Global Food Security: Strategies for Urban Communities

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ABSTRACT

During 2005/2006 a change-over point was reached when the number of people living in urban environments exceeded those living in rural areas. Thus the provision of food for city dwellers will become, increasingly, a major component of global food supply systems. To do so in a way that respects environmental as well as social and economic drivers is a difficult task.

Two case studies are described, one in the UK, the other in Japan, that have and are succeeding in meeting the challenges while allowing consumers diverse and ethical food choices.

INTRODUCTION

Food Security (FAO, 2004) refers not only to "..*physical and economic access to sufficient, safe and nutritious food to meet dietary needs…for an active and healthy life..*" but also "..*food preference…*" or indeed, food choice. The battle for food security will be fought as much in cities as in the countryside. Efforts are being made to ensure that, even in cities, farming and food production should be developed and expanded (RUAF, 2006).

A development amongst some urban dwellers is the growing evidence of a dissatisfaction with the evolution of the nature of food delivered through national or trans-national retail providers ie. Supermarkets, especially amongst the growing middle-class or newly affluent. There is also concern that the poorer citizens in similar locations have limited food choice within their income bracket, leading to less well balanced diets and associated health related issues.

Hence the growth in these sectors for organically produced, locally sourced, minimally or un-processed foods and a rejection of Genetically Modified, fast food and artificially fertilized-pesticide protected produce. A return to *traditional* agriculture and food practices is sought, not only to provide *better* food, but also to reduce pollution and combat global warming. How can affordable food from environmentally responsible suppliers be made available to a general, urban population? The following two *case studies* may indicate challenging solutions to the problem.

METHODOLOGY

The London Food Strategy. This is known as the Mayor's Food Strategy, was presented in draft form in 2005, refined and implemented in mid-2006. It is based on his observation, "*that the food system in the capital is not functioning in a way that is consistent with the ambition that London should be a world-class, sustainable city.*" (LDA, 2005). Many features of the London food system are positive, but many are less so. These include, child obesity and increase in late-onset diabetes; access to affordable food for poorer people; food safety in restaurants and in the home; economic fragility of small food-related businesses; and the environmental consequences of London's food supply chain. The Mayor's plan is to work with and through partners to harmonize market forces with consumer preferences to achieve desired changes.

Daichi-o-Mamoru-Kai (Association to Preserve the Earth) (iNSnet, 2005).
The calorie-based self-sufficiency ratio in Japan is only about 40%, the lowest of all OECD countries. Land available for agriculture has fallen to 12.8% in 2002, with the primary workforce also having fallen to 4.7%. Daichi-o-Mamoru-Kai was established in 1975 by farmers disillusioned with agrichemicals, to seek ways of growing chemical-free vegetables and rice and delivering them to consumers in urban areas. As the number of participating producers and consumers increased, the association established a distribution company to deliver up to 3,500 items to its 70,000 customers, door-to-door.

RESULTS
The London Food Strategy. Few attempts have been made to consider food as an integrated and interdependent system. Diet, health and well-being are inextricably linked and food lies at the heart of the Mayor's cross-cutting themes of health, equalities and sustainable development. Food waste requires new composting facilities and also offers potential for emerging renewable energy initiatives. The importance of food within London is best summarized through the five principal themes of the Strategy framework: *Health.* Both diet and pollution are of concern: *Environment.* The food system is responsible for 41% of the city's ecological footprint: *Economics.* 500,000 people are employed and £8.8 billion earned in retail food outlets: *Social & Cultural.* Many Londoners prefer to eat out at the 12,000 restaurants, 6,000 cafes and 5,000 pubs and bars: *Food Security.* The strategy reserves this term for emergency or crisis events in the food system. These themes are presented as the columns of the framework and are matched against the eight stages of the food chain comprising: *Primary production; processing and manufacture; distribution and transport; retailing; food purchase; food preparation and cooking; consumption; and disposal of waste.* These stages are presented as the rows of the framework (Table 1).
Daichi-o-Mamoru-Kai. Initial consumer problems with the non-uniform and blemished produce were alleviated through an education programme and visits to and dialogue with the primary producers. To their interest in natural production and food quality the association has added an awareness of the energy consumed in producing/delivering their food, *food miles.* To this was added the concept of POCOS, where 1poco = 100g CO_2. It is estimated that eating 100% domestically grown food by its members would save Japan 20,000 tons CO_2 per annum.

CONCLUSIONS
Both case studies have changed, or are changing, their respective food markets and consumer behaviour. By developing commitment of consumers to be able to exercise their choice of food on ethical as well as health, safety or economic grounds, changes in environmental policy can ve supported and indeed driven.

REFERENCES
The literature cited in this paper may be found, together with an extended text, at the following site, and includes Table 1. Any difficulty or need for explanation may be obtained from the author:

McGill, A E J, (2006). "Urban challenges and solutions for ethical eating", in Kaiser, M, & Lien, M, (eds) "Ethics and the politics of food", EurSAFE 2006, Oslo, Norway, 22-24 June, Wageningen Academic Publishers, ISBN-10: 90-8686-008-7: ISBN-13: 978-90-8686-008-1, pp 368 -375.