

The Real Price of the Food We Eat

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Date: **July, 2006** Original Version

INTRODUCTION

→ As we struggle to reduce the footprint of our modern way of life, we are faced with many dilemmas, but none more regularly than when it comes to buying food. Do we visit the local store, or the supermarket? Do we buy local? Do we buy organic or non-organic? The answers are not always simple because our instinctive assumptions – such as organic is good, non-organic is bad – don't necessarily hold up to scrutiny when you start to factor in all the environmental impacts of food production, distribution and retailing.

Let's just take one food as an example - the tomato. Guy Watson is a leading organic farmer in the UK, and sells his produce direct to homes via a weekly vegetable box scheme. He's trying to do everything right on his Riverford Farm – he doesn't use pesticides, includes as much seasonal produce in his boxes as possible, doesn't deal with supermarkets, minimizes packaging, etc. But he also has to meet his customers' demands, and they, understandably, want tomatoes for their early summer salads. But this presents Watson with a dilemma. Here's what he had to say in a recent newsletter to customers about trying to meet their demand with local, organic tomatoes.

“The unpalatable truth is that local, organic, hot-house tomatoes are an environmental disaster,” said Watson. “These tomatoes are planted out in January and consume huge quantities of fossil fuels to keep them growing, in un-insulated, ventilated glass, through the winter and spring and then again into the early winter. Organic may even be worse than conventional because it produces less fruit per square meter (and therefore per joule of energy) and requires more ventilation (and therefore energy) to control fungal disease. I strongly suspect that, in purely environmental terms, tomatoes trucked from Spain or Italy [to the UK] would win hands down and non-organic may well beat organic.”

The problem for us as customers is that, at present, we have no way of weighing up all the factors – environmental, social and economic – that go into the production of tomatoes, or any other food. And if we did, we might start to make some very different choices.

PRICING ENVIRONMENTAL IMPACT

→ What we need is a way of pricing an environmental impact, and a key to this is offsetting. In terms of tomatoes, if we offset the carbon from the energy used in hot-housing the fruit, and in the transportation from Spain, we would get a more realistic comparison of price. There will be other factors too, such as relative amounts of packaging, to consider.

If everything in the production of tomatoes, or any other food or goods, were offset we would get a true economic and cost-to-the-earth price. Then the market could decide which is the best tomato to buy – the local organic, or the imported fruit from Spain, etc.

A big differential in price would obviously determine which would be most successful. But if that differential was small, then we could bring other factors into our decisions. The local organic might be a few more cents per pound, but we might want to support a local business. Or the Spanish tomatoes might come from a cooperative in a region where struggling farmers were trying to regenerate their land and economy and we might be prepared to donate the extra cents to them.

Also, faced with this kind of environmental pricing of their produce, farmers would be encouraged to look for energy from sources other than fossil fuels. The hothouses for the tomatoes could use a geothermal heat source, controlled and powered by wind-generated electricity.

We have to get clever about the way we produce our foods and other goods, and the way we price them. We are very much in a transition state at the moment. Until we start to properly price environmental impact – and offsetting seems to be the best mechanism that we have for the moment – we are going to be faced with some difficult dilemmas and make choices that in the future are going to look pretty crazy.

ABOUT ZEROFOOTPRINT

→ Zerofootprint is a socially responsible enterprise whose mission is to apply technology, design and risk management to the massive reduction of our environmental footprint. We operate both in the for-profit and charitable domains through two entities, Zerofootprint Software and Zerofootprint Foundation using shared technology.