HEALTH, SUSTAINABILITY AND THE GLOBAL ECONOMY – THE ORGANIC DILEMMA

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A discussion on the conflicts and dilemma posed by the global economy on the principles of health and sustainability. A review of the organic movement's response and suggestions for the way forward.

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Colin Fisher, the co-chairman of the first IFOAM Conference which was held in Sissach in Switzerland in 1977, began the final summary to the conference by quoting the words of Poincare *"To doubt everything or to believe everything are two equally convenient solutions; both dispense with the necessity of reflection."* (Fisher 1978).

Nearly twenty years on is a good time to reflect on what this international movement has achieved, where it has been and where it seems set to go.

But what is a movement? The synonyms are more relevant than the definition; action, activity, advance, agitation, campaign, change, crusade, development, faction, ground swell, grouping, operation, organisation, party, progress, stirring. It implies agreement between people to move towards change; it implies challenge; it implies a dynamic and it implies a goal.

That first conference concluded that IFOAM was seeking to *"provide an articulate informed and coherent alternative to contemporary agricultural dogma...(and)...provide further impetus for both the research into, and the practice of, methods of husbandry which are based on the ethic of satisfying need and the obligation to do so by technologies that our planet can sustain."* (Fisher 1978).

The primary interests of the founders and early members of IFOAM were clear. They were the research and the technical development of organic agriculture. Originally three working groups were established to cover research, education, and practical farming. Those researchers and farmers set about their work with gusto. There has been considerable success, although their major concerns have a familiar ring today - research approaches, soil fertility, nutrient supply, weeds, pests, disease and food quality. Later, the development of standards for organic production was added to the agenda.

There can be no doubt that today an informed and coherent alternative to conventional agricultural *"dogma"* does exist theoretically, technically and practically in all parts of the world. That it does, is to a large extent due to the efforts and contribution made by individuals and organisations who are part of IFOAM. What is in less good shape are the concepts and vision that provided the fundamental underpinning of the international organic movement - the concept of health, the concept of sustainability and the vision that by providing farmers with the skills to grow food organically we will be developing a crucial vehicle for bringing about a more equitable, healthy and genuinely sustainable

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world.

The concept of health

Although organic agriculture is popularly and expertly known for its avoidance of agro-chemicals and its consequent environmental benefits, its genesis occurred before the explosion of the agro-chemical revolution and before the environment had been heard of as an issue. Of course there were fertilisers in the 1920s, 30s and 40s, but Steiner in Germany, Muller in Switzerland, Howard and Balfour in England, Rodale in the United States and others were concerned with health and not simply with environment, and they paid more attention to building soil fertility and vitality through recycling nutrients within a more or less closed system than they did to the avoidance of mineral salts (Boeringa 1980).

In the words of Lady Eve Balfour when addressing the IFOAM Conference at Sissach, *"These pioneers had one thing in common - they were what we should now call Ecologists. They all succeeded in breaking away from the narrow confines of the preconceived ideas that dominated the scientific thinking of their day. They looked at the living world from a new perspective - they also asked new questions. Instead of the contemporary obsession with disease and its causes, they set out to discover the causes of Health. This led inevitably to an awareness of wholeness (the two words, after all have the same origin) and to a gradual understanding that all life is one."* (Balfour 1978).

Eve Balfour herself penned the memorable phrase *"the health of soil, plant, animal and man is one and indivisible."* (Balfour 1975). She was a disciple of Sir Robert McCarrison, one of the pioneers of human nutrition who, having systematically observed many peoples and many diets, realised that there was a quality in the diets of the healthiest peoples which was absent from the least healthy; *"that the food in all these diets is, for the most part, fresh from its source, little altered by preparation, and complete; and that, in the case of foods based on agriculture, the natural cycle is complete. Animal and vegetable waste - soil - plant - food - animal - man; no chemical or substitution stage intervenes."* (Balfour 1944).

Others reached similar conclusions and the concept - that health was part of a continuum through soil, plant, animal and man; and that by recycling nutrients through this chain, productivity could be maintained over time and health could be enhanced at all stages. The principle that food should be consumed fresh, for the most part whole and subjected to little or no processing and to no chemical intervention at any stage - became a foundation stone of the international organic movement (Balfour 1944, Besson and Vogtmann 1978).

Unfortunately, the organic movement forgot about most of it some time ago. The only thing that has really been remembered is the prohibition of *"chemical intervention*". For the most part there has been a concentration either on residues, pollution and environment or on specific macro-nutrient differences. Some relevant research has been undertaken (Meier-Ploeger and Vogtmann 1988, Woodward et al 1992), but investigation of this founding idea and the revolutionary concept of health being one and indivisible with the health of environment, the status of animal welfare, the nature of processing, packaging and distribution has been largely neglected.

There may be a separate case for an *"organic market sector"* or an *"organic industry"* but an organic movement as a force for change has difficulty justifying its existence if it abandons or ignores this founding concept of health. Without it there is no conceptual basis from which to reject the compelling arguments that modern technology can obviate chemical abuse; that pollution whether of environment or body can be tackled by modifying modern techniques; that *"chemical"* pesticides can be replaced by *"natural"* ones or biotechnology; that food additives can be replaced by irradiation and biotechnology. We are forced to fall back on arguments about political power, corporate conspiracy and the like - which may well have merit - but if that is where we are, we should disband IFOAM and join

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organisations like Friends of The Earth, and Greenpeace.

If we ignore that founding concept, there is no logical defence for our movement other than the market. Criticisms made of organic food and farming, that there is no difference between organic and conventional food will have to be met by the less than satisfactory arguments about chemical residues, protein and vitamin levels. These are not entirely convincing because: a) they do not apply across the board to a wide range of foods; b) modern usage and monitoring of agro- chemicals is increasingly able to produce foods with low or non detectable levels; c) the levels that are detected have unknown consequences but are not always detrimental to health; d) because variety selection and manure use is not controlled in most organic production some organic foods can be as much of a health risk as conventional produce; e) highly processed organic food is likely to be as nutritionally deficient as highly processed conventional foods; f) out of season production, lengthy distribution chains and over packaging of organic produce have the same environmental and social consequences as that which is produced by conventional methods.

The extent to which IFOAM has moved away from its founding concept of health can be seen in the views espoused by some of its members that *"the organic movement will have succeeded when an organic Mars Bar is on sale."* This is a view that may still be in the minority but would have had no credibility at all amongst the original membership. It can also be seen in the focus of some of the trade fairs with which IFOAM is associated. This focus has the aim of extending the availability of organic foods by utilising organically grown raw materials in as many popularly consumed foodstuffs as possible.

This may be honourable. It may be smart politically and commercially, but it is not where IFOAM started from. This divergence has emerged for several reasons; in part as a consequence of the limitations of the research effort in this area; partially due to the failure of those concerned about this concept of health to formulate or describe an organisational and social structure that can embody it in a way which is relevant to contemporary conditions; and because of the dynamic of market forces. It is important for the international organic movement to recognise that this has happened and take steps to redress the balance.

The concept of sustainability

The first IFOAM Conference had as its theme *"Towards a Sustainable Agriculture"*. But the participants and the energetic organisation that emerged from it had a very different concept of *"sustainable"* than that which predominates today. (Besson and Vogtmann 1978).

In his summing up of the conference, Colin Fisher drew attention to what he described as *"Max Planck's cynical conclusion that - a new scientific truth does not triumph by convincing its opponents and making them see the light; but rather because its opponents eventually die and a new generation grows up that is familiar with it."* (Fisher 1978) Equally cynically one can observe that a truth can easily be suborned, undermined and twisted to the extent that it is turned against itself by appropriating its language, distorting its logic and misapplying its conclusions.

The author George Orwell spent a good deal of time in the 1930s studying the appropriation of words for political ends. In several essays he described how the totalitarian regimes successfully altered the real meaning of words, whilst holding onto their surrounding imagery or perceived qualities. (Orwell and Angus 1968). Orwell employed this study most graphically in the novel *"1984"* where the Ministry of Truth was responsible for propaganda.

The same thing has happened today with the term *"sustainable"*. Of course, there are a number of organisations within IFOAM who use this term as a synonym for organic. Others use the term to

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describe techniques or technology in various fields that are environmentally benign and resource conserving. There are even more people who, without knowing what they mean or are uncertain what they mean, *"care about the concept"* (Dimbleby 1994). However, without doubt the term has been well and truly appropriated by government and industry. Whether it is applied to development, business, agriculture or any of its other manifestations, it is used as a code to indicate there is no conflict between growth and environment that cannot be traded off, or to hide the existence of such a conflict for short-term goals.

This is not what the participants to that first IFOAM Conference meant by *"sustainable"*. An eight point definition, which was eventually used to form the basis of the first IFOAM Standards, was accepted. Its essence, however, was pithily described by Lady Eve Balfour in her presentation; "The criteria for a sustainable agriculture can be summed up in one word *"permanence"*, which means adopting techniques that maintain soil fertility indefinitely; that utilise, as far as possible, only renewable resources; that do not grossly pollute the environment, and that foster life-energy (or if preferred biological activity) within the soil and throughout the cycles of all the involved food-chains" (Balfour 1978).

The official language of IFOAM has always been English. Which has sometimes been difficult for native speakers of other languages, but everyone in IFOAM at that time knew what the lady was saying. At this distance it is worth pointing out two things - the phrase *" throughout the cycles of all the involved food-chains"* and the use of the word *"permanence"*. That phrase was a recognition that the concept underlying organic agriculture had a significance and role beyond the farmgate. It stretched to all parts of the chain from the field to the table and encompassed storage, distribution, preparation and consumption and any processing in between.

The Sissach Conference edged *"Towards a Sustainable Agriculture"* by achieving a consensus concerning the main characteristics (Fisher 1978). These were then worked on and in a more refined form became the *"Principles of Organic Agriculture"* adopted as the opening section of the IFOAM Basic Standards of Organic Production in 1981 (IFOAM 1981). Four additional points, drafted by Hardy Vogtmann, brought them fully in to line with the aspirations of the founding assembly and first conference. (Woodward 1984).

1. To work as much as possible within a closed system, and draw upon local resources.
2. To maintain the long-term fertility of soils.
3. To avoid all forms of pollution that may result from agricultural techniques
4. To produce foodstuffs of high nutritional quality and sufficient quantity.
5. To reduce the use of fossil energy in agricultural practice to a minimum.
6. To give livestock conditions of life that conform to their physiological needs and to humanitarian principles.
7. To make it possible for agricultural producers to earn a living through their work and develop their potentialities as human beings.
8. To use and develop appropriate technology based on an understanding of biological systems.
9. To use decentralised systems for processing, distribution and marketing of products.
10. To create a system which is aesthetically pleasing to both those within and those outside the system.
11. To maintain and preserve wildlife and their habitats.

It is a pity that these eleven points have not received the attention they deserve. Not only do they capture the essential part of the concept of health which the pioneers of the organic movement espoused. Although written earlier than the Brundtland Commission report (Brundtland Commission 1987) and before the term was fashionable, they also provide a description of the goals of *"sustainable agriculture"* encompassing social, economic and environmental parameters beyond as well as behind the *"farmgate"* - a comprehensiveness which has only recently been seen as important.

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They provide the guidelines for an organic agriculture based on self-limitation; limited to working within a closed system, to avoiding all forms of pollution, to reducing the use of fossil energy, to using appropriate technology, to using decentralised systems for the processing, distribution and marketing of products.

This defines an organic agriculture which we believe is significantly at odds with much that is going on under that name today; such as:

- the growing pre-eminence of policy and advice aimed at the production of organic food for export, not local consumption;
- the high level of processing and packaging of organic food;
- energy-expensive miles travelled by such foods - in one example where raw materials are transported from the Caribbean and Africa, to be processed and packaged in Belgium before being retailed from England;
- as processing standards in the EU organic Regulation allowing around 36 additives and provision to use the products of Genetically Modified Organisms (CEC 1993).

The organic agriculture of the EU Regulation, of the food industry and trade is to a large extent at variance with the fundamental principles which IFOAM originally established. There may be good reasons for this, not least because that is what people in the form of the market currently want, but we should recognise that it has happened and decide if it is acceptable and if not, what to do about it.

"Organic farming into the mainstream"

Almost from its beginning the international organic movement seemed to assume that bringing about an increase in the number of organic farmers would automatically lead to an uptake of its founding concepts. Whilst the concepts themselves are essentially sound, this assumption was not and has shown itself to be extremely naive.

The aim of the organic movement for most of the 1980s was to get organic agriculture recognised. To get it into the mainstream. *"Organic is good, organic is good"* became almost a mantra. Inevitably, therefore, the readily accessible parts of the *"organic message"* were highlighted, the more difficult bits pushed into the background. Moreover, our critical faculties were put on hold. After all it is asking a lot to worry about the extent to which the nuances of processing methods affect the hypothetical *"vitality and life-energy chain"* whilst arguing with a disbelieving government or EU official that organic farming should be taken seriously.

There have been two consequences to this approach. The first has been an energetic and successful drive to increase the membership on the basis of, at times, rather fluid criteria which demanded support for only the vaguest notion of the organisation's principles. As a result the IFOAM membership has expanded, but it has also changed its character. It now accommodates groups and individuals from all continents and all activities ranging from international trade to land reform and poverty action. Their concerns are disparate - from standards and regulation governing large scale food production, processing and trade to techniques and organisation for small scale and local food security. This *"broad church", "umbrella"* approach may be politically astute or it may be as much as IFOAM can manage to be. However, for sometime now we have ignored the fundamental differences between us and acknowledged only the possibly superficial similarities. It is likely therefore that the aspirations of different IFOAM members conflict with those of others.

A second consequence of the *"organic is good, organic is good"* approach has been the development of a global *"organic industry"* which seems increasingly to mimic the form and character of the

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mainstream food industry.

The case for encouraging the growth of the *"organic industry"* is a strong one; we are all in business in the here and now, we have to survive commercially so let's produce as many products as we can and sell as much as we can wherever we can. It is unfortunate that the way the market system works means we have to transport our goods all around the world. It is unfortunate that not enough people want to eat wholefood type products to base a business on. It is unfortunate that we need all those additives to produce the products the market wants at the right price in the right shape so that they can be sold in the large stores which is where everyone shops these days.

As long as the raw material is certified organic we are providing income for the farmers, wherever they are in the world. Which is going to encourage more organic farming which is good for at least some parts of the organic movement's aspirations. One may not like the argument but there is a case to be made.

By and large this task has been achieved. Organic agriculture has been recognised. It is in the mainstream. There is a global, albeit a niche, market for organic produce. There are more organic farmers and many of them are extremely successful. Yet the international organic movement is not yet, and seems as far away as ever from being, an effective vehicle for bringing about a more equitable, healthy and genuinely sustainable world.

We should acknowledge that and decide whether it matters. Indeed, are any of the concerns articulated at Sissach relevant in today's world? Surely technology has worked through the excesses of modern conventional agriculture. There is also the promise and potential of biotechnology. Surely we know enough about nutrition to construct diets that are healthy and help us to live longer? In any case now that organic food is available everywhere, it is bought and sold globally, farmers are willing to farm organically if the market or subsidies give the right signals, research is carried out in official institutions throughout the world, hasn't the organic movement completed its task, done its job, shouldn't it now quit and leave the field to the market, to the traders and to those policy makers of sustainable development?

It is worthwhile at this point to consider some of the goals that Lady Eve Balfour and the other pioneers of this movement set for their life's work. (Balfour 1944) Is it generally accepted that the health of the soil, plant, animal and man is one and indivisible? Is this concept a basic part of health care, of food and nutritional policy, of third world aid, veterinary medicine, education? Is it framed in legislation? Is it an organising principle of commerce and trade? Is it a basis of social organisation? No it is not. But is it important?

There are those of us who believe it is . We believe that the advance of the Sahara, the destruction of the rain forests, the growth of degenerative diseases, the persistence of ill health are all consequences of a failure to recognise the inter-dependence of soil, plant, animal, and man on a local and global scale. In Lady Eve's words *"a failure to think ecologically."* Furthermore, there can be no doubt that the state of our planet's environment, the health, the economic and social plight of peoples in all parts of the world is far more parlous than it was when IFOAM was founded.

The world's food stocks have now fallen to the lowest level on record - to 48 days supply, in comparison with the previous low of around 60 days (Kleiner 1996); total grain production in 1995 was 6% below its 1990 peak, and per capita production was 13% down (USDA 1996). A projection of world food supply and demand over the next 35 years suggests a deficit of around 600 million tons of grain on the world market, roughly the entire current grain consumption of the United States and China, and about three times the total of world grain exports today (Brown and Kane 1995). *"Deficit"* is a polite word for starvation.

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In the years between 1950 and 1990, world production of grain had tripled. This growth can be attributed to the application, in increasing quantities, of four critical resources: water, fertile land, fertilisers and plant breeding. However, each of these are now facing limits to which technological advance can offer little comfort (Brown and Kane 1995).

Conditions vary from region to region, but the common problems confronting them all include:

a) **Water**: this is becoming an increasingly scarce resource for agriculture. Some of the main grain-producing regions, such as the US Southern Great Plains, the North China Plain and the Indian Punjab have depended on underground reserves, which are falling and in some regions are close to depletion. The capacity of rivers to provide more water for irrigation, for instance in the Central Asian Republics, and the Colorado River Basin in the United States, is at or close to its limit, not least because of the increased demand for water from towns and industry. There is a compelling view that one of the consequences of global warming will be that grain-growing areas will suffer drought.(Brown and Kane 1995)

b) **Fertile Land**: the world grain growing area declined from 735 million hectares (mh) in 1981 to 695 mh in 1993; in China it has been reduced by one-tenth from its 1976 peak, owing to industrial and residential development and the requirements of transport, and the current one per cent per annum fall is expected to continue for the foreseeable future. All the industrialising countries are losing agricultural land rapidly; in Japan and South Korea, it has fallen by one third since, respectively, 1960 and 1977.

With a few exceptions, notably Brazil, which has access to undeveloped land with low long-term fertility, and whose exploitation is at the cost of forest and chaparral, the net quantity of new land available is now relatively small; if new grain-growing areas do become available in Canada and Siberia as a result of global warming, this will be instead of, rather than in addition to, the major grain-growing areas further south, which climate change would desiccate. (Brown and Kane 1995)

Much of the agricultural land which has so far been spared from urbanisation is subject to erosion and salination. Around 30 per cent of irrigated land is estimated to suffer from moderate or serious erosion (Brown et al 1994). A World Bank report on four developing countries (Costa Rica, Malawi, Mali and Mexico) indicates that annual losses of agricultural productivity due to soil erosion are equal to 1-1.5 per cent of their gross domestic product (World Bank 1992).

c) **Fertiliser**: Throughout the world crops are no longer responding to ever heavier fertiliser applications; 1984 was the last year in which a large increase in fertiliser use led to a comparable gain in world grain output. (Brown and Kane 1995)

d) **Plant breeding**: There are those who see the application of biotechnology as the hope for the future. Yet this industry directed, secretive, undemocratic technology has not yet shown it can produce healthy food for hungry people, nor safeguard the environment from potentially greater damage than that wrought by agro-chemical technology. An inventory of crops so far produced by gene technology includes a tomato that can more easily be transported from the US to the shelves of European Supermarkets, herbicide-resistant rape and herbicide-resistant-tobacco.

In any case, farmers are already using strains with a very high yield, and it does not appear likely that the yield potential of major crops will be increased further on a significant scale, or within the foreseeable future, in spite of the widespread belief or hope that gene technology will deliver.

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And then there is climate change. The International Panel on Climate Change tells us that merely to prevent any further increase in atmospheric carbon dioxide - which is already more than enough to drive global warming - would require an immediate 60% cut in emissions (IPCC 1990). This, of course, will not be done, so the global market economy will explore the hinterland stretching between the extremes of no further global warming and an intolerable increase in global warming, compounded by local effects. Moreover, this expedition into undiscovered country will be profoundly handicapped by a set of lags: between the increase in warming gases and the actual global warming that follows, between observing the climate change and securing public agreement to address it, and between the public agreement and the actual implementation of policy, including profound changes in systems and technologies.

The global economy

It is clear that the founders of IFOAM believed that the international organic movement had an important role to play in addressing these problems. Without doubt most members today share that conviction. But in order to play an effective role we cannot hide away from ourselves any longer. We must face up to the dilemma, the schizophrenia within our movement. Nearly twenty years after its first conference the international organic movement stands at a cross-roads. One direction is to embrace the global economy and to seek its *"greening"*. In effect, to participate in what governments and international bodies now call *"sustainable development."* The other route is to work on a regional basis according to the principles of closed nutrient cycles, decentralised organisation, appropriate technology and within the context of local democracy and culture.

We support the latter and hope that IFOAM will too. Quite apart from being inequitable and a moral abomination, we believe that the global economy (even if tinged green) is untenable; that it cannot survive and it is necessary to replace the imperative for growth and consumption which drives it and in consequence our civilisation.

Can such a dramatic statement be justified? We believe so on two counts. Firstly, the economies of the industrialised countries have found it increasingly difficult to achieve the rate of economic growth required to maintain social stability. Secondly, growth means consumption and even with good environmental technologies there are limits to what this planet of finite resources and fragile ecosystems can stand.

Even the most rural and agricultural country is profoundly affected by what happens to the all-pervasive economies of the industrial nations, and the *"critical rate of growth"* of the Gross Domestic Product (GDP) of these countries is critical to all parts of the world. As would be expected, the views of economists do vary somewhat as to what this rate is. It is sufficient here to recognise that there is a critical rate required for growth of GDP and that it is somewhere around 2.7% to 3% per year. That is to say, their economies would not be strong enough to finance the maintenance of living standards of the unemployed at subsistence level, to finance the maintenance of law and order, nor to finance the provision of social welfare, health, education and environmental protection (Fleming 1993, Fleming 1994).

Of course there are many in the world, arguably the majority, for whom this is the norm. But the prospect of serious instability at the heart of the developed industrial nations is a truly nightmare scenario for government leaders the world over and has contributed to the increasing anxiety with which initiatives such as the GATT, the creation of trade blocs, the provision of so-called aid to the Eastern European countries, have been pursued.

The fact is that an annual growth rate of this order has been increasingly difficult to achieve in the industrialised countries for nearly 20 years. Some years have been okay, but the trend is definitely down: 4.9% in the 1960s, 3.8% in the 1970s, 2.9% in the 1990s (Thurrow 1993). In any event,

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commonsense helps to reinforce any doubts as to whether growth and consumption really can continue at the rate that is required over the long term: the critical rate of growth (say 2.75%), sustained over 100 years, would give us an economy 15 times the present size - each household consuming up to15 times the number of - what? miles of car travel? household furnishing? hamburgers? hours negotiating with divorce lawyers? There may be some very costly pastimes in the future, such as trips to the moon and back, but scepticism as to whether this will produce the necessary economic growth is justified - not least, because a ceiling to consumption could be set, long before then, by the limited endurance of the environment.

Despite the evidence and commonsense, most economists, business people, traders and politicians are wedded to the belief that growth and consumption can continue and the required rate of growth will be achieved. Not to beat about the bush, we do not believe that there is the slightest chance of achieving a 15-fold increase in GDP worldwide in the next century, and that sustainable development has been widely adopted as a method of not grasping the nettle that economic growth will not provide the basis for stabilising the global economy and all that flows from it. Indeed there is a possibility that the limits to growth are already upon us and the effects can already be seen in the rural areas but particularly in the cities of both the developed and developing world. Unless an alternative is developed urgently economic and social collapse will be even deeper and more widespread than it is now.

That is not to deny that benefits can come from developments that fall under the *"sustainable development"* label. There is a whole gamut of "green technologies", eco and environmental management which should be employed and can make a real difference socially and environmentally. But essentially "Sustainable Development" rests on the flawed proposition that the economy has to grow - *and can grow* - sufficiently to pay for all the social equity, education, health and environmental protection that we all want.

Eco-efficiency may well be enabling economies to produce progressively increased output per tonne of greenhouse gas. Yet these efficiencies are likely to be overwhelmed by the global growth in both output and population. A good example is the transport industry where environmentally efficient cars which can significantly reduce emissions of carbon dioxide are in the prototype stage and could be put reasonably soon into production. Nonetheless. these efficiencies are likely to be outweighed if not swept aside by the arrival of the car-based economy in China, together with India and the former Soviet Union.

Any analysis of *"sustainable development"* inevitably raises the central conundrum: How can economic activity grow any further on our planet of finite resources and a fragile environment? And if it cannot grow how can our civilisation survive?

There are those who will say that this kind of thing has been heard before. There have been many instances of industries at their limits where remarkable ingenuity has been shown in developing alternatives. Dwindling tin stocks have been replaced by copper; dwindling copper stocks are being replaced by optical fibre; insufficient agricultural resources in many countries have been supplemented by the great grain resources of America. Someone cried *"wolf"*, but the wolf did not come.

But there are two morals to the tale of the wolf. The first is that you should not cry wolf too soon; the second is that, eventually, the wolf comes, and you should not allow your judgement to be jaded by all the false alarms. The limits that are visible now deserve serious attention. Any one of them could affect the global economy not only by stopping growth in its tracks; they could actually reverse growth, reducing the output of the market economies and, over the longer term, this could be on a scale sufficient to provide conditions for complete collapse.

One has to be extraordinarily optimistic or ostrich-like not recognise the possibility of this. Taking action to prevent it is another matter. We find it hard to disagree with the conclusions of the of the

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Meadows research team in 1992. These were that major changes to current practice in the areas of population control, reduction in industrial output and the intensive development and application of technology for pollution abatement, improved land yield, soil protection and resource conservation would need to be implemented before 2015 to avoid a structural breakdown in the global economy around the mid-century. (Meadows et al 1992).

That is approximately the time from the first IFOAM Conference in Sissach to this one in Copenhagen.

The development of a global market for organic produce does not seem to us be an adequate response to such monumental problems. It locks us into the growth and consumption imperative of the current and flawed global economy when we should be using our technology, our skills, energy and our enterprise to find a way out.

A more appropriate response for the international organic movement is to seek to give form and life to our founding concepts and to build on those. We should to take up the task set by E. F. Schumacher in his book *"Small is Beautiful"*, to replace our growth and consumption based economy *"by evolving a new lifestyle, with new methods of production and new patterns of consumption: a lifestyle designed for permanence"*. This lifestyle must be built upon the principle of limitation, *"because the environment in which it is placed is strictly limited"*. It must only employ methods and equipment *"which are cheap enough so they are accessible to virtually everyone; suitable for small-scale application; and compatible with Man's need for creativity."* Out of these three characteristics *"is born non-violence and a relationship of Man to nature which guarantees permanence"*.

Schumacher gave three, what he called *"preliminary examples"* of activities that could make significant contributions to the evolution of a world of *"Peace and Permanence"*. The one he was most associated with was intermediate technology, *"technology with a human face"* as he called it. Another was new forms of partnerships, even common ownership. But the example he gave first of all was organic farming (Schumacher 1973).

Those characteristics of organic farming were originally set out by IFOAM; self-regulating metabolic cycles tending towards closed systems, the use of local resources, the reduction in the use of fossil fuel, the employment of appropriate technology, the use of decentralised systems for production, processing and distribution; seem to us to be the best way to respond to the environmental, economic and social collapse of which this planet is on the brink. Indeed we see it as the responsibility of the international organic movement to initiate and carry through that response. That is the legacy of Sissach.

It also makes sense for a number of realistic and practical reasons.
1) More than any other economic sector, agriculture, if practised organically, is able to combine efficient production within the limits of a finite and fragile eco-system.
2) All the signs point to a future where primary goods such as food and primary resources such as soil and water will be scarce and vulnerable. An economic sector such as agriculture that produces one and conserves the other can lead the way to wider economic and social recovery.
3) The monolithic and undemocratic global economy has been found wanting on many counts; future economic development should be based on ecologically appropriate regions which should enable essential goods and services and in particular primary goods such as food, to be supplied equitably to all.
4) In the pre-market economy era, reciprocal obligation within a fairly immediate level of local and regional community provided a powerful driver for maintaining social cohesion, by being an integral part of the economic and social structure. This requires an active participatory economic democracy which becomes less effective beyond the borders of a shared regional culture.
5) Local processing of organic produce can be a source and fulcrum of wider economic and social development, showing the way for the evolution of a strong internal regional market which in turn can form the basis of appropriate trading relationships with other regions, even to the international level.

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This may come across as glib and eco-romantic. Even worse it may meet the same fate as a bland sacred cow - universal approval whilst being ignored. We hope not, as this is an attempt, admittedly limited, to identify a direction for the international organic movement to which we believe it has an historical commitment. At this stage we are profoundly aware of the shortcomings of this proposition, but there are already initiatives involving IFOAM members which are focused in this direction.

In the Dominican Republic, a long-standing project has revitalised a rural area through firstly reclaiming land and then producing food organically. Passing on the skills to grow food led to wider education and tackling issues of gender, health care and decision-making structures. By the effort of seeking to produce food for themselves, that community found its way from achieving food security to developing a local economy that could build houses, bring in a modest outside income from selling surplus produce, educate its own children and train people from other villages, all within a socially equitable community democracy and local ecological resources (Feedman 1993).

The approach also has relevance to the developed world. In the German state of Hesse a programme has been initiated with the specific goal of using organic agriculture as a mainspring of regional development. It links farming, on-farm or local processing of regionally grown organic produce and other economic initiatives such as tourism and community composting; the goal is to enable the farmer to take on the role of *"regional developer"* and so once again becoming an essential part of the region's economic, social and cultural life. Hesse is utilising various government and EU schemes for training, product innovation and marketing, as well as cultural and landscape development. All with the aim of adding value to primary products within the region, so creating employment and a strong regional economy in an environmentally appropriate way.

These are just two examples; undoubtedly there are others. We feel that we are at the beginning of a very important discussion which is essential not only for the future of organic farming and independent regional development, but also for the development of different forms of economic and social relations that must emerge from the crisis or collapse that faces the world. This discussion and the action that should follow are ones that we hope all parts of the international organic movement - farmers, processors, traders, consumers, researchers, educators, political activists of all kinds - will join in.

Although at first it may seem so, this paper is not anti-commerce, anti-trade or anti-market. It stands against activities that break the principle of limitation as described by Schumacher and most vividly seen in the biological cycles that form the basis of organic farming. It stands for those activities which are appropriate to ecological limits, culture and equitable social relationships and those can include forms of commerce, trade and the market. Indeed those within IFOAM who have those interests and skills are extremely important at this time because those are the areas in our movement that are the least developed as far as putting principles into practice is concerned.

Galvanising those skills in this direction seems at present to be problematic but it need not be so. As a first step a working group could be established with the objective of seeking to identify ways organic production can be integrated with regional and community development in both Northern and Southern countries; another group could investigate the practical ways in which organic agriculture can make an impact on social problems including those of poverty, access to resources, gender and health. The stress here is on practical work and less on statements to conferences and international agencies; IFOAM could carry through its much discussed plans to decentralise and regionalise itself. Nearly ten years after the *"World Board"* was established with the aim of devolving power to regions, its agenda and business seems depressingly similar to that of the "old" Board; activists within IFOAM could redirect at least some of their focus. For example the EU group could take a broader view to include regional policy and be less hidebound to the organic labelling regulation.

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Regrettably much of the above will be familiar to long standing members . From its inception IFOAM proclaimed that it had a mission to tackle economic and social inequality in all its manifestations. In conference after conference and assembly after assembly we have piously applauded exhortations on issues of poverty, women, third world development, the plight and rights of peasant farmers. But we have yet to free this movement from its Northern or Western world perspective. That this is the case is not due solely to those of us from the developed world. This perspective has often been shared by some members from the Southern countries and others have been unable to make their voices heard. Little actually gets done between conferences on these issues. We have talked the good fight, but not actually fought it. But at least we have talked. The fear is that we are becoming so obsessed by European or US based regulation and trade that our developed world bias will become even more pronounced.

Ultimately bringing about real change, being an effective movement comes down to attitude and a willingness to see and act beyond self or sectional interest. Overall this federation has a mixed track record on that. One cannot escape the feeling that too often and increasingly IFOAM has been used by individuals and organisations to further their own professional, commercial or sectional interest and not enough the other way around.

The title we were given for this paper was *"Reflections of the past, outlook for the future"*. Our reflections obviously arise from our particular perspective and experience. Others will have different ones and many may disagree with ours. We make no apology, other than, due to lack of space, for not adequately recognising those talented and dogged people who have worked over the years for IFOAM.

But the future is clear. Unless the international organic movement rediscovers its roots and begins to act in accordance with its founding principles it will have little worth for us and we do not believe it will fulfil the aspirations its founders had for it. By accepting its legacy and with words and deeds, seeking to give life, shape and form to those principles will it contribute to the creation of an agriculture, an economy, a lifestyle designed for peace and permanence?

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