

Background

for Creation Time 2011



Photo: Susy Morris

Food, agriculture and issues for Christian consumers:

some background information, the global challenges and our response

Introduction

Food is essential to our survival and wellbeing and yet, at least in the developed world, increasingly we have taken it for granted. We are promised that 'as long as earth endures seedtime and harvest will never cease' (Gen 8:22) and told by leading scientists that 'the global food system will experience an unprecedented confluence of pressures over the next 40 years'.

To consider our response as individual Christian consumers there is need to understand the global perspective. **Food Security** means the ability of people to feed themselves and their families with nutritious affordable food. This should be reality for all and in the developed world we may need to adopt a more realistic view of 'affordability'.

The Global Challenges¹

"The case for urgent action in the global food system is now compelling".

The approach to global food supply should seek to:

- Balance future demand and supply sustainably and ensure affordability
- Ensure stability in food supplies and protection of the most vulnerable when there is volatility of supply and price
- Achieve global access to food and end hunger—whilst there has been enough food produced, 925
 million people experience hunger, a further billion have an inadequate diet through lack of
 micronutrients and yet a further billion are over consuming at the risk of their health
- Manage the food system in ways that mitigate the impact of climate change
- Maintain biodiversity while feeding the world.



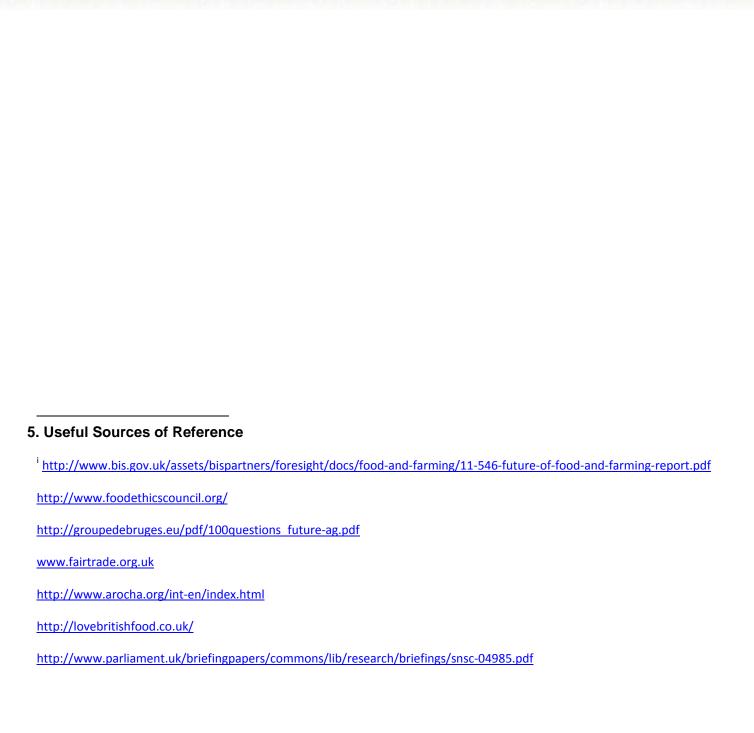
Ten Drivers Impacting Global Food Supply

- **Population:** For the first time there is an expectation that growth in population will cease but not until mid century when world population is predicted to be 9Bn.
- Climate Change: Growing demand for food will be against a backdrop of rising temperatures and changing patterns of rainfall with consequent impact on sea levels and river flows. There will be significant impact on crop growing conditions. The demand for more food must be met while delivering steep reductions in greenhouse gas emissions.
- Land Availability & Use: Currently 4,600 million hectares are used for food production; there is limited additional land available and land has been and will continue to be lost to urbanization, desertification, salinisation, soil degradation and sea level rise. There are strong environmental grounds for limiting further expansion of agricultural land especially when it entails depletion of rainforests. There is increasing pressure for land to be used for other purposes including biofuels.
- Water Availability & Use: Agriculture consumes 70% of water withdrawn from rivers and aquifers and demand is expected to increase by 30% by 2030. Total global water demand could rise by 35-60% by 2025 and double by 2050. In some regions aquifers are being depleted without the capacity to replenish. Constraints on water supply are likely to be a huge concern and efficiency of usage must vastly improve.
- **Global Energy Demand:** Expected to increase by 45% by 2030. Some parts of the food system are very vulnerable to higher energy costs especially the production of nitrogen fertilizers. There will need to be reduced dependency in the food chain on fossil fuels.
- **Dietary Changes:** Various studies have projected per capita increases in demand for meat (32-52Kg /capita/annum by 2050) and fish. Major increases, especially in grain-fed meat will seriously impact resource availability.
- **Emerging Technologies**: The global challenge will not be met without application of new technologies; genetic modification, nanotechnology, cloning of livestock, synthetic biology are just a few examples that need balanced evaluation.
- Governance of the Food System: Globalisation of the food system including the expansion of multi-national conglomerates, use of subsidies and trading policies will continue to be of significance. Governments will need to re-appraise their commitment to food based research, knowledge transfer and extension policies.
- **Power in the Food Chain:** Shifts of power within the food chain especially to the advantage of manufacturers, processors and retailers have delivered a blend of benefits and threats to consumers and food producers. The extent to which small scale producers can remain viable in the wider market place remains uncertain.
- Changes in Values and Ethical Stance of Consumers: Through buying practices, levels of
 awareness and influencing skills, consumers will have increasing impact on policy makers and on
 patterns of consumption. Examples will include modern technology, production methods, animal
 welfare, ethical marketing etc. The Christian consumer will seek to interpret biblical truth to the
 complex area of food supply and use.

Consumer response

Consumer power has been harnessed very effectively especially by large retailers. ('The herd will be heard.') We are attuned to the concept of consumer rights but less familiar with the notion of consumer obligations. In the context of the global food agenda what are the food related issues on which, as Christian consumers, we need to consider our stance? The complexity of this topic is such that simple right and wrong conclusions may not be attainable.

- **Gratitude:** The starting point has to be a grateful heart; we must stop taking our 'daily bread' for granted and develop a broad understanding of how it is produced, what it has cost and how fortunate we are in terms of availability. Whilst the vast majority are not directly involved in food production eating has been described as an agricultural act thus linking us all to the land. The social implications around food are strongly rooted through the bible.
- **Health:** Few if any factors impact our health more than what we eat, a fact of particular significance for our children. It is vital they understand the link between food and health and that we raise individual responsibility for balanced nutrition.
- **Diet:** In addition to health related issues there is need for a balanced approach around consumption of meat and fish. The carbon foot print of meat production will vary hugely according to systems of production with some forage based systems capable of providing net benefits.
- Waste: It is estimated that almost half of the world's food never gets consumed. Even in the developing world approximately one third is wasted, mainly post harvest. In the UK an estimated one third of waste is in the supply chain and two thirds in the home. Consumers need to change their behaviour to address this issue.
- Sourcing of Food: With a global market place we have unparalleled choice with the option to
 remove seasonality as a constraint in our buying practices albeit with significant environmental cost.
 Importing foods that can be grown at home poses the dilemma of, on the one hand, supporting
 developing economies, whilst risking depriving them of scarce water and other resources. While the
 link between 'food miles' and sustainability can be blurred there are socio-economic, food quality
 and traceability reasons for local sourcing and procurement. We do of course consume significant
 quantities of food that cannot be produced in our temperate climate.
- Systems of Food Production: The best options for agriculture to increase food production while simultaneously reducing its contribution to greenhouse gas emissions are the basis of intense scrutiny and debate. In part the debate revolves around levels of intensity. Extensive production entails lower inputs and outputs. Any criticism of intensive production needs to be balanced against the need to produce enough food for all.
- **Animal Welfare:** Animal production systems also entail varying levels of intensity. Most would support the view that if animals are to be reared for food it should be under systems that incorporate high standards of welfare.
- Emerging Technologies: The huge challenges relating to feeding the world are unlikely to be met without the application of risk assessed new and emerging technologies. There is need to lower some ideological barriers in order to achieve agro-ecological sustainability. Consumers should engage more widely in the debate that can be unduly biased with disproportionate influence of single interest lobby groups.
- Fair Trade: The work of the FairTrade Foundation has moved from being perceived as 'whacky' to mainstream. This has demonstrated that even beyond the work of the Foundation the ability of consumers to influence the extent to which producers (relatively small scale) receive a fair proportion of the end price charged by processors and retailers (relatively large scale) should not be under estimated.



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