

**Developing The Links: An Assessment of the Potential  
for Community Food Initiatives to Contribute to the  
Development of Sustainable Food Systems in South  
East Wales**

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## **1: Introduction**

This paper reports on the findings of a research project funded by Science Shops Wales (SSW) and conducted by a lead researcher from the University of Glamorgan's Programme for Community Regeneration (PCR) with support from SSW's research team. As the title suggests the focus of the research was upon the role which community based food initiatives could play in the development of more sustainable local food system in the South East Wales area. The term community food initiatives (CFIs) is used to describe diverse projects which span a spectrum of community level activities such as urban agriculture, community supported agriculture, food co-operatives and community run farmers markets or box schemes. The focus here has therefore been upon initiatives primarily geared towards the production and/or distribution and supply of sustainable food. To retain a clarity of focus community food initiatives whose activities are concentrated upon promoting awareness of nutrition and health issues such as healthy eating classes have not been specifically included, although many of the projects which are included also incorporate these roles within the range of their activities. In addition to being defined by their activities, the initiatives explored in this research are also defined by their location within the third sector and their concern to work at a community level. Many of the initiatives are located within wider community development organisations and all of the initiatives included within the research are concerned in their own way with building community.

Although reporting on research findings, the paper is intended as a discussion paper which will make a contribution to further debate about the role which community food initiatives might have in developing sustainable food chains. In order to contextualise the role of community food initiatives in the development of sustainable food chains, it begins with a synopsis of the conventional food system's lack of sustainability and the different characteristics which are likely to be required of a sustainable food system. It then moves on to explore the emergence of a grassroots sustainable food movement and the difficulties which this movement faces in terms of addressing the social dimensions of sustainability. In particular, attention is focused on the way in which the economics of sustainable food have restricted its accessibility to a narrow and exclusive social strata distinguished by its relative affluence. Attention then turns to the potential role of community food initiatives in reconciling the social and environmental dimensions of sustainable food, and the challenges which they face in the pursuit of this goal.

## **2: Methodology**

The methodology deployed in this study has been based upon a combination of interviews with staff and participants involved in various community based food initiatives, site visits to projects, and evidence drawn from a growing body of literature. This latter aspect of the research proved to be particularly challenging. This was due in part to the multi-disciplinary nature of the subject

area and the disparate range of sources it is derived from. It is a body of literature which spans academic and professional silos, but which also extends away from traditional academic and policy documents to important research and ideas produced by advocacy organisations and by individual projects themselves (the so called 'grey literature'). However, the real challenge stemmed from the fact that the growing realisation of the importance of developing sustainable food systems, and the role of community initiatives within this, is reflected in a rapidly expanding body of literature, and, to a lesser extent, policy development. Keeping track of these developments is a potentially endless task and even during the final stages of writing this report a number of key reports were released and important developments in policy announced.

Throughout its duration the study sought to adopt an action based and participatory model of research. Whilst the bedrock of the primary data was obtained through traditional qualitative interviews these frequently formed the basis of an informal and formal ongoing dialogue with key participants in which the findings and their implications for practice were discussed. Formal components of this process included a half day feedback seminar in which the initial research findings were presented and discussed with participants. This was intended to provide a means by which their perceived validity within practitioners could be assessed and also sought to guide the future direction and shape of the research. Another important component of the action research model was the development of a series of study visits which emerged as an idea during one of the early interviews. These study visits were developed with the support of the Federation of City Farms and Community Garden's Growing Together programme which provided part-funding and which opened up the visits to its growing Welsh membership. The main intention of these visits was to provide an opportunity for projects which were often in their very early stages of development to learn from the experience and ideas of more established 'exemplar' projects. Additionally it was hoped that the visits would provide opportunities for participants based in South Wales to share experiences and network with one another. In the event it only proved possible to organise two study visits (one to a Community Supported Agriculture initiative in Stroud, and one to the Growing Communities and Organiclea initiatives in London). However, feedback from participants was extremely positive and their reported experience suggests that such visits could play an important role in development of community food initiatives in South Wales in the future.

### **3: Food, Sustainability and Community Food Initiatives**

#### **3.1: The Development of the Current Food System**

There is growing concern that humanity is at the beginning of a crisis in its ability to feed itself which cannot be resolved through the conventional food system. Indeed, for many analysts it is the conventional food system which has brought us to a point which leading food policy analyst Tim Lang has likened to "peering into the abyss" (Lang 2008). This system is characterised

by highly productive but resource intensive models of food production combined with increasingly globalised distribution chains. It is a model which has developed through a particular combination of technological innovation, exploitation of fossil fuels, government policy and wider socio-economic and cultural change.

From the 1920s there was an ongoing process of mechanisation of agriculture and following on from this the “Green Revolution” of the 1960s saw increased crop yields as the result of the wholesale application of inorganic fertilisers and pesticides, new seed strains and irrigation (Evans 2009). The emergence and subsequent domination of the industrial agricultural model was credited with averting a food crisis in the Twentieth Century through its capacity to increase agricultural productivity (yields per unit of land) in a context where a finite amount of agriculturally viable land was virtually fully exploited (Evans 2009).

Its development was also facilitated through government policy. This was particularly in the context of food shortages of the immediate post war period. Prior to its entry to European Union, the UK government response was to develop an agricultural policy based on a combination of funding support linked to increasing agricultural efficiency and productivity, and the erection of import barriers (DEFRA 2006). A similar approach was followed by much of the rest of Europe through the development of the Common Agricultural Policy (CAP). Both sets of policies were developed under what has been described as a “productionist paradigm” whose goals were to ensure food security through raising overall production, ensure regularity of supply, and lower costs to consumers (Lang et al. 2001, Lang & Rayner 2005). Both policies were so successful in pursuing these goals that by the mid 1970s the food problem had changed from shortages to surpluses.

In recent years there has therefore been an increasing momentum for reforms to the CAP which move away from the narrow focus of efficiency and productivity. This has been reflected in the emergence of a new rhetoric of multi-functionality in which the aims of the CAP have been broadened to include goals such as maintaining bio-diversity or promoting rural development (Erjavec & Erjavec 2009). One outcome of this has been the recent emergence of policy and funding support for organic agriculture (Stolze & Lampkin 2009). However, this doesn't necessarily signify a departure from its commitment to an industrialised food system which continues to be the mainstay of food production within the European Union. Indeed, it can be argued that the rhetoric of multi-functionality is implicated in increasing the global spread and dominance of the industrial model, coinciding as it does with an increasingly dominant discourse of economic neo-liberalism (Erjavec & Erjavec 2009). There is therefore a sense in which the encouragement of more sustainable farming practices and land uses through CAP reforms are part of the ongoing globalisation of the industrial model, as the production of Europe's food supply becomes transferred to other regions of the world. The UK has been at the forefront of these developments since the election of the new right governments of the 1980s to the present day and continues to

advocate a policy of national food security through increasing global trade (DEFRA 2006).

Finally the development of the food system can be seen as a response to the seismic social, economic and cultural changes which took place in the developed world during latter half of the Twentieth Century. Of particular significance has been the unprecedented growth in personal mobility through access to private transport and the expansion of the aviation industry, and a related transformation in the dominant pattern of food retailing and distribution. In the last thirty years of the Twentieth Century car based supermarket shopping became the societal norm in the UK, as it did in other countries across the developed world. Indeed estimates of the major supermarkets' market share of food retailing range between 70% (Carley et al. 2001) to 75% (Cranbrook 2006) and coincide almost exactly with the 73% of households in the UK which were recorded as owning one or more cars in the 2001 census (Office for National Statistics). It also coincides with a decline in the number of small scale independent retailers from 80% of the market share in 1900 to a projected figure of less than 5% by 2010 (Defra 2006).

The food system which has emerged out of these disparate processes is radically different to anything that has gone before. The agricultural sector underwent revolutionary change as a result of technical innovation and mechanisation, underpinned by the twin drivers of maximising productivity and economic efficiency. Regional agricultural systems have been transformed. Conversations with farmers and neighbours during the course of this research revealed recollections of a patchwork of market gardens growing fruit and vegetables in South Wales, whilst livestock feed was traditionally grown on the same farm. Today, fine tuned economic calculations have meant that fruit and vegetable production is concentrated in particular regions (such as East Anglia or the Lancashire coastal plain) or increasingly in other regions of the world, as are animal feeds. The entire food system is based upon an increasing and more complex pattern of global trade, a process which has occurred hand in glove with the emergence of a relatively small number of multi-national corporations through which the bulk of this trade occurs. For the western consumer the net result of this system has been to generate a historically unparalleled range of food choices at an equally low cost. In 2006 purchase of food and non-alcoholic drinks constituted around just 10% of average household expenditure in the UK (ONS 2007), a stark contrast to the plight of the urban poor in developing countries who regularly spend up to 80% of household income on food (Mougeot 2006).

### **3.2 The Pressures Facing the Food System**

The food system which emerged during the 20<sup>th</sup> Century can therefore be seen as having delivered on its key goal of delivering food security, in the developed world at least. However, even as it was fulfilling this objective there was a growing sense of concern that it was at the same time generating a series of environmental, social and economic problems. Conservationists criticised the new intensive agricultural systems for their impact upon wildlife habitats, bio-diversity and pollution of ecological systems. The experience of successive famines and endemic malnutrition in parts of the developing world

made it grotesquely obvious that whilst this system could generate huge production surpluses it could not guarantee global food security. Moreover, towards the end of the Twentieth Century public health analysts became increasingly concerned that it was the food system itself which was responsible for the rapid increases in obesity and associated degenerative health conditions which were occurring throughout the Western World (Lang & Rayner 2005). Concerns also started to be voiced by farmers and independent retailers about the growing dominance of the supermarkets amidst claims that they were using their new found power to squeeze suppliers to the absolute limits of economic viability and eliminate competition from local high streets.

More recently, as awareness has grown about the major challenges which climate change and resource depletion pose to the future of humanity, these previously disparate sets of concerns have coalesced into an analysis which concludes that the present system is not sustainable for the 21<sup>st</sup> Century. A comprehensive analysis of the multiple pressures facing the food system, this has recently been published in a Chatham House report which brought together the perspectives of eight leading analysts and was subject to peer review by other recognised experts in this field. The report can therefore be said to represent the consensus of a significant body of expert opinion. It describes a global food chain which is on the cusp of being unable to feed the population as the result of the interplay of seven key social and environmental pressures which it describes as the “New Fundamentals”. It is argued that these “New Fundamentals” dictate the need for radical changes to the current food system since *“left unaddressed, they threaten to lead to a significant deterioration in the balance between the global demand for food and the capacity of world agriculture to supply it”* (Ambler Edwards et. al. 2009: 11). They are summarised below:

- **Rising Human Population:** Despite a slowing down of the increase in population the global population is expected on current trends to have reached 9 billion people by 2050.
- **“Nutrition Transition”:** A process which occurs as countries develop and increasing affluence is reflected in their populations consuming not just more food, but more resource intensive foods such as meat and dairy. The nutrition transition also tends to involve the consumption of less healthy, refined and processed foods rich in sugars and saturated fats, and a significant growth in food waste.
- **Energy:** The industrial model is fundamentally dependent on inputs from fossil fuels at all stages of the food chain including production, processing, distribution and consumption. The price and availability of food is therefore driven by the availability of, and ability to use fossil fuels. However, a combination of declining reserves coupled with their critical impact upon climate change means that the use of this energy source needs to be massively and urgently reduced.
- **Pressure on Land:** The finite nature of agriculturally productive land means that as population increases the availability of productive land per capita decreases. There is increasing evidence also of declining crop yields, declining soil fertility and declining amounts of agriculturally

viable land as a result of processes such as desertification and rising sea levels.

- **Pressure on Water:** Currently the global population is using approximately 54% of the available water supply which is usable for human consumption and the rate of use is rising sharply. Moreover, the increased globalisation of food chains has led to increased trade in virtual water (water embedded in food and other products). The fact that many of the producer countries are “water stressed” creates further pressures on already over exploited aquifers.
- **Climate Change:** One of the consequences of the industrial food system’s reliance upon fossil fuels is that it is a major source of Greenhouse Gas (GhGs) emissions. Indeed, the current food system is estimated to be responsible for up to one third of all UK GHG emissions (Helweg Larson & Bull et. al. 2007, Garnett 2008). The problem is made worse by the unpredictability of the effects of climate change with future projections being far from certain. Worryingly, as the impacts of climate change are beginning to be experienced many of the initial findings suggest that early predictions of the adverse effects of climate change have underestimated the problem. For example, early evidence of the depressing effect that temperature increases will have upon crop yields in the United States has shown crop yields to fall by as much as three times more than was previously expected (Costello et. al 2009: 1704)
- **Labour:** Essentially a problem of who will produce the food. This is a problem across the planet. In the developing world in particular, the rural agricultural labour force is under pressure from poor working conditions, poverty, disease, and the consequent pull of urbanisation. In the UK there are already well established problems in securing an adequate labour supply with farmers’ average age increasing and other labour requirements largely being met with migrant labour.  
(Ambler Edwards et. al 2009)

Critically, these unsustainable dynamics of the current food system are not static but are on an upward trajectory. For example Garnett (2008) notes how the dominant trend is towards accelerating production and consumption of GhG intensive food. In other words it is not only the case that the current food system is unsustainable at the present time but that it is becoming increasingly unsustainable as time goes on. This is in turn linked to its increasing global dominance and the way in which this process actively undermines alternative systems which are often more sustainable. This is exemplified in such developments as the extension of legally protected Intellectual Property Rights (IPR’s) to plant and animal materials in recent World Trade Agreements, a development which effectively outlaws millennia old sustainable farming practices and customs (Tansey 2007). This process not only undermines existing sustainable farming practices but potentially undermines the ability to respond to the future challenges facing food production through reducing horticultural bio-diversity. Tansey questions whether:

*“In a world threatened with increasingly variable and extreme weather events such as storms, floods and droughts, linked to climatic change, could widespread applications of IPRs-protected, less diverse crops affect the sustainability of farming systems as well as farmers’ and researchers’ efforts to adapt to climatic changes?”*

(Tansey 2002: 588)

### **3.3: Characteristics of More Sustainable Food Systems**

The preceding discussion leaves little doubt that the industrial model of food production and the neo-liberal economic policy paradigm it sits within are fundamentally unsustainable. One indication of the severity, scale and complexity of the challenges which this poses is that climate change, an issue which is routinely regarded as the greatest threat to humanity, is only one of the seven fundamental pressures on the food system. Whilst there are major differences in opinion about whether the present system should be replaced or reformed (Ambler Edwards et al. 2009), there is a growing awareness about the need for significant and radical changes.

There is also increasing awareness of what some of the core changes should be. Arguably the three combined characteristics of sustainable food systems which have most entered the public consciousness are the need for food to be local, seasonal and organic. A food system based on these principals would do much to reduce the Greenhouse Gas emissions associated with conventional agriculture by, for example, reducing the ‘food miles’ between producer and consumer, reducing the energy inputs needed to produce food out of season and by eliminating the sizeable emissions associated with the production and application of chemical fertilisers. Organic production systems, localised food chains and consumption habits linked to what is seasonally available are therefore seen as essential components in the development of low or de-carbonised food systems. It is this message which has most captured the public imagination and the notion of “local, seasonal and organic” is widely perceived as being synonymous with sustainable food. In a sense, this is hardly surprising as it is essentially asking consumers to make a positive consumption choice (i.e. to choose a product which is imbued with connotations of superior taste, nutritional value and safety through traceability).

Other aspects of the transition to a more sustainable diet are likely to be less attractive to populations accustomed to the typical Western diet. For example, a sustainable food system would require substantial reductions in the production and consumption of meat and dairy products. Garnett (2008) cites Dutch figures which show that when food related GhG emissions are broken down by food type, potatoes, fruit and vegetables are responsible for only 15% of emissions, whereas meat, fish and dairy products are responsible for over half (51%) of emissions. This is in part a reflection of direct emissions from livestock but also reflects the fact that producing food from animals is intrinsically less efficient than growing crops. The average energy input to output ratio for meat production has been calculated as up to ten times that of vegetable production (Simms 2008, DEFRA 2008). Whilst there are disagreements about the extent to which meat and dairy products would need

to reduced, there is general agreement that a more sustainable food system would involve much lower rates of production and consumption of these foodstuffs.

In addition to changing the nature of consumption patterns, there is also widespread agreement that there would need to be a scaling down of absolute levels of food consumption coupled with major reductions in food waste. That there is a general pattern of over consumption in developed countries is evidenced in the rapid increase of obesity that has occurred in developed world countries (Lang & Rayner 2005), but is also evident in the amount of food that is wasted. A recent estimate of food waste has suggested that currently around one third of all food purchased in the UK ends up as waste and that of this 61% is avoidable waste resulting from poor management practices (Ventour 2008). Finally there would be greater emphasis on from-scratch preparation of food within the home as opposed to more resource intensive practices such as eating out and 'ready meals', together with reduced alcohol consumption (Dawkins et. al. 2008). As might be expected environmental pressure groups, think tanks, advocacy bodies and a growing number of groups and alliances forged specifically around the issue of sustainable food, are at the core of this emerging consensus.

However, it also includes leading analysts within different academic disciplines and NGOs traditionally concerned with international development. Perhaps most significantly it also includes key bodies from mainstream agriculture. This is perhaps best exemplified by the work of Farming Futures, a partnership of various agricultural bodies and DEFRA which came together to research and advised on how agriculture can respond to the effects of climate change. Guidance detailed on their website includes recognition of the need for re-localised food chains, increased use of organic methods and smaller scale units of production. <http://www.farmingfutures.co.uk/> (last accessed July 2009).

There is therefore a relatively clear picture of the core characteristics of a sustainable food system. It is a system which should include the following components:

- Reduced overall consumption.
- Reduced food waste.
- Reductions in resource intensive foodstuffs such as meat, dairy and alcohol.
- Reductions in resource intensive modes of consumption such as "eating out" and ready meals.
- Greater localisation of food chains
- Greater consumption of seasonal produce
- Greater use of low input and organic production methods

One of the striking features of the contemporary debate around food and sustainability is the extent to which there is an emerging consensus around these different components amongst an increasingly diverse range of players.

This is not to say that there are not significant differences, in the extent to which different bodies or groupings subscribe to all of these components or that there are not major potential fault lines in such issues as: reconciling the “local and green” narrative of sustainable food with arguments for a “global and fair” system (Morgan 2008); on whether the current system should be reformed or replaced (Ambler Edwards et.al 2009); the relationship between sustainability, food security and national or even regional self sufficiency; or the role that might be played by genetically modified (GM) foodstuffs. However, the very existence of agreement between groups who have in the past frequently been at loggerheads with one another is a striking development. What is more striking still is the emergence of a spontaneous grassroots movement towards an interest in sustainable food.

### **3.4 A Sustainable Food Movement?**

One of the major trends in the U.K. in recent years has been the growth of food produced, distributed and consumed outside of the conventional food chain. This is exemplified in a range of diverse but interlinked trends. There has been a major expansion in the organic sector during the last decade, a growth which is apparent across all socio-economic groups and has continued even into the current recession (Soil Association 2009). Moreover whilst the primary motivation for purchasing organic food remains “private goods” such as perceived health and nutritional advantages, wider concerns about environmental and animal welfare issues also feature strongly (SeyFang 2006, Weir et al. 2008, Soil Association 2009). Coupled with increased demand for organic food there has been a proliferation of alternative distribution models such as farmers markets and box schemes which are explicitly geared towards localising food chains and reconnecting producers with consumers. Alongside the growth in these alternative food networks interest in domestic food production has grown to levels not seen since the “Dig-For-Victory” campaign in the Second World War. This is reflected in a series of related trends such as the fact that from 2007 sales of vegetable seeds overtook sales of flower seeds (Vidal 2007) the sudden upsurge of interest in allotment gardens, and wider proliferation of community based food projects.

For those who are looking for indications of the emergence of alternative models of sustainable food systems, the greatest cause for optimism appears to be where these trends overlap. That is where there are individuals and groups of consumers who are making a conscious decision to purchase not only organic food, but to do so from local suppliers and/or to grow their own food. In other words the emergence of alternative food networks which are based on a critique of the conventional food system and which are in turn seeking to construct a more sustainable alternative food system. Within local organic food networks SeyFang (2006) argues that it is possible to detect the emergence of a new social movement of “ecological citizens” whose consumer behaviour is based on a new ethic of holistic sustainability encompassing environmental, social and economic concerns. What distinguishes the ecological citizen from the consumer is that their consumption decisions are motivated not only by perceived private benefits (e.g. taste, freshness) but also by a desire to derive collective benefits (e.g.

positive environmental behaviour, supporting local farmers and the local economy). For SeyFang (2006) these ecological citizens promise of a strong collective model of sustainable consumption which is capable of instigating the radical changes needed for the development of truly sustainable food systems.

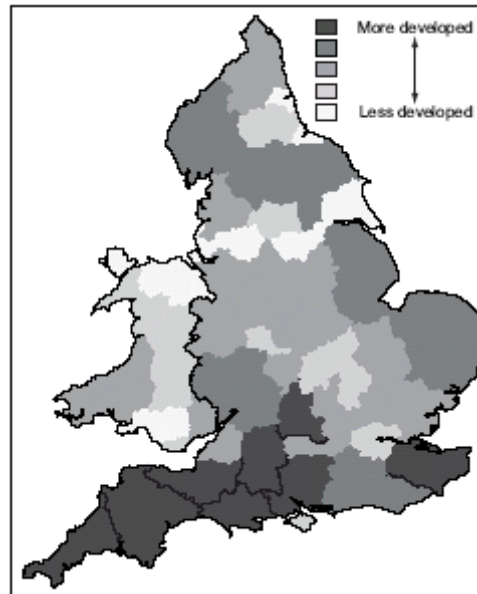
There are therefore considerable grounds for optimism in some of the trends around sustainable food in UK over the last decade. However, the evidence within these trends also suggests these new patterns of sustainable consumption based around organic and local food are currently destined to remain a marginal feature of the food system. Within the organic sector data produced on an annual basis by the Soil Association paints a picture of ongoing but slowing growth and of a sector which remains marginal in relation to the conventional food system. This is true at every level of the supply chain from production, to distribution and consumption. In terms of production there has been a major slackening of the growth of land under organic management since the beginning of the decade. Between 1999 and 2001 there was a doubling of such land and by 2001 it was calculated that 3% (540,191 hectares) of UK agricultural land was either fully organic or undergoing conversion (Rigby et al. 2002). Comparable figures for 2008 show since then the proportion of land under organic management has grown at a much slower rate and now stands at 3.9% (676,387 hectares) of agricultural land. Similarly, the latest evidence from retail sales shows that approximately three quarters of organic sales are through mainstream outlets such as supermarkets rather than alternative outlets such as farmers markets or box schemes (see also Weir et. al. 2008). Given that between 2007 and 2008 sales in the supermarkets were increasing at a faster rate, the current trend is of a widening gap. Finally, whilst 90% of households now purchase some organic goods and sales are also increasing amongst low income groups, the dominant pattern is of irregular purchases which make up a negligible amount of annual household expenditure. Supermarket market research speaks of the “halo effect” which consumers gain from having an item of organic food in their shopping basket (Reed 2009). In 2008 only 6% of “organic consumers” spent 60% or more of their household food expenditure on organic products and the average annual spend was as low as £50.55 (Soil Association 2009). Put simply, this evidence suggests that the “ecological citizen” can be found only at the periphery of a food sector which itself sits at the periphery of the UK food chain.

### **3.5 Food Poverty and Sustainable Food.**

There is therefore evidence of an established trend towards models of food production, consumption and distribution which are more environmentally sustainable. However, the evidence also suggests that this trend exists only at the margins of consumption, is restricted to particular, generally more affluent and educated social groupings and is perhaps stagnating. In the case of organic food, market research has shown that the typical committed organic consumer, who might fall within SeyFang’s notion of an ecological citizen is “older, wealthier and more educated” (Reed 2009:282). Likewise, there is also evidence to suggest that the trend for local food has bypassed large urban areas, particularly those with high levels of socio-economic deprivation. An

index of Food Re-Localisation compiled for England and Wales (see figure 1) shows that alongside areas such as Greater Manchester, Merseyside, South Yorkshire and Humberside, the South Wales Valleys have the lowest level of food relocalisation (Ricketts Hein 2004).

**Figure 1: Index of Food Re-Localisation in England and Wales**



Source: Ricketts-Hein (2004)

It is not just the case that the trend towards sustainable food has bypassed many low income households, but that it has a number of profoundly negative implications for these households. For a start, if there was a sudden wholesale switch to the type of sustainable food system described above there would inevitably be a significant rise in the price of many foodstuffs. There is no escaping the fact that for all its faults the industrial agricultural model has been extremely successful in providing a plentiful supply of inexpensive food. Critics have argued that this is largely attributable to its ability to externalise costs and that internalising these costs would increase the average cost of weekly food basket by as much as 12% (Pretty et. al. 2004). For consumers to pay the *true* costs of conventionally produced food would therefore result in a significant increase in expenditure on food, an increase which would exacerbate the problems faced by households already surviving on often sub-breadline incomes. Moreover, whilst organic food production is claimed to reduce the externalised costs by up to two thirds, the higher production costs and lower yields per acre mean that retail prices are higher (Soil Association 2008). It's almost impossible to get an accurate average figure for the price differentials between organic and non-organic produce due to differences between different types of product, retail outlets and seasonality. However, evidence from snap shot shopping basket surveys are illuminating, if unscientific. For example, the Independent newspaper conducted a comparison of prices for a seven item shopping basket from Waitrose found the cost of a seven item grocery list was 50% more expensive and that the cost of an organic chicken was more than twice that of a conventional chicken (Monk 2008). In current conditions such price increases

are simply unaffordable to low income households, where even a £5-10 increase would increase the weekly food bill by nearly a fifth (Dowler 2002).

The economics of sustainably produced food therefore effectively price low income households out of the market, and leave it as the preserve of the relatively affluent. There is recognition of this social exclusivity even amongst those who have done much to popularise the cause. For example, when interviewed shortly after becoming president of the Soil Association, Monty Don expressed his concern that organic food was popularly perceived as “*wealthy, middle-class people indulging in their penchant for peasant food*” (Hickman 30/08/08). It is not only the case that sustainable food is frequently inaccessible to those on low incomes but that this inequality can enable sustainable food to become a means by which social divisions are actively constructed. In a social context food represents considerably more than its nutritional qualities. It is more than “*a bundle of nutrients: it represents an expression of who a person is and what they are worth, and is a focus of social exchange.*” (Dowler 2002: 709). This relationship between food and social status is long standing. In feudal times it was formalised within sumptuary laws which included a series of legal codes and social customs determining the dietary choices of different social strata (Thompson 1980). Whilst in the modern context dietary choices are not prescribed by law but are an outcome of economic means, the role of food in demarcating social status is no less powerful. Against this backdrop there is a danger that the movement towards more environmentally sustainable food is also implicated in the reinforcement and reproduction of social inequality.

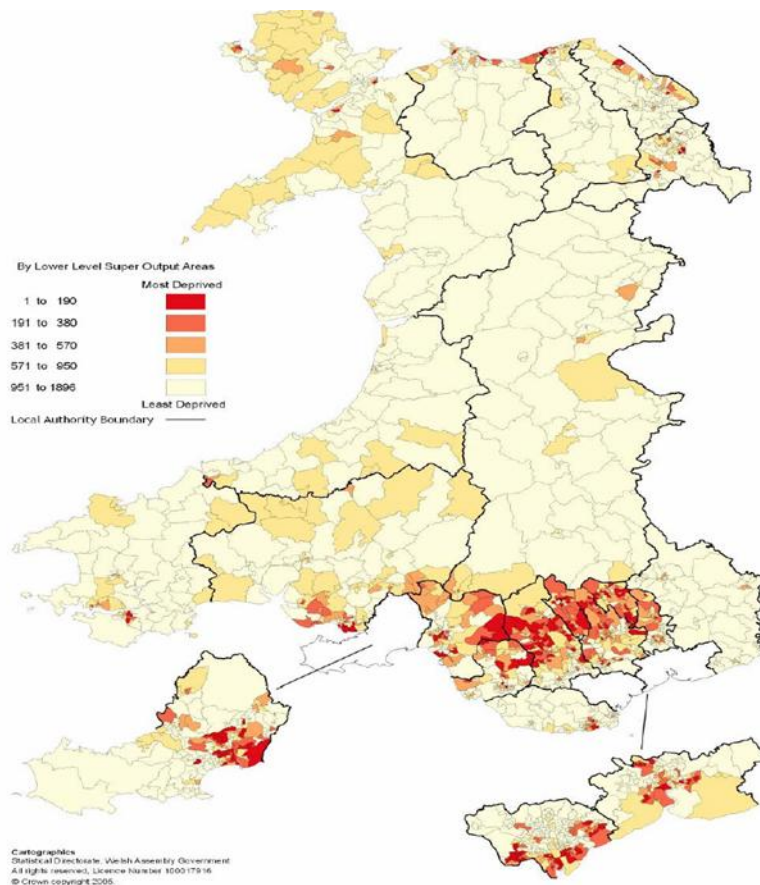
The Observer, food critic Jay Rayner takes this analysis further and writes of the way in which a “middle class, local seasonal food Taliban” has displaced attention away from the debilitating and life shortening impact of food poverty (Rayner 2008). Whilst perhaps overstated, Rayner’s use of the word Taliban does reflect a particular type of moralising discourse in which those who can afford to eat sustainable food cast judgement upon those who cannot. During the course of this research these types of discourse have been regularly encountered in workshops where issues of food and sustainability have been discussed. Typically, they take the form of statements which are made about the poor consumption *choices* made by low income households. As one individual suggested “*they*” (the urban poor) don’t buy local and organic produce because they choose “*to eat biscuits*” instead, and as everyone knows “*biscuits kill you!*”.

To identify this type of discourse within the sustainable food movement is not to suggest that it is a characteristic or defining feature, but merely notes the plurality of ideas and viewpoints which it embodies. Whilst it is possible to identify a progressive politics of change within this movement it is also possible to identify more regressive and reactionary political voices. This observation is also made by Harris (2008) whose study of Alternative Food Networks in Fife led to the conclusion that there is a need for “*greater reflexivity in ‘local’ food politics*” (Harris 2008:51). In the case of food poverty this questioning would do well to focus on two issues, the choices that are available to low income households and the environmental impact which they

have upon the planet. The issue of choice is returned to later, for now attention will focus on low incomes households environmental impact or their ecological footprint.

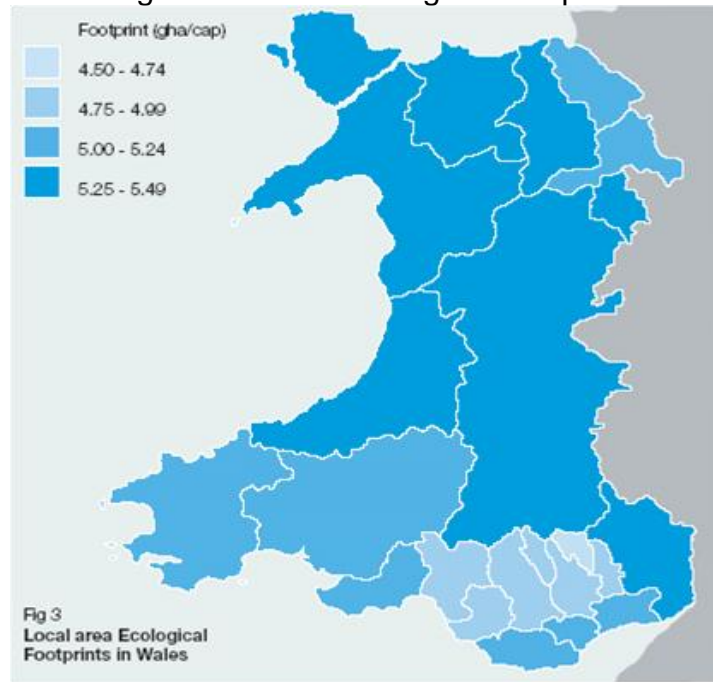
What is often overlooked in discussions of food poverty and sustainable food is that the consumption patterns of the poorest sections of the population have a lower environmental impact than those of more affluent sections. In Wales this relationship is comprehensively explored in the latest Ecological Footprint analysis which has been conducted for the Welsh Assembly Government (WAG) by analysts at the Stockholm Environmental Institute. As with an earlier footprint calculated by the WWF (WWF 2007) the SEI's footprint analysis shows an almost perfect spatial correlation between areas with high levels of deprivation and areas of lower than average ecological impact (see figures 2 and 3). This relationship is equally apparent when the ecological footprint for food is calculated separately (see figure 4).

**Figure 2: Welsh Index of Multiple Deprivation**



Source: Welsh Index of Multiple Deprivation 2008, WAG

Figure 3: Welsh Ecological Footprint



Source: WWF 2007

Figure 4: Welsh Food Footprint

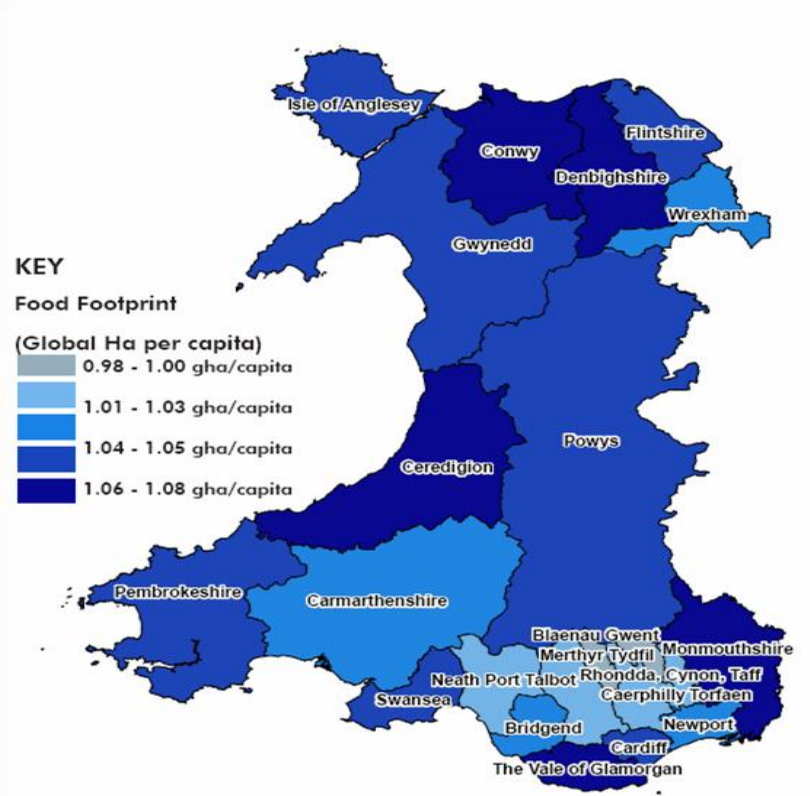


Fig 27: The food footprint per capita for local authorities in Wales

Source: Dawkins et al 2008

Dawkins et. al (2008) go onto model the different ecological footprints for the hypothesized food consumption patterns of three different types of environmental behaviour: a consumer with conscience, who grows their own vegetables, shops at farmers markets and whose consumption habits are generally underpinned by ethical considerations ; a disinterested individual; and an efficiency focused individual. Unsurprisingly, the results from this exercise show that the “efficiency focused” individual’s footprint to be considerably lower than that of the “disinterested” individual (see table 1 below). What is perhaps more surprising is that for all their ethical consumption practices the “consumer with conscience’s” footprint is exactly double that of the “efficiency focused” consumer, and is in fact more closely aligned to the high footprint of the “disinterested” consumer.

**Table 1: Hypothecated Food Footprint Calculations for Three Different Types of Environmental Behaviour.**

	Disinterested	Consumer with conscience	Efficiency focused
Ecological Footprint (global acres per person per week)	0.1	0.08	0.04

Source: Dawkins et al. 2008: 64

The key distinguishing characteristics of the “efficiency focused” consumer that their income is lower than average and that they are therefore concerned with controlling costs. Consequently there is greater careful forward planning of meals (thus reducing journeys to the shops, purchasing lower amounts of food and generating less waste), their low meat diet (thus consuming less resource intensive food products) and low level of expenditure on meals outside the home (thus consuming less food in cafes and restaurants which is reported to use up to ten times more energy than food which is prepared at home).

These results should be treated with some caution in the terms of the conclusions that are drawn from them, not least because they will obviously reflect the fact that local food was explicitly not included within the footprint calculations. Neither can the different consumer profiles be interpreted as a straightforward proxy measurement of the differences between the consumption practices of rich and poor. That said the efficiency focused consumer is distinguished from the other consumer types by their low income, a related concern with controlling costs and lower absolute rate of consumption.

To summarise the discussion so far, the sustainable food movement has proved unable to adequately address food poverty issues and has largely remained the preserve of a small minority of the relatively affluent middle classes. A corollary to this is that in some instances it can actually play a contributory role in reinforcing the social divisions and discourses which structure contemporary poverty and social exclusion. Moreover, what is often lost in this debate is that for all the ecologically positive consumption choices made elsewhere, the lowest ecological footprints, for food and for other dimensions such as transport, are consistently found within the poorest communities. This is true at both national and global scales.

There appears to be two key issues at play. The first is that whilst the sustainable food movement has had demonstrable successes in developing alternative models of food systems which are environmentally sustainable, they have experienced far less success in addressing the social dimensions of sustainability. These networks may well, as SeyFang (2007) suggests, be consciously seeking to develop new types of relationship between producers and consumers, and even seeking to build communities, but they are exclusive communities whose membership is largely dependent on economic resources. This emphasis on the environmental dimensions of sustainability not only excludes the poor, but can actually be a driver of poverty in its own right. Examples of this can be found not only in the UK but farther afield. Riches (2002) analysed the Canadian experience of food banks system run by charitable organisations that divert safe but unsaleable supermarket stock away from landfill and redistribute it, together with donations from the general public, to poor households. His analysis suggests that users experience this system as stigmatising and demeaning, that it conceals cracks in the welfare safety net, and undermines welfare provision more generally through enabling the state to shift responsibility onto charities. Similarly, the localisation of food systems on environmental grounds can be interpreted as a form of “green

parochialism” which denies access to export markets for farmers in the developing world and thereby deepens rural poverty (Morgan 2008).

The second is the issue of choice. At one level, within the Sustainable Food movement there is evidence of a body of consumers who are seeking to drive forward the sustainability agenda through their consumption choices and patterns. However, their impact becomes limited when these choices are focused principally on what might be regarded as positive consumption choices (i.e. those with some sort of personal gain) to the exclusion of choices which might involve some form of self denial (e.g. eating less meat). At another level there is a group of consumers whose consumption patterns are defined by their extremely restricted range of choices. Where choice occurs it is that food is a relatively “substitutable commodity” in household budgets overwhelmed by multiple and conflicting priorities, to the extent it has formed part of the rhetoric which has enabled the state to divest itself of responsibility for household nutrition (Dowler 2002). As has been seen, choice also features prominently in some of the discourses around issues of food poverty, diet and sustainability. Such arguments represent a long standing tradition in the UK of seeking to explain poverty through the behaviour and culture of the poor. Whilst they rarely stand up to empirical analysis they are nonetheless a pervasive influence in popular perceptions of poverty (Lobstein 1997).

Although the argument above is critical of the sustainable food movement it is not an argument against sustainable food, nor an argument for the continuation of a business-as-usual food system. The social, economic and ecological pressures which are facing the food system are such that change is both necessary and inevitable (Ambler-Edwards et. al. 2009). Likewise, there is also a certain inevitability that food prices will increase into the future and that the sharp price increases which occurred between 2007-2008 were a precursor of a longer term upward trend in prices (Piece & Thirtle 2009). Globally and locally, the people who stand to suffer the worst effects of this trend are those with the least economic resources. Neither is it the intention to denigrate the efforts or motivations of those who through their own actions and consumption patterns are seeking to promote and support the development of sustainable food systems. As one of the participants in this research observed in relation to the problems of addressing food poverty issues through Community Supported Agriculture (CSA) “*the problem is poverty and not the [CSA] system*”.

The challenge then lies in the development of food systems which are environmentally sustainable but which are also capable of feeding low income households. In other words, a food system which incorporates and reconciles both the environmental and social dimensions of sustainability (Morgan 2008). Meeting this challenge is important not just for reasons of social justice but would seem to be an essential step in extending the development of environmentally sustainable food beyond the margins of consumption. For all its many faults, the conventional food system has been successful in delivering a reliable supply of food at prices which are affordable/cheap at the point of consumption. For sustainable food systems to go from the margins to the mainstream they must be able to emulate this quality, albeit within a

different framework of expectations. It is difficult to see how these sorts of changes can occur without an appropriate statutory response. Many would argue that such a response cannot be achieved through incremental policy, but is dependent upon a paradigm shift in which the neo-liberal economic principles which have dominated policy development for the past three decades are rejected.

There is, for example, general agreement amongst analysts that this will involve a significant rebalancing of the relationship between statutory responsibility and the neo-liberal rhetoric of market governed 'choice'. As has been seen from the discussion above, this rhetoric of choice is in many respects meaningless. Economically, families on low incomes have no say in their income levels or the cost and availability of essential commodities (Dowler 2002). Socially, the idea of genuine consumption choices vie against retailing and marketing techniques fine tuned to the nuances of human psychology and contemporary lifestyles. As Lang & Rayner (2007: 178-179) argue in relation to obesity, it is a problem best understood not through personal choice but as "*systemic failure – the understandable bodily and psychological response to an inappropriate set of signals from the physical, physiological, social and cognitive worlds*". Environmentally, the twin imperatives of climate change and resource depletion leave few choices.

In large part the policy challenge is therefore about redefining the balance of restrictions and entitlements from which choices are comprised so as to develop a notion of choice which is compatible with sustainability. For example, Dowler (2002) argues for the development of a food poverty policy framework in which responsibility for dealing with the linked problems of low income, poor diet and poor health is shifted away from the individual and placed upon the state and wider society. Morgan (2007) appears to echo this argument when lamenting the Thatcher government's removal of mandatory nutrition guidelines in school meals. In these ways choice may be redefined in ways which enable access to environmentally sustainable foods to low income households. Equally, it is likely to involve inducements and encouragements to households to make choices which are seen as unpopular or as some form of 'sacrifice'. Ambler-Edwards et. al (2009:32) takes this further and argues for the adoption of 'choice editing' techniques in which the range of choices is determined by a "backroom selection of sustainable products" developed through dialogue between government, industry and civil society. This idea of dialogue and partnership would appear to be critical in facilitating the transition towards a more sustainable food system, and indeed, more sustainable ways of living generally. There is currently a sense in which governments, with an eye to their future electoral fortunes, are unwilling to make the radical but potentially unpopular changes which are necessary to address the current sustainability crisis. Equally, individuals are able to deny their personal responsibility by pointing to the lack of coherent statutory action and the inaction of their fellow citizens (Marshall 2001). The establishment of a genuine multi-level dialogue between citizens, community and state potentially has the ability to break this deadlock (Warburton 2008). As will be seen it is exactly this sort of relationship which forms a key part of the promise of Community Agriculture.

## **4: The Promise of Community Food Initiatives**

### **4.1: A Holistic Model of Sustainable Development**

As the weaknesses of the global industrial food system have become increasingly apparent there have been significant changes made to the nature and direction of food policy. Whilst welcoming many of these changes, analysts have also commented on the failure to integrate the different areas of policy which are relevant to food. Not only has this meant that food policy has often been disjointed but it has also resulted in situations where the different elements of food policy contradict one another in their aims and outcomes (Barling et. al 2002). Consequently, analysts have argued for more integrated policy development (Barling et al 2002) with policies being framed within a shared vision of sustainability (Lang et. al 2001). This is one of the key areas of promise for community food initiatives which have a demonstrable ability in developing this kind of co-ordinated multi-dimensional approach. Whilst food based activities provide the major emphasis, these initiatives routinely address this issue in ways which weave together the social, economic and environmental dimensions of sustainability within a mutually complementary framework.

Economically, community food initiatives can contribute to local economic development by: providing a source of income and employment (particularly in developing countries (Mougeot 2006)); operating as intermediate labour markets in which the economically inactive can develop vocational skills and self confidence; or act as an outlet for local producers. This research has encountered examples of all of these possibilities, and, as is discussed later, there are some notable successes in areas which have proved elusive to community regeneration programmes. However, what is arguably of greater significance is the way in which community food initiatives are striving to develop and put into practice alternative models and relationships based on “New Economics” principles. These approaches reject the sole focus on profit maximisation which characterises neo-liberal economics. Thus, many community food initiatives are constituted as social enterprises which aim to be economically self sustaining in order to fulfil wider social and environmental aims. Moreover, during site visits discussions with project staff revealed that many projects were seeking to experiment with alternative economic models such as share cropping, time banking, LETS systems and other forms of local currency.

Whilst a core social function of community food initiatives lies in addressing food poverty and access issues through increasing the availability of fresh food, its activities are also underpinned by wider community development aims, many of which are shared by the wider sustainable food movement. One of the defining features in the development of Alternative Food Networks has been the concern to develop new relationships between producers and consumers as an explicit alternative to the anonymised relationships of the mainstream food system (Harris 2008, SeyFang 2006, Kneafsey et. al 2004). However, community food initiatives frequently take this further by developing interventions which seek to build social cohesion and inclusion through

developing relationships across key social divides (e.g. through inter-generational work) and by working with groups who are particularly vulnerable to marginalization and exclusion. Examples identified within this research include initiatives which are working with 'disengaged' young people, ethnic minorities, refugees or asylum seekers, people with mental illness or substance misuse problems and ex-offenders.

Environmentally, the most obvious yardstick against which community food initiatives can be judged is in their ability to contribute to a sustainable food chain through direct production and/or third party distribution via farmers markets or box schemes. In some instances, a range of factors including the marginality and small size of the growing sites, and an orientation towards other aims mean that food production is primarily of demonstration and educational value. However, this is not intrinsically the case and there are many examples of highly productive growing activities that make a significant contribution to local food chains. An initiative in Middlesbrough which produced food on sites such as school playing fields and the side of public footpaths managed to feed 2,500 people at a Town Meal event (Collingswood 2008). Likewise, through a combination of growing activities and some purchasing in of produce, Stroud's Community Supported Agriculture produces food for 264 households all year round (Weir et. al 2008). In terms of scale the best example of productive urban agriculture is the traditional allotment. Although it is difficult to generalise about production levels due to the diversity of sites and lack of research (Cook 2006), an issue which is returned to later, existing evidence suggests that allotments can make a major contribution to household food requirements. Production figures collected during the Second World War revealed that a standard sized allotment was capable of producing up to 0.75 tonnes of vegetables per year (National Society of Allotment and Leisure Gardeners personal communication). Similarly, calculations based on organic agricultural yields suggest that an area slightly larger than a standard allotment is capable of enabling a family of four to be up to 75% self sufficient in fresh produce for much of the year (Hitchens 2009).

Experience also suggests that urban agriculture can play a critical role in food supplies at a societal scale, particularly during periods of crisis. Thus during the Second World War the United States Victory Gardening Movement was credited with producing between 30-40% of vegetables produced for domestic consumption (New Economics Foundation 2008). A contemporary example of the productive potential of urban agriculture can be found in the Cuban response to the food crisis which resulted from the combined effects of the US trade embargo and the collapse of the Soviet Union. Urban Agriculture, emerged as a spontaneous response to acute food shortages and within five years was estimated to be providing up over 30% of local food needs and 5% of total agricultural production (Wright 2009). Moreover, when in the late 1990s the Cuban government introduced per capita production targets for urban agriculture it quickly exceeded these (Wright 2009).

Although its role in the development of a sustainable local food system is community food initiatives' most obvious contribution to environmental sustainability, here too there are a wider range of identifiable benefits. For example, lessons from Urban Agriculture in the developing world point to its contribution to the general environmental sustainability of urban places through the re-use and recycling of household waste, grey water and even sewage (Mougeot 2006). Examples of this are evident also in the UK, whether in the informal 'skip raiding' of allotment, gardeners, composting contracts with local authorities, or the construction of greenhouses from used plastic drinks bottles. In addition by maintaining urban green spaces community based food production can also play a role in such diverse environmental benefits as conserving bio-diversity (Wiltshire & Burn 2008), improving air quality (Mougeot 2006), and reducing the urban heat island effect (Head 2008).

There is therefore an apparent capability within community food initiatives to develop holistic models of sustainability. However, in practice the emphasis which projects place on different strands of sustainability varies considerably between different types of project, and even from project to project. For example, whereas in Welsh food co-operatives have succeeded in increasing the availability of cheap fruit and vegetables to some of Wales's most deprived communities, they have frequently used mainstream wholesale suppliers out of practical and economic necessity. As such they have had less impact upon addressing the environmental aspects of sustainability. However, this is something which they have recognised and have sought to address nationally through the appointment of a Wales produce manager. It is also being addressed at the community level through food growing initiatives which are planning to supply their local food co-operatives. Likewise, those initiatives which have placed greater emphasis on the environmental dimensions of sustainability have been less successful in addressing food poverty issues (again, out of practical and economic necessity). However, they too are aware of these limitations and have actively sought to respond to them. For example, Stroud CSA (Weir et al 2008) has experimented with cross subsidisation systems in which members on low incomes can receive their share of vegetables at a reduced rate. Similarly whilst the main focus of Riverside Community Market Association is upon its farmers market, it has used income generated from these activities and grant funding to develop a mixed portfolio of activities. These include, the development of a community allotment and a local food co-operative (<http://www.riversidemarket.org.uk/projects.htm>).

#### **4.2: An Agent Of Transition**

There is therefore evidence of a culture of reflection, innovation and experimentation which exists at the heart of many community food initiatives and which drives their ongoing development. These are extremely valuable qualities in a context where the major barrier to the transition to a sustainable food system lies in a lack of knowledge and understanding of the fine detail of the new system's operation. As Tim Lang argued in an episode of BBC radio 4's Food Programme:

*“we don't yet know what the final answer or the final food system is going to look like... what we do need is the space for innovation, space for invention .....instead of trying to figure out what the answer is ahead of time”*  
(BBC Radio 4 2008)

Community food initiatives are increasingly being recognised as occupying an important role in this transition, in part because of their characteristic propensity to innovation and experimentation. For Example, SeyFang & Smith (2006) note the contribution which *“grassroots innovators”* can make to sustainable development generally, whilst Barling et. al (2002) describes local food initiatives as *“policy innovators”*. Ambler-Edwards et al (2009) also appear to suggest a critical role in their prediction that the new food system will need to be characterised by a partnership based approach to food and the active participation of civil society. The transitional period itself will be characterised by *“a ferment of experiments, many of them small scale and below the radar”* (Ambler Edwards et. al 2009: 37).

This innovative capacity is something which spans the spectrum of activities from conceptualising and experimenting with new forms of social and economic exchange, through to the development of new agricultural techniques. For these reasons, one of its notable features is its ability to produce food from marginal and inhospitable spaces which would be discounted as entirely unsuitable within conventional agriculture. There are examples of food production in rooftop gardens (Richards 2008), in the ‘no-man’s land’ green spaces between high rise residential buildings (Write 2008), footpath verges (Collingswood 2008) on the spoil heaps of abandoned slate mines at the Centre for Alternative Technology, in raised beds or even bags used for building materials on contaminated land (Buttery et al. 2008). In Cuba, Wright (2009) describes a situation where urban growers supported by government funded research groups were at the forefront of developing technological innovations which played a key role in resolving their food crisis. She recounts the experience of one researcher who argued that *“development was ahead of research due to the high demand for techniques, so it was participatory and spontaneous from the start. We had to give out technologies before we could even test them, and in fact the farmers tested them”* (Wright 2009: 83).

The transformative potential of community food initiatives lies not just in their capacity for innovation, but in their commitment to working in partnership with the communities they operate within. Although noting the current lack of “unequivocal proof” of their efficacy in terms of making the level of changes necessary, Jackson’s (2005) review of the factors involved in promoting sustainable consumption concludes that there is a key role for Community Development approaches:

*“The role of community in mediating and moderating individual behaviours is also clear. There are some strong suggestions that participatory community-based processes could offer effective avenues for exploring pro-environmental and pro-social behavioural change. There are even some examples of such initiatives which appear to have some success.”* (Jackson 2005:133)

This is particularly evident in the approach to training, education and work experience opportunities which initiatives frequently adopt. These activities are important not only for the practical acquisition of skills but for the opportunities they create for a cultural re-connection to the natural world. Such opportunities for reconnection are widely regarded as essential first steps in the development of a culture of responsibility and respect towards the natural environment (McIntosh 2001). They are in other words an essential factor in facilitating the behaviour changes which are essential to the transition to more sustainable lifestyles. Moreover, initiatives typically employ a distinctive approach to learning which is grounded in the Community Development principles of informal “learning by-doing” combined with a process of active reflection. For Warburton (2008) this social learning approach creates the possibility to develop a “*discursive conscientisation*” in which individuals are able to critically evaluate, reflect on and change established patterns of behaviour. Perhaps most significantly of all, community food initiatives offer opportunities for this kind of awareness raising but in a context where individuals can actually make concrete positive actions within their own locality.

There is therefore much to suggest that the approach and experience of community food initiatives can potentially play key roles in the development of sustainable food systems and more sustainable ways of living generally. In particular there is a demonstrable ability to develop projects which are striving to address sustainability issues in a holistic and multi-dimensional fashion. Whilst they are not always successful in this, there is a characteristic culture of reflection, innovation and experimentation which means that they are continually pushing to develop their activities towards this goal. It is not just the case that this sector might have the capacity to provide at least some of the answers as to how a sustainable food system might look, but that its unique approach suggests that it has considerable potential as an actual agent of transition.

#### **4.3: Community Food Initiatives in Wales**

Whilst there are no figures for the total number of community food initiatives in Wales there is evidence from a range of sources to suggest that they have undergone a rapid increase in recent years. For example, the Rural Regeneration Unit reports that there are now 120 food co-operatives in Wales from a base of zero in 2004. Likewise, in just over a year of operation the Federation of City Farms and Community Gardens (FCFCG) “Growing Together” programme has risen from 8 to 44 registered members and estimates that there are over 300 community growing initiatives currently operating in Wales as a whole. In addition there is a well recognised, if as yet unquantified, increase in the take up of allotments and in many areas, pressure for the creation of new sites.

Within this trend of overall increase there also appears to be a qualitative shift in the emphasis of many projects. For example, representatives from the FCFCG reported movement away from the traditional educational and recreational role in favour of an increased emphasis on sustainable food production. There is also a distinct trend of new initiatives being established

by Community Development organisations with a long standing tradition of working in some of the most deprived communities in Wales. Two prime examples are the Bryncynon Strategy in the Cynon Valley, and Creation Development Trust at the head of the Garw Valley.

In Bryncynon, a “Green Valley” initiative has been established on a five acre site of formerly derelict land. The initiative is seeking to blend significant levels of local food production based on organic and permaculture principles with a range of education, training and work placement opportunities.

(<http://www.bryncynonstrategy.org.uk>). In Blaengarw, a community orchard was planted as part of the reclamation of a former colliery site and the trust is now developing a ‘real food’ box scheme through which produce from local farmers will be sold within the community (<http://www.creation.me.uk/#>).

These are just two examples of a distinct and, in South Wales at least, relatively new trend. Of the 12 initiatives visited in South Wales during the course of this research 4 were still in the initial start up phase and only 3 were over five years old. Examples of well established initiatives are therefore few and far between, and as such it is not yet possible to truly assess their long term impact or viability.

However, despite the initiatives facing multiple barriers which are discussed in subsequent sections of this paper, the early signs are promising. In particular, the involvement of community development organisations appears to offer the potential for a model of community based sustainable food production which is accessible to low income households and which makes an active contribution to wider anti poverty strategies. Despite the fact that in many instances projects are still in their very early stages of development there is tentative evidence to suggest a tangible impact upon local regeneration. As has occurred elsewhere in the UK, community food initiatives in Wales have demonstrated a capacity to build mutually beneficial linkages with other strands of regeneration and social inclusion activities. Initiatives have also developed mutually supportive links with existing community infrastructure. In particular, there appears to be an emerging pattern of partnerships developing between new types of community food initiatives operated by Community Development organisations and the existing infrastructure of allotment sites. The development of these types of partnerships could well be critical to the future fortunes and development of community food initiatives in Wales. The allotment movement has an established infrastructure of sites with relatively strong legal protection together with a reservoir of horticultural skills and knowledge which is of obvious potential value to emerging initiatives. For allotments the involvement of statutory and/or third sector partners can help contribute to the longer term viability of sites through their institutional capacity, knowledge of policy structures/funding streams, and even as a source of new gardeners with the requisite skills, interest and commitment.

There is also tentative evidence to suggest that in creating these linkages community food initiatives have demonstrated a capacity to do things which regeneration programmes have struggled to do. In Wales, Communities First is the main state run regeneration programme and is tasked with addressing the poverty and social exclusion experienced in its most deprived communities. One of the key aims of Communities First has been to move

away from the traditional grant assistance approach and encourage greater local influence over the ways in which mainstream services are delivered in their area, a process which is described as “programme bending”. The rationale is twofold. That it will improve local services by ensuring they are responsive to local needs and that it will also ensure the longer term financial sustainability of community initiatives by redirecting mainstream statutory funding at the community level. To date, this has been a goal which the Communities First programme has consistently failed to fulfil (Adamson & Bromiley 2008). However, there is evidence to suggest from Wales and further afield that community food initiatives can play a key role in developing programme bending activities. For example, Bryncynon’s Green Valley project has developed a partnership with the Pathways to Work programme. Across the UK there are examples of projects establishing service level agreements with local authority mental health teams in Cumbria (<http://www.growingwell.co.uk/>), of a Scottish food co-operative which has started to supply local schools with prepared fruit that meets the nutritional requirements prescribed by the Scottish parliament (<http://www.welfehd.co.uk/>), and even of GPs offering allotments on prescription via healthy living centres (Allotments Regeneration Initiative 2006).

There is also evidence of sustainable food providing a focus for the development of new types of relationship between community organisations and the private sector. When launching the new Farming, Food and Countryside strategy, the WAG Rural Affairs minister Elin Jones described an example of this in Pentangi Uchaf:

*“an inspirational family farm that has converted to organic livestock farming, diversified into water bottling and has recently taken over the local pub, where they sell their farm produce. This diversification has already allowed two of their sons to return from college to work in the area. They have also leased the running of the water bottling plant to a local charity, thereby re-investing in their local community.”* (Jones 2009: 1)

In some instances the work of community based organisations has played a key role in enabling small farms within the private sector to make the transition to more sustainable forms of production. For example, an organic farmer interviewed during this research described the Riverside farmers market as being critical to their ability to make the conversion to organic production viable “[Its] been absolutely important to the business ..... it spread the word and built up a loyal customer base”. In other instances the efforts of local farmers to generate local outlets has contributed to some of the key aims of area regeneration strategies. For example, in Treharris, a co-operative of five local hill farmers set up a butchers shop on the local high street (<http://www.cigmynyddcymru.co.uk/>), an initiative which has created two skilled jobs in an area of high unemployment and helped maintain the local high street. Whilst community organisations were not involved in the establishment of this enterprise it has received support from the local food co-operative which included vouchers for the shop in their Christmas food hamper. According to one of the shop’s founders this type of support can be invaluable: *“it brings customers into the shop ...it’s as good as any financial help with no strings, that’s what we really need”*. There is therefore

demonstrable evidence of the potential for development of reciprocal relationships between community organisations and private sector agriculture in which sustainable food helps contribute to sustainable local economic development and a sustainable pattern of community regeneration.

This potential to forge these relationships is particularly significant in South East Wales which is arguably the most urbanised and industrialised area of Wales. As is discussed further in section 5.2, this can lead to these urban characteristics being regarded as the definitive feature of the area to the exclusion of its rural qualities, such as the fact that it also contains some of the best agricultural land in Wales (see section 5.5). This tendency reflects the way in which rural and urban are often viewed in terms of a simplistic dichotomy. Nowhere are the limitations of this more apparent than in some of the more isolated communities of the South Wales Valleys which in their current post industrial state display geographical positioning, socio-economic profiles and problems which are more characteristic of rural communities. Indeed, a number of these communities now find themselves eligible for funding from the Rural Development Plan (see section 5.3). The limitations of the rural urban dichotomy are equally apparent in predictions of what a future low carbon food system might look like. Such predictions frequently suggest a blurring of boundaries as food production increasingly moves into the urban place and its immediate periphery, and an increased proportion of the urban labour force is occupied in agricultural work. Perhaps most importantly this simplistic distinction also reinforces a sense not just of difference but of division between rural and urban communities. A number of interviewees attested to the existence of a deep rooted division between rural and urban communities in the area, to an extent which is perhaps surprising given the physical proximity of these communities to one another in areas like the South Wales Valleys. Such divisions not only obscure the important interdependencies which already exist between rural farming communities and urban communities but also act as a barrier to the types of relationships which are fundamental to more localised food systems.

Bridging the rural urban divide is therefore not only important for reasons of local social cohesion but for the development of a more sustainable local food system and in turn for developing the future resilience of communities in South East Wales. Examples from the research suggest that community based food initiatives are already playing a significant role in brokering relationships across this divide through such activities as farmers markets and local box schemes. However, discussions occurring during the interviews suggest a wide range of further and as yet untapped opportunities which could arise through collaborations between farmers and community food initiatives. For example, suggestions include: the sharing of knowledge, skills and services; sharing organic certification for initiatives which are too small for it to be economically viable to apply for certification in their own right; and even the possibility of developing distinctive brands which emphasise the particular social, economic and environmental benefits accruing from food produced through such collaborations.

It can clearly be seen therefore, that despite many community food initiatives in Wales being in their infancy the early experience is extremely promising. The evidence of new project start ups suggests a pattern of increasing interest, whilst the experimental nature and diversity of the projects themselves suggests that they possess the innovation and dynamism which characterises initiatives elsewhere. Given the tensions between sustainable food and poverty discussed above, it is particularly significant that in South Wales many of these new initiatives are occurring in areas with extremely high levels of deprivation. Indeed, there is a distinct trend of new sustainable food production and distribution initiatives being established by community organisations and partnerships whose primary remit lies in the regeneration of communities experiencing endemic poverty and social exclusion. This engagement with sustainable food can be seen as emerging out of a growing pattern of community organisations engaging with sustainable development issues generally. Moreover, there is evidence to suggest that in practice this engagement with sustainable development and sustainable food in particular has positive impacts upon key areas of community regeneration activity (e.g. in developing education and training or health and well being activities). Perhaps most significantly, there is evidence that it creates opportunities to address those areas where regeneration programmes have often struggled to make a significant impact (e.g. creating sustainable jobs, local economic development and 'programme bending'). In the longer term the activities of community food initiatives could well be of critical importance in empowering communities to develop a sense of their own food sovereignty (see section 5.5), something which is likely to be of central to their future resilience.

## **5: Key Factors Affecting the Development of Community Food Initiatives in Wales**

The preceding section of this paper examined the promise of community food initiatives in terms of their contribution to more sustainable food systems and sustainable development generally. In particular it recounted some of the initial benefits which can be identified from the early experiences of and future potential for, a rapidly increasing range of initiatives in Wales. This section of the paper explores some of the critical issues which are affecting the development of these initiatives. Ultimately, it explores the dimensions and dynamics of factors which are currently operating as barriers to the development of initiatives in Wales generally, and in South East Wales in particular. However, it should be noted that while many of the factors identified here are currently operating as barriers, they are also factors which could, under different circumstances, play a key role in enabling the development of community food initiatives in South East Wales.

### **5.1: Economics**

Earlier sections of this report have described how the major promise of community food initiatives resides in their apparent ability to contribute to a more sustainable food system through the development of holistic models that are simultaneously able to address the environmental, social and economic dimensions of sustainability. Environmentally, food is produced using organically orientated (if not always certificated) production methods, is

produced close to the point of consumption and is based on techniques which often make use of waste materials. Socially, it is credited with providing fresh, nutritious and healthy food in ways that are accessible to low income populations. Economically, it can directly create business and job opportunities, intermediate labour market activities, and, through contributing to positive economic multiplier effects, help strengthen local economies. All of these attributes are readily verifiable from the actual experience of Urban Agriculture in the developing world (Mougeot 2006) and in particular, in Cuba (Wright 2009).

Many of these attributes are equally apparent from the experience of Urban Agriculture in developing countries. However, one of the major differences here is that its defining activity of food production is, in most instances, uneconomic (Cook 2006). That is to say that it is currently unable to compete on an equal economic footing with food produced via the conventional food system. These economic dynamics appear to have been an important influence in shaping the direction in which Urban Agriculture has developed in the West. Thus whilst, food production is often central to the rationale and sense of their own project's identity, it typically plays a minor role and often loss making role in financial sustainability strategies. A good example of this is the Growing Communities project in North London which has established itself as an entirely self-funding social enterprise with income streams based on food production, hosting farmers markets and co-ordinating an organic vegetable box scheme. Despite focussing its growing activities on the intensive year round production of high value and high yielding organic salad vegetables, food production still only accounted for £7000 of an annual turnover of £290,000 in the 2007-08 financial year, and was actually a loss making component of its operation (Brown 2008). These circumstances are not unique to urban agriculture in the UK but are equally apparent in the US experience. For example, none of the urban agriculture projects visited by (Buttery et al 2008) in the United States, nor any of those reviewed by (Kaufman & Bailkey 2000) funded themselves through revenue from food production alone.

The research did however encounter two models which appear to be exceptions to the rule. The first of these was the traditional allotment which is able to concentrate its activities towards food production by operating outside of the market economy altogether. Typically, produce is not sold but is consumed directly by the individual gardeners and their friends and family, whilst surplus produce tends to be given away or exchanged with other gardeners. Indeed, as a leading figure within the allotments argued during an interview for this research, this ethos of mutualism and reciprocity is integral to the normative cultural values of allotment gardening: *"it's about a community within a community it's about giving.....when we've got the crops we're prepared to give the crops"*. Labour for the cultivation of the plots and/or day to day management of the site tends to be conducted on an unpaid voluntary basis by individual gardeners and the site committee. However, the mandatory obligation placed on local authorities to provide allotments means that their operation is underpinned by core public sector funding which covers such key functions such as purchase/rental of land and, to varying degrees in

different sites and local authorities, maintenance of sites and provision of amenities. This is a situation which is unique within UK community food initiatives. There are also notable, but unusual, examples of Community Supported Agriculture (CSA) initiatives which are primarily geared around sustainable food production and are financially self sustaining. For example, Stroud CSA has developed an economically self sustaining initiative whose finances are based on food production and which is capable both providing full time paid employment for a number of growers whilst supplying its members with organic produce at a price equivalent to or lower than local supermarket organic price (Weir et. al. undated). Its ability to do this appears to be based on several factors: the commitment of voluntary labour from its management group (and to a lesser extent its membership); the sizeable amount of land under cultivation in relation to other community based food production initiatives; some, albeit small, degree of mechanisation; and by pricing structures which are competitive with comparable produce. However achieving economic sustainability in this way inevitably places major limitations on its ability to address food poverty issues.

As is discussed in earlier sections the multiple goals and diversified activities of community food initiatives are an integral component of their rationale. However, given that food production alone is in most instances incapable of supporting running costs, many projects have sought to develop income streams from other more lucrative strands of activity. These income streams were predominantly derived from agreements with local authorities and other statutory agencies to deliver services which included education and training activities, therapeutic support programmes, composting household waste and grass cutting (the 'programme bending' described earlier). Whilst, contributing to running costs this generation of income streams could inevitably create its own tensions around how projects seek to balance different goals and their often competing demands. Moreover, the evidence suggests that diversification is not a panacea to the economic barriers which projects face as it frequently involves extra staffing costs and in some instances can mean that projects are simply taking another loss making or break even activity. Consequently, even with the establishment of diversified income streams over and above food many initiatives continue to be at least partially dependent on continued grant funding. This is again something which appears to be true of initiatives in both the US and the UK, and as discussed below, is something which needs to be recognised by policy.

The economic conditions within which initiatives operate has therefore had fundamental implications for their development. In particular the economics of food production creates a fundamental tension between a project's ability to produce meaningful quantities of sustainable food and its ability to simultaneously address social issues. These economic conditions also mean that many projects operate on an extremely precarious financial footing, and, as even with diversification into other activities, it's unlikely that most initiatives are capable of surviving as entirely self funding operations. The viability of community food initiatives in Wales is therefore dependent on the development of effective policy support and appropriate funding regimes and relationships. These issues are explored in subsequent sections of this report.

However before moving onto these issues, it also needs to be noted that the economic viability of community food Initiatives needs to be evaluated against a much broader set of economic criteria than its ability to fund itself at this moment in time. Whilst it's argued that the true costs of the industrial food system are hidden by its ability to externalise costs, community food initiatives face the opposite problem in that their full benefits are not accounted for as they too are frequently externalised. In particular, as was noted by one of the interviewees, there is an economic case to be made on the basis of the Stern review's (Stern 2006) central argument that short term expenditure on mitigation measures are economically justified by the longer term expenditure savings on adaptation measures. Finally, it should also be noted that these economic conditions pertain to the current circumstances of a high input and high carbon food system and that the economics of food production within a low carbon food system will be transformed.

## **5.2: Policy**

The development of an appropriate policy framework is critical to the future of community food initiatives in Wales. To the extent that the Welsh Assembly Government (WAG) has sought to position itself as a world leader in delivering on sustainable development, there appears to be grounds for optimism. It is one of only a handful of countries in the world which has made a statutory commitment to promoting sustainable development in all of its activities (Williams & Thomas 2004) and is the only country within the UK to have not only calculated its ecological footprint, but to have committed itself to stabilising its footprint by 2020 and sought to enact the policies to achieve this goal (Dawkins et al 2008). Ostensibly then, there is an almost uniquely favourable policy climate for nurturing the development of the initiatives which are springing up at the community level across Wales.

However, there is increasing recognition of an apparent inability to move beyond the aspirational rhetoric of successive policy documents to the successful incorporation of sustainable development into actual actions. In this respect the official evaluation of the impact of the policies enacted through successive sustainable development action plans since 2000 is scathing in its assessment:

*“While there is enthusiasm and willingness among WAG’s partners to progress this agenda, on the evidence of this research, progress between 2003 and 2008 on addressing the weaknesses identified by CAG and others in previous reviews has been slow. In many cases, the SD Scheme has become weaker in its influence and interpretation by key delivery agents. Much of this is down to the weak and inconsistent messaging, tokenism, lack of co-ordination, limited understanding, weaknesses in corporate working and bounded horizons from WAG.”*

(Flynn et al 2008: 6)

In many respects the failings evident in wider sustainable development policy framework are exemplified in the development of policy towards sustainable food generally and community food initiatives in particular.

At worst, key policy documents completely overlook the role of food systems in sustainable development. The most obvious manifestation of this is the consultation paper on the future Green Jobs for Wales (WAG 2008c) which fails to even consider the agricultural or food sectors as a source of green employment growth. This omission is startling given the degree of consensus which exists amongst food policy analysts about the need for an expanded agricultural labour force in more sustainable food systems (Ambler Edwards et al. 2009, Maynard & Hewlett 2008) and the actual experience in Cuba during the 1990s where the rapid development of a low carbon food system was credited with creating 160,000 new jobs in urban agriculture alone (Lopez 2000 cited in Wright 2009: 85). Whilst the Green Jobs for Wales document is part of a consultation process which will act as the basis for the development of future policy, the Wales Spatial Plan is effectively a blueprint for planning policy in Wales and constitutes an important determinant in the allocation of WAG resources and funds, and which purports to have placed sustainable development at the core of its strategy. This is an aspiration which is clearly reflected in the five core themes which each of the six areas of Wales was required to develop its strategy around:

- building sustainable communities,
- promoting a sustainable economy,
- valuing our environment,
- achieving sustainable accessibility,
- respecting distinctiveness. (WAG 2008 a)

Given its relevance to each of these themes The Wales Spatial Plan clearly represented a major opportunity to develop a framework which could have played a major role in promoting the development of a more sustainable food system in South East Wales. All the more so because the role of planning policies and processes has been identified as being of critical importance in either enabling or stifling the development of community food initiatives (Garret 2008) and more sustainable ways of living generally (<http://www.lammas.org.uk/>). In other more rural areas of Wales the spatial plans explicitly include aspirations to link together issues of agriculture, local food, regeneration and sustainability. However, the “Capital Networks” (i.e. South East Wales) area strategy contains no discussion of these issues. Indeed, there is not a single reference to either agriculture or food in the entire strategy. Whilst this oversight is perhaps understandable given the urban character of much of the area it is less understandable when it is considered that this area contains one of only three pockets of agricultural land in Wales which is not classified as a less favoured area (see figure 4).

However, this is not to say that the issue of sustainable food systems has been entirely overlooked in Welsh sustainable development policy. There have been some areas of notable progress. In recent years there has been increasing interest amongst both academics and policy makers in the role that the public sector procurement budget might play in promoting sustainable development. The introduction of UK wide minimum environmental standards into procurement practices has been widely welcomed, as an example of the state using its purchasing power to develop new markets in sustainable products (Morgan 2008). However, this development is also seen only as a starting point in the development of a purchasing strategy which seeks to

maximise the added value of public expenditure through imposing a requirement on suppliers to demonstrate the environmental and social benefits derived from their products (Morgan 2008, Blair & Evans 2004). Such a development could potentially transform the economics of community food initiatives and act as a major incentive for the development of the sorts of partnerships between community organisations and farmers that are already tentatively starting to emerge. The development of a public sector procurement strategy based on meaningful triple bottom line criteria could therefore be a major policy instrument in the development of more sustainable and resilient local food systems. Moreover, by enabling the state to “lead by example” (Blair and Evans 2004) public sector procurement could potentially help to instigate wider behaviour change, through challenging the perception that others are not acting, or that their actions lack sincerity which are integral to the psychology of denial which exists around climate change (Marshall 2006).

In Wales too, public sector procurement strategies are seen as one of the principal ways in which the state can encourage sustainable development. Key policy documents such as “One Wales” which sets out the policy priorities for the Plaid Cymru and Labour coalition government (WAG 2007), the 2004-2007 SD Action Plan (WAG 2004), and the “One Wales, One Planet” consultation on the forthcoming sustainable development action plan (WAG 2008b) have all identified procurement as a key vehicle for delivering sustainable development goals. Moreover, the recent introduction of a Local Sourcing Action Plan (WAG 2009) provides some indication that policy is beginning move from an initial exploratory phase examining feasibility and technical logistics into an implementation phase. For the first time there is a national policy document which sets out clear objectives, actions, and milestones towards developing a public procurement process which will encourage the environmental, social and economic dimensions of sustainable development . An aspect of the plan which is of particular significance for this research is that it explicitly identifies a range of objectives and associated actions to support community based activities (see table 2). Additionally, the plan includes a statement in support of allotments together with a commitment to develop “*proposals for action*” through discussion with the voluntary sector and WLGA.

**Table 2: Community Oriented Objectives and Actions in The Local Sourcing Action Plan**

Objective	Action
Support the development of food hubs	Encourage applications for grant support for potential Food Hubs and facilitate the development of projects for funding under the Rural Development Plan.
Encourage producers to diversify to meet local demand and respond to consumer trends, such as demands for healthy foods.	Support community initiatives to develop products representative of their areas.

Develop local food and community food projects.	Expansion of the Community Cooperative Food programme. Programme to support local food groups.
Promote the benefits of growing, cooking and eating of local food to children and young people.	Support existing school programmes to encourage the growing of fruit and vegetables and healthy cooking.  Develop new programmes for the youth and Further Education sectors.
Encourage people to grow their own food.	Disseminate best practice.

Source: WAG (2009)

Clearly then, public procurement procedures represent an area of tangible and ongoing progress in the development of policy frameworks which can provide support to the development of sustainable food systems. Moreover, these are policy developments which see a clear role for community based initiatives. Whilst the plan includes many laudable aims and objectives there is a distinct lack of detail in the strategies and means by which they will be achieved. For example, the objective of encouraging more people to grow their own food is to be achieved through disseminating best practice. There is no elaboration on exactly which areas of best practice are considered to be important, what constitutes best practice or even why best practice might be considered more important than something more practical such as releasing land. Likewise, the plan expresses an intention to encourage the development of local food and community food projects in Communities First areas but nothing on how it will resource this or seek to ensure their longer term continuity. Perhaps the most notable omission in this respect is the fact that all of the community based objectives are grouped within Strategic Aim 1 which is “to increase the level of local sourcing of food and drink in Wales”. There is apparently no role for community food initiatives in strategic Aim 2 which seeks “to increase supply of local food and drink to public sector organisations”. Yet it is precisely this area of policy which could provide the sort of stimulus which would not only help ensure the financial viability of initiatives and consolidate their achievements in areas such as job creation, local economic development and programme bending. In doing so this area of policy could act to encourage the sorts of reciprocal relationships between community organisations and local farmers which could be critical in the transition to a sustainable food system.

When current procurement patterns are broken down by foodstuff (see table 3) it can be seen that procurement is currently dominated by meat and dairy foodstuffs whose localisation brings the least gains in terms of environmental sustainability and health. Less than one third of fruit and vegetables supplied

to the public sector are produced within Wales. This is scarcely the fault of the plan or existing procurement practices but instead reflects the dominance of the meat and dairy production within Welsh Agriculture as a result of the regional specialisation described in section 3.1. However, a key aim of developing procurement policy in this way is that it can encourage suppliers to develop sustainable products by creating new markets for these products (Morgan 2008). Yet there is no real mention of the low levels of fruit and vegetables that are being sourced, nor discussion of how procurement policy might be used to encourage more local fruit and vegetable production.

**Table 3: Proportion of Produce Sourced from Wales by The Welsh Public Sector**

<b>Food Stuff</b>	<b>Proportion produced in Wales (%)</b>
Lamb and Beef	68
Horticultural	31
Milk	66
Added Value Dairy	31

Source: Wag 2009

The lack of an appropriate policy framework to support the development of community food initiatives is clearly an important barrier to their future development. In many respects this reflects wider policy failures in both sustainable development and support for the development of sustainable food systems. In part it is a problem of omission. The Spatial Plan for South East Wales and the Green Jobs for Wales consultation constitute key policy areas where issues of food and sustainability, let alone community food initiatives, are not even considered. However, this appears to be a problem of oversight rather than intent. In key policy documents such as the consultation document for the next Sustainable Development Action Plan significant attention is given to the issues of food and sustainability and the role which community can play in these areas. In particular there has been significant progress in the development of public procurement policies which are actively seeking to structure public expenditure towards sustainability goals. Moreover, issues of food and sustainability have been at the centre of these developments and a holistic notion of sustainability has been adopted which incorporates social and economic considerations in addition to environmental concerns. This is reflected in the Local Sourcing Action Plan's concern to address food poverty issues through actions such as a renewed commitment to food co-operatives and broadening the range of community level organisations to include Communities First Partnerships. Notably both the Local Sourcing Action Plan and the consultation on the next Sustainable Development Action Plan have identified a significant role for Communities First partnerships.

However, whilst there are examples of progress the impact of policy is severely limited by the glacial pace of development and an incremental approach which is typically lacking ambition. For example, whilst the Local Sourcing Action Plan represents the culmination of policy development in this area to date, it fails to even consider the role which community initiatives could play in the supply side of the public sector procurement process. Moreover, at both national and local levels of government there remains a

significant gap between the aspirations and intentions of policy and its actual outcomes on the ground. Garret (2008) cites an example of this when recounting a meeting with representatives from a local authority which had developed a local sourcing strategy but which continued to supply internationally sourced bottled water as refreshments to its meetings. Underlying the disparity between the aspirations and outcomes of policy is the fact that it is typically unfunded and permissive, encouraging action rather than delineating a statutory duty to act. Historically, although often preceded by a period of permissive policy development, it is the development of mandatory policy which has been the real trigger for change. This can be seen in such disparate areas of policy as the development of an effective public sanitation system at the end of the Nineteenth Century or increasing levels of refuse recycling at the beginning of the Twenty First. Of course, as is demonstrated by the levels of unmet demand for allotments despite the statutory duty of provision which is incumbent upon local authorities, the effectiveness of mandatory policy is also dependent upon the extent to which it is enforced, and the provision of appropriate funding and support.

### **5.3: Funding and Support**

Several of the projects consulted during the research identified funding as a major inhibiting factor to their operation and ongoing development. In at least one instance the inability to access relatively small amounts of capital funding has prevented a long standing, successful and innovative social enterprise from developing a food production strand to its activities. However, this organisation's situation was relatively unusual and the research also encountered a number of projects which have been able to access significant sums of funding to cover their initial start up period (mainly from the Big Lottery Fund and the Rural Development Programme). This funding has been used to cover both staff costs and essential capital expenditure on items such as land, equipment and buildings. Whilst, other projects had not accessed such large pots of funding they demonstrated an ability to draw together funding and support in kind from a diverse range of statutory, third sector and private sector bodies. These sources mainly offered help with capital costs rather than revenue funding. Their existence coupled with the relatively low requirements for equipment (in terms of both quantity and cost) meant that this was rarely identified as a barrier by the projects. However, many of the smaller projects reported being unable to access funding to cover staffing costs. For these projects this was felt to be a major barrier to their development as they simply didn't have the staffing capability to think about developing other activities.

As has been noted already, some projects were able to access significant amounts of revenue funding from the Big Lottery Fund's People and Places programme and from the Rural Development Plan, which is jointly funded by the European Union and WAG. These funding sources have been critical in facilitating the development of major new initiatives such as Bryncynon's Green Valley project and Blaengarw's real food box scheme. Both programmes are potentially major sources of funding for the development of community food initiatives in Wales. However, whilst both have remits which could include these initiatives their primary focus lies in meeting other

objectives. The RDP is obviously targeted on rural areas and as such the urban industrial character of much of the study area means that it is ineligible for RDP funding. This includes all of Rhondda Cynon Taff, Blaenau Gwent, Newport, and Cardiff. Whilst some wards in Merthyr, Bridgend, and Neath Port Talbot are eligible for RDP funding this is restricted to a few isolated wards which display rural characteristics (e.g. relative isolation, low population densities). Whilst there are therefore some isolated examples of projects accessing RDP funds, this funding source is not going to be major force for the development of community food initiatives in South East Wales. Likewise, whilst several projects have accessed funding from the Big Lottery's People and Places Programme, this funding stream is primarily geared towards social and community based objectives. There are certainly no funding sources in Wales which equate with the Big Lottery Fund's £50 million Local Food programme which operates in England. This programme provides a tiered system of grants ranging from £2000-500,000 to non-profit making organisations seeking to establish or support initiatives which would contribute to the development of localised food chains (<http://www.localfoodgrants.org/>). It has proved so popular amongst community organisations that within 14 months of opening it has had to announce the suspension of new first stage applications due to it being fully subscribed. The absence of this type of funding in Wales clearly places Welsh initiatives at a disadvantage to their English counterparts and would seem likely to mean that the sector remains relatively under developed in comparison to England. However, the existence of a targeted funding stream is in itself unlikely to be a panacea for the long term development of community food initiatives in Wales.

A perennial issue for funding community food initiatives and indeed, community initiatives generally, is that funding streams typically cover the costs for initial start up periods only (typically around 3 years). At the end of this start up period projects have to support themselves either through accessing further grant funding and/or through developing other income streams. The problems this generates are twofold. That, whilst a new funding stream such as Local Food can generate a flush of new initiatives there is a possibility that many will close once the initial start up funding finishes, and that it diverts project attention away from fulfilling the objectives they were set up to fulfil. Staff time can become dominated by the process of securing continuation funding, whilst the projects themselves are forced to re-invent themselves not on the basis of a revised assessment of need, but on the basis of the new criteria outlined by the next round of funding (McGlone et. al. 1999). There is therefore a well recognised need for "for sustained rather than start up funding" (Dowler 2002:711), but this is a need which funding bodies have consistently failed to address. This is of course one of the major spurs to developing social enterprise activities for community initiatives but this too generates its own challenges in terms of not only identifying and developing viable opportunities, but in ensuring that they can be balanced with maintaining core social and/or environmental goals.

The issue of funding can therefore be seen as a significant factor holding back the development of community food initiatives in South Wales. It is not just that Welsh initiatives do not have access to a funding stream specifically

focused on this activity, as is the case in England. The current economics are such that, whilst most projects are likely to be able to develop income streams through social enterprise activities, they are unlikely to be able to develop as entirely self funding social enterprises. Consequently, there is a need to develop longer term funding sources which will enable projects to develop in accordance with their objectives rather than along routes determined by conditions of economic necessity. This underscores the importance of the development of an appropriate policy framework discussed in the preceding section of this report, but also underscores the importance of projects being able to demonstrate their full worth.

#### **5.4: The Knowledge Deficit**

A key backdrop to this problem is that, once initial start up funding has ended, the future of many initiatives will be determined by their ability to generate enough revenue to be self funding and/or draw in subsequent grant funding. In order to be able to do this they need to be able to demonstrate their impact. However, if a major strength of community food initiatives is their ability to address in a mutually complementary manner multiple environmental, social and economic issues, a major weakness lies in its current inability to evidence these strengths. Consequently, its proponents face a situation where they can frequently only *assert* rather than *demonstrate* the benefits of this model. This is not to say that there isn't a considerable and growing evidence base. At an international level there has in recent years been such a "*proliferation of data and research*" on urban agriculture that it now justifies being described as a field in its own right (Redwood 2009:232). This proliferation has occurred not just within academic research but in the emergence of a considerable body of 'grey' literature linked to the rapid take off of urban agriculture initiatives in the developing world (Mougeot 2005). However, whilst this literature reveals many shared issues, concerns and transferable lessons, it is also specific to the particular combination of social, economic and political conditions which prevail in developing countries. Whilst it may share broadly similar goals, the conditions in which initiatives operate in developed countries are fundamentally different to those of the developing world. That said, the evidence base in developing countries is likely to grow in parallel with the rapid growth of initiatives themselves. In particular, as the outcomes of the projects funded by the Big Lottery's Local Food funding begin to become apparent there is likely to be a surge in "grey literature" as the flurry of new projects produce their evaluations. For now though, there remain fundamental gaps in the knowledge base for community food initiatives in the UK in general and in Wales in particular.

This is perhaps best exemplified with reference to the allotments movement which represents the oldest and most numerous manifestation of urban agriculture in the UK. Moreover, it is the only form of urban agriculture for which there is a statutory duty of provision. For these reasons it might be expected that there is a considerable body of official data relating to allotments. In reality there is an absence of reliable data on such basic information as the number of sites, individual plots, take up rates, levels of turnover, and the size of waiting lists. In large part this is an outcome of inadequate statutory monitoring systems, something which can in turn be

interpreted as reflecting the low priority attached to allotments. For example, the latest official attempt at estimating the number of allotments in England (Crouch 2006) was not published by the commissioning body as a low response rate from local authorities was felt to have rendered the results unreliable. In Wales, by contrast there is not even an unreliable estimate of allotment numbers as no recent audit of sites has been undertaken.

Without even these most basic pieces of knowledge it becomes almost impossible to build a reliable and robust picture of the key trends which are emerging within the allotments movement. Anecdotally and experientially we hear about spiralling levels of demand and take up of allotment of gardens: of changing demographics and socio-economic characteristics of gardeners; of a new generation of environmentally conscious gardeners; of new relationships between allotment societies and local community organisations; or of allotments being used as sites for innovative educational, therapeutic and rehabilitative interventions. Whilst it is possible to cite specific examples of all these developments it is impossible to even begin the process of quantifying the extent of these trends or their significance to the allotment movement if we can't even answer the simple question of how many allotment sites exist in Wales.

Where information has been collected it has typically been by civil society organisations, individual or small scale teams of academic researchers and even disgruntled individuals. A notable example of the latter being Margaret Campbell who conducted her own audit of allotment sites in England, and by using the Freedom of Information Act generated a 99% response rate from the English councils (BBC Radio 4 2009). Whilst unlikely to be exhaustive owing to the complexity and diversity of management/ownership relationships the resulting body of raw data provides a comprehensive insight into the official waiting lists for allotments in England (this data can be downloaded from <http://www.whatdotheyknow.com/search/allotments/bodies>). Similarly, the Scottish Allotments and Garden Society (SAGS) have conducted a comprehensive audit of allotment sites in Scotland. This research not only mapped allotment sites and individual plots, and also explored recent trends such as patterns of demand, linkages to other community projects and the problems afflicting allotment sites. Significantly one of their key findings was that "there has been little systematic monitoring of provision" (SAGS 2007: 1). There is also a small body of academic literature which explores the social, cultural environmental and economic benefits of allotment gardens (e.g. Perez-Vasquez et.al (2005), Crouch 2006). However, much of this is small scale research specific to particular areas of the country and/or particular moments in time. One of the few things that can be stated with reasonable confidence is that the number and diversity of allotment gardens and gardeners makes it very difficult to make meaningful generalisations (Perez-Vasquez et.al (2005), Crouch (2006), SAGS (2006)). There is therefore a need for research which is both geographically and temporally specific. It cannot simply be assumed that trends occurring within English allotments are being replicated in Wales, or even that trends in allotment gardening in Cardiff are replicated in the South Wales Valleys. Equally, the functional role of allotments has undergone significant change throughout

their history, from their early role as integral part of the financial survival of many working class households, through to their contribution towards national food security during the world wars, to a leisure and recreational focus in the post war era of cheap food. In the current context of a looming food crisis and heightened awareness of food safety and sustainability issues it seems likely that their role is again changing. As the role changes so does the information requirements. Thus, whereas during World War II the most pressing question may well have been how much food can be realistically produced from allotments, today it might well be how sustainably can the food be produced or what social or cultural role might they play in the transition to more sustainable ways of living.

It can be seen then that there exists a substantial evidence deficit around the size and nature of even the most well established manifestation of a Community Food Initiative in the UK. It is little surprise then that this deficit extends not only to other more recent manifestations of community food initiatives but to more complex questions about its impacts, effects and outcomes. The extent of the knowledge deficit is such that it is not something which can be met by a strategically targeted research project or even a series of such projects. Instead it requires the development of a new programme of research and new inter-disciplinary methodologies. Its neither possible nor desirable for a single study such as this to seek to define the scope of such a programme. This is something which can only be achieved through an active and ongoing dialogue between the sector's different participants.

However, the findings from this and other research (e.g. Garrett 2008, Cook 2006) suggest that this programme should pay particular attention to the following areas of concern:

- Developing an empirical knowledge base about the size, dimensions of, productive potential, and trends within the community food initiatives. This should include data which both quantifies outcomes (e.g. production yields, contribution to household and/or community nutrition) and develops a qualitative understanding around issues such as its contribution to consciousness raising and behaviour change.
- The development and deployment of methodological tools and frameworks for its comprehensive evaluation. In particular attention should be focused on developing approaches which are capable of capturing its externalised effects.
- Developing new inter-disciplinary collaborations which are capable of addressing its environmental, social and economic impacts both in isolation and collectively.
- Developing multi-sectoral collaborations. For example, Garret (2008) argues that the active collaboration of grassroots practitioners, policy makers and academics is essential to progressing the cause of urban agriculture in South Wales. Such collaborations have the obvious benefit of being able to synthesise different areas of knowledge and expertise and feed this back into practice. In other words what is being advocated is a participatory and action research approach in which the research process not only documents the experience of community

food initiatives but is an integral component of its ongoing development.

- Developing and sharing knowledge which is directly transferable to the practice of community food initiatives. This is likely to be a diverse body of information which includes information about such issues as success and failure factors in establishing a food-based social enterprise through to technical knowledge about production techniques. Again the development of this area of research should be driven by the needs of the sector itself.

Addressing the knowledge deficit presents major methodological challenges not least because of the complexity of the subject matter. As a recent publication by the National Farmers Union noted, this complexity means that it is extremely difficult to generate accurate guidance on how agricultural practices can reduce their impact upon climate change (NFU 2005). For example, whereas non-tillage systems are seen as positive for their carbon sequestration role, they are also seen as being prone to anaerobic conditions which increase NO<sub>x</sub> emissions (NFU 2005). Similarly, whilst entering the public consciousness as an indicator of the environmental cost of extended food chains, the notion of “food miles” has been roundly criticised for its failure to consider the impacts of other components of the food chain (AEA Technology 2005, Coley et al. 2008). Instead of a narrow focus on the distance which a product travels to market, critics of food miles propose a more comprehensive approach which seek to measure impacts over the entirety of a product’s lifecycle. Yet, as a recent House of Commons committee report on product labelling noted, whilst scientifically robust, the product lifecycle approach would be prohibitively complex and cumbersome if done on a product by product basis (House of Commons Environmental Audit Committee 2009).

The challenge here is to develop an approach which is sophisticated enough to capture complexity, but simple enough to be practicable and readily understandable. In the case of assessing the ecological impact of food systems Coley et al (2008) present a potential solution. They recognise the fundamental unlikelihood of consumers being able to understand full product lifecycle calculations or of public and private sector providers being able to conduct them for each and every product. Their suggestion is for an approach in which detailed case studies of different types of system and/or commodity sectors are used to develop benchmarks which can be used as a basis for comparison (Coley et al. 2008: 153) Such an approach would allow the identification of “hotspots” of GhG intensive activities which would in turn enable specific and targeted actions, as well as the formation of general principles (Garnett 2008). Critically, it would also enable identification of areas on of non-intensive GhG activities. It is easy to envisage how such an approach could be adapted within different community food initiatives in order to develop both internal comparisons and comparisons with other systems. In turn this could provide a basis by which community food initiatives systems could demonstrate their lower externalised costs, or even, on the basis of the Stern Review, the expenditure savings which their mitigation activities might have on the longer term financial cost of climate change. Equally, there are

other methodological tools and indicators which are being developed within conventional agriculture which could well be adapted to community food initiatives. For example, Farming Futures recently reported on the increased availability and use of on farm carbon accounting systems.

There are therefore methodological developments which would potentially enable community food initiatives to empirically demonstrate their worth through effectively quantifying what they *do not* do. From a different perspective there are also innovations from within the community regeneration sector which might enable a Community Food Initiative to calculate the full benefits of what it *does* do. For example, the New Economics Foundation has recently developed a Social Return on Investment Framework (SROI). The SROI provides community projects with an analytical tool with which they can calculate the financial value of their overall benefits (i.e. including those which are externalised) and express this in terms of a ratio in relation to their net investment (Lawlor et al. 2008). It would seem likely that similar approaches could also be developed to capture the externalised environmental and economic impacts. Developing a unified approach is unlikely to be a smooth linear process but is instead more likely to be characterised by lots of incremental advances which can be borrowed, adapted and amalgamated with others.

However, it is likely that considerable progress could be made through synthesising different bodies of knowledge, experience and expertise to develop new tools and frameworks with which to analyse community food initiatives' diverse impacts. It might for example, be possible to develop methodologies which are capable of auditing the social, economic and environmental impacts of community food initiatives. Such sustainability audits could exist along a spectrum of intensity. At one level they might encapsulate the sort of detailed and intensive case study analysis of the different systems described above, but broadened to include social and economic impacts. At this scale the auditing process would involve detailed analysis of the diverse benefits and external multiplier effects of different models, and would also be a process through which it might be possible to develop the tools and indicators needed at the opposite end of the spectrum. Here the auditing process might be streamlined enough to be usable by 'on-the-ground' projects as a framework for their monitoring and evaluation activities. In this way it could become a resource through which projects could conduct their own audits through the use of an agreed range of indicators spanning the different environmental, social and economic disciplines.

This might sound like an overly ambitious and perhaps unachievable programme in term of its scale and the type of collaborations it would require between different sectors and, perhaps more importantly, across the silos which exist within different sectors. However, exactly this sort of approach has been developed elsewhere in an effort to support the emergence of urban agriculture in the developing world. A good example can be found in the International Development Research Centre's (IDRC) AGROPOLIS research programme which sought to develop innovative multi-disciplinary, participatory and practice based research on the social, economic and environmental

impacts of urban agriculture in the developing world (Mougeot ed. 2005, Redwood ed. 2009). Whilst the individual outcomes of the programme made their own contributions to the practice of Urban Agriculture, the IDRC claims that the collective impact of the programme has been to help shift the profile of Urban Agriculture away from the margins and onto the mainstream agendas of development organisations and some governments (Redwood ed. 2009).

## **5.5: Land**

In some of the English conurbations such as London, where increasing interest in urban agriculture faces a major barrier of a general shortage of suitable land and development pressure on the land which does exist. This situation is markedly different in the study area for this research. Even in the capital city of Cardiff there are substantial areas of green land within the city limits many of which are potentially suitable for urban agriculture (Garret 2008) and the city's relatively small size means that even the city centre areas have relatively close proximity to a rural hinterland. In the valleys to the north the historic development of housing has created a ribbon like urban structure in which development is concentrated along the valley floors and lower parts of the hillsides. This means that there are substantial areas on the flood plains, middle to upper slopes and plateaus which have not been developed for housing and which remain as green spaces. Land use here is made up of a mix of forestry, sheep and beef farming, and greened over spoil heaps left over from previous mining activities, together with extensive tracts of moorland, open pasture and pockets of native broad leaved woodland.

The existence of extensive areas of green space immediately proximate to urban areas is a clear advantage when assessing the area's potential for a re-localised food chain but there are also a number of potential problems around the suitability of the land for growing food. One of these is that the area's industrial history has left a legacy of severe contamination. However, this problem tends to be concentrated within very specific locations and within relatively small sites. Moreover, as is discussed above one of the unique characteristics of urban agriculture is its ability to develop innovative techniques which can enable the safe production of food on contaminated land. Another potential issue is the impact which changes in land use could have upon the area's biodiversity but this also does not appear to represent an insurmountable problem. Many of the habitat types identified within Local Biodiversity Actions Plans as having the highest biodiversity value would not typically be regarded as prime sites for food production (e.g. upland broad leaved woodland, greening spoil tips). Indeed, sensitive handling together with the application of organic and permaculture techniques could potentially enrich local biodiversity through reinstalling features such as native hedgerows and contributing to the development of a more diverse landscape generally.

Perhaps the greatest potential barrier lies in the area's physical topography, soil structures and climate. Indeed, the prevalence of these conditions in Wales mean that 80% of the land in Wales is classed by the EU as a Less Favoured Area and of this the majority is classed as severely disadvantaged (see figure 4). The South Wales Valleys with their steep sides and high levels

of rainfall are identified as severely disadvantaged in this classification. This classification of most Welsh land as extremely marginal in agricultural terms is reflected in the fact that sheep, dairy and beef farming are the dominant forms of agriculture and in the low levels of commercial horticulture. However, the South Wales coastal plain has one of the most extensive areas of relatively good agricultural land in Wales. Moreover, even in the valley areas where the physical conditions appear most inhospitable, interviews with local farmers revealed that previous generations had maintained market gardens alongside the sheep farming more typically associated with upland agriculture. Likewise there is a long established tradition of productive allotment gardening often on sites which would be considered unfavourable due to their slopes and aspect.

**Figure 4: Map Showing the Distribution of Severely Disadvantaged Land, Disadvantaged Land and Non-Less Favoured Areas in Wales**



Source: WAG 2009 <http://cymru.gov.uk/topics/environmentcountryside/farmingandcountryside/maps/lfamap>

The general availability of green land together with its low agricultural or building development value probably constitute the major reasons why access to land has not proven to be a particular barrier to either the establishment or ongoing development of the projects included within this study. Indeed, a key difference within the emerging community food initiatives in Wales and comparable projects in England appears to be not only the relative ease with which they are able to access land but their ability to access relatively large plots of land often totalling several acres. Access to this land has been gained through a range of means. These have included purchasing of land outright, leasing land from private landowners and local authorities, and asset transfers that have occurred as part of the reclamation of former industrial sites or commercially derelict sites. There are also numerous examples of smaller scale initiatives making use of the existing infrastructure of allotment sites and more recently there have been some examples of entirely new allotment sites being established.

The ability to access land is also aided by the existence of key pieces of legislation relating to the provision of allotments and smallholdings, and to the provision of appropriate infrastructure in new housing developments. As part of the process of granting planning permission the 1990 Town and Country Planning Act allows local authorities to negotiate Section 106 agreements which require land developers to provide aspects of community infrastructure which meet the needs of new residents or relieve pressure placed on existing infrastructure by new developments. The latest edition of "Growing in The Community" the best practice guidance for allotment managers suggests that one option for the development of new allotment sites is to ensure that provision is incorporated within Section 106 agreements (Wiltshire & Burn 2008). The greatest powers are contained within various pieces of allotments

legislation which collectively impose a statutory duty upon local authorities to provide land for allotments where there is proven demand and to ensure an appropriate supply of allotments. In addition this legislation also grants local authorities powers of compulsory purchase and to hire land for the establishment of allotment gardens. However, whilst these powers exist the perception of advocacy bodies for allotments such as the NSALG is that local authorities are frequently reluctant to use them because of the financial implications and/or uncertainty about the legal technicalities (Hannaby 2008).

Although accessing land is not currently a major barrier to the community food initiatives encountered in this research, it could prove to be more of an issue in the future, particularly if the number of initiatives continues to expand. One cause for concern is that in many instances they will be competing for land located either within the urban limits or on its immediate periphery which is of inherently limited availability and which is also subject to demand pressures from competing uses (e.g. recreation, housing or business development). If such situations did arise an imaginative approach might well be required. For example, this might well involve the development of a spectrum of growing activities comprised of intensive food production at one end, but at the other could involve simple, low impact changes to the planting practices of managed spaces and parks (e.g. replacing ornamental trees with fruit trees or decorative flower beds with mixed vegetable pottages). Early examples of this type of approach can be seen in the use of spaces such as foot path verges in Middlesbrough (Collingswood 2008).

Whilst accessing suitable land is not presently a major constraint on the development of community food initiatives in South Wales, maintaining access to that land can pose a major threat for those projects operating on ground which is rented or leased. At least one of the projects involved in the research reported being unable to continue when the land it had been allowed to use changed ownership. For this reason the National Society of Allotment and Leisure Gardeners (NSALG) is concerned that the release and use of land for community growing occurs through the framework of existing allotments legislation. In addition to providing a legal and policy framework through which land can be accessed this legislation provides tenants with a number of legal safeguards over the tenure of that land. These include stipulations that the local authority must provide alternative provision locally, that notices to quit must give a period of notice and be conducted within stipulated timeframes established around the growing year and that plot holders are entitled to compensation for the loss of their plot (<http://www.nsalg.org.uk/>).

However, the fact that allotments are typically located within or at the edge of settlement boundaries still means that they potentially occupy prime locations for infill development and competing land uses. Consequently, even with these forms of protection and even with rising patterns of demand and reports of lengthening waiting lists, well used allotment sites continue to be lost to development. Thus maintaining security of tenure is something that is likely to be a major factor in determining the future of community level food production in South Wales and indeed the development of a more sustainable food

system generally. Insecure tenure is not only likely to have practical implications such as the disruption and distress it can cause to initiatives, but at a deeper level undermines the extent to which individuals and communities are able to develop a sense of such critical notions as food sovereignty (the *right to feed oneself*, as distinct from the notion of the more passive *right to food* which defines food security (Morgan 2008)). McIntosh, makes this point in relation to Community Land Trusts (which hold land in the community's name in perpetuity) by suggesting that their main importance is in changing the nature of a community's relationships to the land and itself:

*“Community land trusts are therefore an answer to providing people with the opportunity which to live in a more authentic relationship with the land, even if not necessarily from the land. This matters because it builds a sense of the bio-region that is human scaled. Such a sense of place in turn contributes towards a sense of belonging. And that builds a sense of identity which in turn can carry the collective values that can sustainably generate the responsibility necessary for upholding the both the social and the natural environment.”*

(McIntosh 2001: 269)

There does therefore appear to be a need to examine ways in which the security of tenure can be strengthened through perhaps new legislation and the active and resourced use of existing powers. From a community agriculturalists perspective the ideal scenario might well be a combination of the powers to access land contained within existing allotments legislation together with the security of tenure provided by models such as Community Land Trusts.

## **5.6: Labour**

Given the well documented labour supply difficulties in conventional agriculture and the fact that this is identified as one of the seven “new fundamentals” affecting this system, it is perhaps not surprising that labour supply can also be a key problem for many initiatives.

It is a problem exacerbated by the economic circumstances and funding regimes described earlier, and the high levels of labour required as a result of the largely non-mechanised nature of production, organic production techniques and the diversified activities. Drawing upon the experience of conventional agriculture, Quiet Waters Consultancy (2009) suggested that the use of organic techniques and on-farm diversification increased labour requirements by between one and two thirds respectively. However, the critical factor in determining the disproportionately high labour requirements of community food production appears to be the low level of mechanisation. For example, Hitchens (2009) found that when the standard formula used in determining agricultural labour requirements is applied to a patch of land broadly equivalent to the size of a single allotment then it produces a result which suggests a weekly labour input of just 22.5 minutes. Clearly, this is a figure which hugely underestimates the true labour requirements of maintaining a productive allotment and in doing so underlines the extent to which the mechanisation of conventional agriculture has reduced its labour requirements.

It would therefore appear that production activities have significantly higher labour requirements than either conventional or organic agriculture, both of which are themselves facing acute labour problems. As such it is little surprise that many of the projects geared towards food production identified problems of maintaining as a major barrier to their ongoing development or even viability. As one project co-ordinator routinely commented *“I just can’t get the labour”*.

However, one of the key advantages which community food initiatives have over conventional agriculture is its ability to recruit volunteers. Indeed, the existence of significant levels of voluntary activity can be seen as a defining and universal feature of Community Agriculture. Some initiatives such as Growing Communities in London have proven extremely successful in recruiting a large and committed pool of volunteers. However, such projects are perhaps the exception rather than the rule. Many projects reported problems with attracting a sufficient number of volunteers and felt this was constrained any plans they might have for further development:

*“getting people to work – those that do are stretched..... a few dedicated people..... the problem we’ve got is keeping up with what we’ve got coming in.....the potential is there, the only thing is getting the labour”*

Quite a number of participants occupying diverse positions within the sector expressed the view that underlying the difficulty in attracting labour was an intrinsic aversion to the physical and outdoor nature of the work. This trait was particularly ascribed to the younger generation. It is impossible and beyond the scope of this research to comment on the validity of these perceptions.

## **5.7: Vandalism and Anti-Social Behaviour**

Although not an insurmountable problem, it does need to be recognised that the urban and peri-urban locations which many of the projects inhabit bring with them an increased vulnerability to problems arising from vandalism and anti-social behaviour. This is not unique to the study area but is a recognised problem of farming on the urban fringe generally (Jones 2008) and is equally recognised as a problem in the management of allotments and community gardens. For example, a recent survey of English allotment gardens found that nearly 90% of local authorities reported problems with vandalism on allotment sites, as did over 80% of community gardens (Department for Communities and Local Government 2006). Several of the projects visited during this study also reported significant problems which were particularly focused around buildings which had been constructed on site. These problems included buildings such as a compost toilet and bird observation hide being destroyed by arson attacks, a discarded hypodermic needle being found in a covered area of a school’s garden, and minor damage to the cover of a polytunnel.

One implication of this vulnerability (both perceived and actual) victimisation is that it can significantly increase costs for projects which, as discussed above, are already facing considerable economic barriers. Projects which have buildings destroyed potentially face a significant loss of capital investment. Equally, for those projects which had installed security features such as perimeter fencing, formed the major component of initial capital expenditure

and routinely dwarfed the costs of the rental or even purchase of land and equipment. Moreover, the introduction of “target hardening” measures such as perimeter fencing is not a failsafe solution in itself as one project found to its cost when a building was burnt down after the culprits had crawled underneath a perimeter fence.

The available evidence suggests that responses to vandalism and anti-social behaviour require more imaginative solutions than the traditional ‘locks and bolts’ approach to site security. One of the defining features of contemporary community food initiatives is that they explicitly encourage public access as part of their reason for being. In doing so they seek to foster a sense of community ownership which is in turn believed to function as a powerful source of informal regulation of that space. Consequently there are numerous examples of initiatives operating in ostensibly difficult areas but which offer unrestricted public access. Examples can be found in locations as diverse as Middlesbrough (Collingwood 2008), inner city London (Write 2008) or Chicago (Buttery et al. 2008). Equally, in this research many of the projects which were visited had consciously developed sites where wider public access was explicitly encouraged and was in many cases entirely unrestricted. Examples of completely unrestricted access included a community garden and allotment which was adjacent to a pre-school nursery and served as a dual function as an educational resource for the children and a community garden for the wider community and an open access community orchard. Both projects reported instances of vandalism. However, in the case of the community orchard this was minor damage to two of the trees and the incident was reported to have been informally resolved through the intervention of local residents. The damage to the community garden was more serious in the sense that it involved a wooden bird hide being destroyed by fire but other parts of the garden have suffered no damage. Although the small size of the sample means that it is only possible to draw tentative conclusions, it is perhaps significant that all the reported problems with vandalism and anti-social behaviour related to physical structures. None of the projects reported any significant or sustained damage to their growing activities.

The evidence therefore paints a mixed picture in terms of the projects’ experience of problems with vandalism and anti-social behaviour and one in which the presence of security features is not necessarily the key determinant. Whilst there are instances of sites with minimal or no security which have experienced no problems there are others with relatively high levels of security which have experienced these problems. However, the dominant picture appears to be a situation where projects are likely to experience problems of crime, vandalism and anti-social behaviour, but that they are of a relatively infrequent and minor nature. They are in other words a nuisance rather than a make or break issue. It is also difficult to formulate general principles or guidance as much appears to depend on specific attributes of the site (e.g. levels of natural surveillance) and also appears to be influenced by factors which are difficult to quantify (e.g. the extent to which there is a sense of community ownership). Moreover, there are also instances where these problems relate more to the ambiguous nature of the public/private status of spaces used for community food initiatives, and the

way in which this can in turn generate contested perceptions of ownership. For example, Buttery et. al. (2008) cite an example of an urban agriculture project in a former public park where residents helped themselves to produce because they believed they had a right to make use of what was perceived as a public resource.

### **5.8: Consumer Resistance**

A number of participants also reported a reluctance to consume the vegetables produced by projects from within the communities where they were based. One participant expressed the view that whilst many people in South Wales residents had grown up eating vegetables grown on allotments or in backyards this was now seen to be “*a second class choice*” when compared to the “*nice, cleanly packaged and exotic veg*” on offer in the supermarkets. The consumption of home grown vegetables was not therefore seen as a positive choice but had connotations of making do. In this context the ability to be able to purchase washed and prepared vegetables from the supermarket was a marker of their social mobility. Another participant felt that the experience of purchasing vegetables from supermarkets has (mis)shaped peoples’ expectations of vegetables to the extent that vegetables which deviated from these expectations were refused:

*“we couldn’t give it away, we could never have sold them to people....people go into a supermarket expecting a certain size and shape.”*

However, this participant also felt that this mindset was now changing: “*we were ahead of our time – it was before people were interested in healthy eating – people are more aware now – it comes through the kids*”

However, what is perhaps a more intractable problem is the extra time involved in washing, preparing and cooking vegetables from scratch for consumers used to purchasing food where even in its rawest state the first stages of preparation have already been completed. This issue was identified by several interviewees and was identified not only as a barrier to private households but for school based projects where catering staff didn’t have the time, staffing levels or facilities to prepare vegetables from their rawest condition. This a key issue which needs to be addressed if community food initiatives are to move away from producing food principally for its demonstrative or educational value, and instead make a more quantitatively significant contribution to local diets. However, this is also a problem which potentially presents opportunities for community based organisations to generate income streams based on initial food stages of food preparation and processing.

## **6. Conclusions and Recommendations**

The main conclusions that can be drawn from this research are that the conventional food system needs to change in response to a combination of fundamental social and environmental pressures. These are already being experienced, but will become ever more pronounced over the course of the 21<sup>st</sup> Century. Whilst there appears to be something of an emerging consensus about what some of the key dimensions of a more sustainable and secure food system might look like, there is much less understanding and agreement about how the different pieces of the jigsaw can be made to fit together. In this

context of uncertainty community based food initiatives are increasingly being identified as being able to play a significant role, not only in the functioning of the new food system but, critically, as an agent of change in their own right. Frustrated at the tentative nature and glacial pace of changes originating from national and international policy making apparatus, many analysts see hope in the spontaneous actions which are occurring at community level.

The evidence from this research suggests that there is much justification for such optimism. The experience from South East Wales, the wider UK and further afield, suggests that these initiatives do indeed have a considerable potential role to play in developing more sustainable food systems and in the promotion of sustainable development generally. Their capacity to do this extends beyond their productive capabilities to include the role which initiatives can play in facilitating links between producers and consumers, whether through performing formal roles as “food hubs” or more background support and development roles. Indeed if community food initiatives are to play a major role in the development of sustainable food systems it is possible, even probable, that these intermediary functions will be of greater significance than their food production activities.

A particular quality of community food initiatives is the way in which they are striving to develop holistic approaches to sustainable food which seek to reconcile the often competing demands of the social, economic and environmental dimensions of sustainability. Most significant in this respect are the numerous examples of initiatives that are actively engaging with the apparently impossible problem of trying to increase the accessibility of environmentally sustainable food to low income populations. As is discussed further below, this is a particularly distinctive feature of the development of community food initiatives in the study area of South East Wales. Whilst to date it is not possible to identify a particular model, or even isolated examples of initiatives, which have truly squared this circle, this is a reflection of the circumstances they are operating in rather than an intrinsic limitation of the projects themselves. What unites an otherwise disparate set of initiatives is their awareness of the centrality of this problem in making the transition to a sustainable food system and their willingness to innovate and experiment with different ways of resolving it. This is in turn indicative of a sense of grassroots creativity and dynamism within initiatives which are not content to merely outline sustainable alternatives, but which in seeking to implement these are becoming active agents of transition.

In many respects the specific situation regarding community food initiatives in South East Wales is a microcosm of the wider UK picture. There has in recent years been major growth in the development of these initiatives, and the initiatives display similar concern with developing a holistic approach to sustainability coupled with the characteristically innovative approach to pursuing this goal. However, leaving aside the more established food co-operative and farmers’ market movements, the development of community food initiatives are in their relative infancy. Moreover, in the absence of a major funding stream such as the Big Lottery Fund’s Local Food programme, the development of community food initiatives in Wales as a whole is likely to

continue to lag behind England in terms of the number and scale of initiatives. The development of community food initiatives in South East Wales is also notable in that the growth of projects has been concentrated within deprived communities. This is likely to be a reflection of a combination of factors which include the generally high incidence of deprivation in South Wales, the focus of key funding regimes on social and regeneration goals, and the existence of an extensive infrastructure of community regeneration organisations operating in deprived communities.

Whatever the cause of this patterning of community food initiatives in South East Wales, a key outcome is that they are operating at the sharp end of attempts to reconcile the most difficult aspects of the environmental and social dimensions of sustainable food. Their early experiences of grappling with this dilemma points to some significant successes and to the possibility of exciting longer term opportunities. Critically, community food initiatives in the area have demonstrated a capacity to make a significant contribution to wider regeneration strategies, not least in those arenas where traditional regeneration programmes struggle to make an impact. Moreover, the nature of the opportunities opened up by community food initiatives suggests a critical potential role in shaping sustainable patterns of regeneration. This is in contrast to existing models of regeneration which are predicated upon, and ultimately judged by, their ability to contribute to economic growth.

However, for all their initial promise, many community food initiatives face a precarious and uncertain future arising from the interplay of the economic circumstances in which they operate, and the lack policy frameworks and funding structures to support their long-term development. There is a real danger that in this context, initiatives' efforts are deflected from their goals of developing truly sustainable food systems and are instead restricted to maintaining projects' survival in the face of adverse circumstances. This in turn creates the danger that the initial promise of these initiatives will be stifled as their long term development becomes shaped by their short term responses to these pressures. Clearly then, the extent to which community food initiatives are able to realise their potential in contributing to the development of a more sustainable food system will be profoundly influenced by the extent to which the various tiers of local, regional and national government create the "structural platforms" required to promote their development (Barling et. al 2002: 571). Whilst there are examples of progress in areas such as public procurement policy, these gains have been slow to achieve, limited in scope and ambition, and restricted to particular areas of policy development. Notably, key areas of sustainable development policy have failed to even consider the role of sustainable food systems, let alone the role which community food initiatives might play in their development. Likewise, the historical development of both sustainable development and community regeneration policy in Wales has been characterised by a critical lack of funding. There is therefore little to suggest that some major new statutory funding stream will be made available to provide long term support for the development of community food initiatives.

It therefore seems reasonable to assume that the short to medium term development of community food initiatives in South Wales is likely to occur without major sources of dedicated funding and without substantial policy support. This is likely to present a major constraint to the scale and nature of their development, as breaking the deadlock imposed by the barriers which projects face would seem dependent on statutory action. It is for example difficult to envisage how the central conundrum of maintaining economic viability, whilst supplying intrinsically more expensive food to consumers on breadline-incomes, can be resolved without some form of public subsidisation. This is after all a fundamental component of the Cuban system which currently represents the only successful example of transition to a low carbon food system (Wright 2009), but it has also been equally important to ensuring food security in European nations since the Second World War. However, such forms of statutory intervention in the market are anathema to the neo-liberal economics which have framed social and economic policy for three decades and which are becoming increasingly influential in agricultural policy (Erjavec & Erjavec 2009). The likelihood of such developments therefore seems remote in the near future at least. Consequently, the recommendations outlined below have been developed on the assumption that the development of community food initiatives in South East Wales will continue to occur within this context of major structural constraints. The recommendations are intended to function as suggestions as to the ways in which community food initiatives might develop within this context, but also as suggestion for further actions through which they can develop their ability to change the context itself. Although, if enacted they will require some funding, this is relatively limited in scale and as such they are developments which can occur irrespective of major statutory support. The recommendations are all interconnected with one another and although listed numerically there is no intention of any hierarchy of importance.

**Recommendation 1: The establishment of a programme of inter-disciplinary and multi-sectoral research which explores the subject areas outlined in section 5.4 of this paper.**

The aims of this programme would be to develop the empirical knowledge base about the impacts and experience of community food initiatives. As an outcome of this process it would also seek to develop research instruments which initiatives would be able to use in their own monitoring and evaluation activities. As such a key aim of the programme would be to empower community food initiatives through enabling them to develop robust data about the impacts of their activities.

**Recommendation 2: The establishment of a broad based network of individuals, groups and other stakeholders engaged with Community Food Initiatives.**

This body would function both as a basis for sharing knowledge and experience between members, providing mutual support and as a means of providing a co-ordinated and coherent lobbying voice for initiatives. There are already examples of similar networks existing in the South East Wales area in the membership of groups such as the Federation of City Farms and Community Gardens, the National Society of Allotment and Leisure

Gardeners, the Wales Nutrition Network, or Sustain's Food Access Network. However, these are quite disparate networks, which are each focused on their own particular area of activity. What is being suggested here is a much broader partnership which seeks to bring these disparate strands of activity together and which is also capable of drawing in other prospective partners interested in the development of sustainable food systems. Whilst, such a body would ideally include representation from policy makers it would be important that it should exist independently of government.

### **Recommendation 3: Development of the existing allotments infrastructure.**

The allotments model is currently the only operating model of urban agriculture in Wales which is economically self financing, produces significant quantities of sustainable food and which is accessible to low income populations. This model also has the advantages of having an extensive existing infrastructure, a long standing presence in community life in South Wales, and a degree of statutory protection and associated core funding which is currently unprecedented in community food initiatives. For these reasons the allotments movement is a key source of strength in the development of community food initiatives. Moreover, in recent years it has also been a key site of innovation.

A notable trend has been the development of community gardens within allotment sites, whether as general open access community gardens or as community gardens operated by particular organisations to serve the needs of their client groups. Potentially, this is a trend which could make a major contribution to the long term future development of the allotments movement, creating mutually beneficial relationships between allotment sites and key local institutions such as community organisations and schools. Whilst this research has encountered multiple examples of such linkages in allotment sites throughout South East Wales, their development also appears to have been relatively ad-hoc and dependent on the presence of key individuals. One suggestion for building on this trend might therefore be the establishment of regional development workers tasked with facilitating links between allotment sites and local institutions such as schools and community organisations. The experience of the Federation of City Farms and Community Gardens' Growing Together project and the Rural Regeneration Unit's food co-operatives provides ample demonstration that relatively small numbers of development officers acting in a facilitating role can be a major catalyst to project development.

However, for all its strengths the allotments movement frequently occupies a Cinderella like position within many local authorities where allotments often exist at the periphery of leisure departments. Their perceived lack of importance is reflected in extremely poor levels of record keeping, the fact that there has been no recent audit of allotment sites in Wales and reported high levels of unmet demand. Moreover, there are huge variations in levels of local authority support for allotments, management practices, ownership and tenure patterns, provision of facilities and the general condition of sites. For these reasons, and because of limitations within the allotments legislation

itself, the long term status of many allotment sites continues to be precarious. Even in a context of rising demand, well used sites continue to be lost. A core part of developing the allotments infrastructure must therefore be efforts to ensure greater statutory protection of sites, strengthening the rights to allotments, the greater enforcement of existing legislation at the local authority level and clarification of local authority responsibilities in terms of the provision and management of sites.

**Recommendation 4: The development of strategic pilot initiatives in which different models of Community Food Initiatives are tried and tested in the specific conditions which exist within South East Wales.**

It is neither possible or appropriate to present here a prescriptive list of what these projects should be as this in itself should be decided through the sorts of dialogue which could be established within the network described above. However, one obvious example of such an initiative would include building on the pathfinder projects which have already occurred in the development of public sector procurement policy. A specific project could be developed to explore the scope for community-based organisations to become involved in the supply side of public sector procurement. Similar developments are already occurring in Scotland and could be a valuable source of learning for initiatives in Wales. Another obvious example might involve the piloting of a Community Supported Agriculture initiative similar to the Stroud model. There are already existing community sector organisations ideally placed to develop such models in terms of their access to land, relationships with local farmers, established viable customer base and the existence of a core group of committed volunteers. Such pilot initiatives could not only demonstrate the worth of particular models, but could also be a catalyst to the development of the sorts of inter project linkages which have yet to emerge.

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