANTS | Coffee |  |  |  |  |  |
| Tea |  |  |  |  |  |
| Cacao/chocolate |  |  |  |  |  |
|  |  |  |  |  |  |