## Abstract (250 words maximum)

# Capturing the value of sustainable food procurement through Social Return on Investment analysis: Lessons from the Soil Association's Food for Life programme

Jones, M.<sup>1</sup>, Donnelly, A.<sup>2</sup>, Pitt, H.<sup>3</sup>, Oxford, L.<sup>1</sup>, Orme, J.<sup>1</sup>, Gray, S.<sup>1</sup>, Salmon, D.<sup>4</sup>, Means, R.<sup>1</sup>, Weitkamp, E.<sup>1</sup>, Kimberlee, R.<sup>1</sup>, and J. Powell<sup>1</sup>

<sup>1</sup> Public Health and Wellbeing Research Group at the University of the West of England, Bristol (UWE Bristol). <u>matthew.jones@uwe.ac.uk</u>

- 2 Soil Association Food for Life, Bristol
- 3 Sustainable Places Research Institute, Cardiff University

4 School of Health Sciences, City University London

### Abstract

Caterers in public service institutions are increasingly encouraged to procure local and organic foods, and to become active partners in promoting healthy and sustainable diets. Food for Life (FFL)<sup>1</sup> is an initiative led by the Soil Association that supports caterers, schools, hospitals, children's centres and other institutions in taking steps to enhance good food culture and, notably, to increase their use of ingredients that are local, organic, seasonal, fair trade and better for animal welfare.

As a whole settings programme, one attraction of FFL is that it can have multiple and systemic impacts that extend beyond those that accrue to local farmers and producers. Such forms of holistic understanding are critical in order to bring together stakeholders with different priorities in relation to local food system reform. The aim of this paper is to show how Social Return on Investment (SROI) research has been used to assess the value of Food for Life and the potential of the methodology in driving public food procurement policies particularly at local and regional levels.

SROI case study analyses of FFL show that the initiative delivers tangible benefits to schools (and the educational sector more widely); health agencies and their strategic partners; community groups and other voluntary agencies; caterers – as well as to local food businesses. Where the programme has been commissioned as part of a local authority local food strategy, this can be expressed as a SROI ratio of £4.41 of social value created for every £1 of investment. Sensitivity analysis showed that the range of values was closely clustered around the £3 to £5 range.

SROI analyses of FFL have been innovative because they take into account a considerable body of evidence from local stakeholders, evaluation fieldwork and external research to develop a whole system account of the social value of a healthy and sustainable food settings and area-based programme. This type of research can be used to inform policy makers of benefits of coordinated action with public service caterers. It also provides additional support for producers and farmers seeking to mainstream the supply sustainable food through leading catering services.

<sup>&</sup>lt;sup>1</sup> http://www.foodforlife.org.uk/

**Keywords:** sustainable food, local food, public procurement, catering, social return on investment (SROI)

## 1. Introduction

Catering in public service settings such as schools, workplaces and hospitals is increasingly recognised as having an important place in the promotion of healthy and sustainable diets. In England, adults consume at least a third of their daily calorie intake while at places of work (NHS, 2015) and there are similar estimates for children attending school (Kaphingst and French, 2006). Thirteen percent of all meals eaten out of the home are provided in healthcare environments (WRAP, 2014). National figures point to the importance of food in other settings. In England, almost 2 million students attend 133 higher education institutions (HESA, 2014), 4.7 million children aged 0-5 years attend 82,000 registered childcare providers (DfE, 2014), and more than a quarter of a million people aged 65 and over are living in one of over 15,000 care homes in England and Wales (ONS, 2014). The significance of these settings becomes amplified when put into a life-course and ecological perspective: people move in time and space through multiple settings and settings themselves can interact, especially when in spatial proximity to one another. Even small shifts in the procurement practices of caterers and food services in these environments can therefore have an important impact for producers and suppliers, not least those engaging the local and organic food sectors.

The purpose of this paper is to examine the role of a national programme, Food for Life, in changing the procurement and wider food related practices in public service settings. We argue that an essential feature of the programme has been to create multiple and systemic impacts that extend beyond those that accrue to local farmers and producers. Such forms of holistic understanding are critical in order to bring together stakeholders with different priorities in relation to sustainable food system reform. We start by outlining the mission, operation and evolution the Food for Life programme in England. We then examine the application of the Social Return on Investment (SROI) methodology in two local authority areas that have actively implemented the programme. The implications of this research are then discussed in the context of driving public food procurement policies particularly at local and regional levels.

## 2. Soil Association's Food for Life programme

### 2.1 Overview of the programme

Food for Life is a Soil Association initiative, which began life in 2003 and developed into an awardwinning national programme to transform school food culture thanks to funding from the Big Lottery Fund. The Food for Life vision is to make good food the easy choice for everyone, whoever and wherever they are. The Soil Association is a charity based in the United Kingdom. Its activities include campaign work on issues including opposition to intensive farming, support for local purchasing and public education on nutrition; as well the certification of organic food. It developed the world's first organic certification system in 1967 – standards which have since widened to encompass agriculture, aquaculture, ethical trade, food processing, forestry, health & beauty, horticulture and textiles. Today it certifies over 80% of organic produce in the UK (Soil Association, 2012).

Building on evidence of positive impacts in both primary and secondary schools (Jones et al., 2012; Orme et al., 2011) Food for Life now includes tried and tested approaches to transforming food culture in a wide range of settings including early years, hospitals and care settings. The Food for Life programme takes a whole system approach to food, changing both the food environment and food culture within which people make choices. The programme defines 'good food' as:

- A healthy and sustainable diet: Less high fat/salt/sugar/processed food and less but better quality meat; more fruit and vegetables, whole grains and sustainable fish.
- Quality food you can trust: more fresh, local, seasonal, environmentally sustainable food, with low climate impact and high welfare standards.
- Eating together: more opportunities for social contact through food, building families and communities and tackling loneliness

### **1.2 Food for Life local authority commissioned programme**

A number of local authorities in England have commissioned FFL to support delivery of their priorities, with some areas now looking beyond their initial focus on schools to connect with food in other settings. FFL locally commissioned programmes involve a coordinated approach between networks of schools, food producers, food suppliers, caterers and other agencies. Each local programme is tailored to meet the needs, priorities and capacity for action in the area. A commissioned local programme for schools would usually involve coordination and support for settings through a Local Programme Manager, and a programme of training courses for school staff, caterers and others on cooking skills, food growing skills, linking schools to farms, setting up school farmers markets, and food policy and leadership. Programmes support schools to achieve Food for Life Schools Award.

### 1.3 Food for Life Catering Mark

The Food for Life Catering Mark provides independent endorsement that caterers are taking steps to improve their food through meeting standards on nutrition, freshness, sustainability and animal welfare. There are three levels of award allowing caterers to progress and ensuring continuous improvement. The Catering Mark standards incorporate sector-specific nutrition standards, as well as sustainability and assurance schemes (at Silver and Gold), including LEAF, Fairtrade, RSPCA Freedom Food, Marine Stewardship Council, and organic.

#### 1.4 Food for Life Schools Awards

Food for Life awards are centred around four areas of development, which link to Food for Life award criteria and create an action framework for schools:

- Food Quality
- Food Leadership and Food Culture
- Food Education
- Community and Partnerships

Schools achieve the following to gain an award at each of the Award levels of Bronze, Silver and Gold:

#### BRONZE schools:

- Have committed to improve their school food culture by developing a school food policy.
- Meet the Bronze Food for Life Catering Mark which shows that school food is healthy and uses seasonal ingredients that are at least 75% freshly prepared from unprocessed ingredients<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Food for Life state they they use "a common sense definition of 'unprocessed' to include raw, basic ingredients such as fresh or frozen fruit and vegetables, fresh or frozen meat or fish, pasta, rice, flours, pulses and beans. Unprocessed foods

- Involve pupils and parents in planning improvements to school menus and the lunchtime experience, boosting school meal take-up
- Give every pupil the opportunity to visit a local farm, and take part in cooking and food growing activity.

### SILVER schools:

- Serve school meals on proper crockery, not plastic 'flight trays'
- Meet the Silver Food for Life Catering Mark which shows that school food is healthy, ethical, and uses some local and organic ingredients
- Have a cooking club, where pupils get to cook with and eat the produce grown in the school growing area
- Involve parents and the wider community to get involved in food education via foodthemed events
- Serve food that is healthy, ethical, and uses local ingredients. Schools use a minimum of 5% organic ingredients in menus<sup>3</sup>.

### **GOLD** schools:

- Act as hubs for their local community, actively involving parents and community groups in cooking and growing activities
- Meet the Gold Food for Life Catering Mark which shows the food served is healthy, ethical, uses lots of local ingredients and is animal and climate friendly, including a minimum of 15% organic and 5% free range<sup>4</sup>
- Pupils choosing to eat a school meal is the norm
- Are actively involved in the life of a local farm and active in planning and growing organic food for the school.

### 2. SROI case study methodology

#### Social Return on Investment case studies

Social Return on Investment (SROI) is a framework for measuring and accounting for change in ways that are relevant to the people or organisations that experience or contribute to it (Cabinet Office, 2009). It provides an assessment of whether value is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. SROI captures value often left out of more traditional methods of economic evaluation such as cost benefit analysis (Arvidson et al, 2010; Banke-Thomas et al., 2015).

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of £1 delivers £3 of social value. SROI is about value, rather than money. Money is simply a common unit and as such is a useful and widely accepted way of conveying value.

are fresh, homemade and natural, as defined by the Food Standards Authority." "75%" is calculated a percentage of the dishes served.

<sup>&</sup>lt;sup>3</sup> Calculated as a percentage of ingredient spend. School caterers use a Food for Life Catering Mark Points Calculator to calculate additional points needed for demonstrating sourcing of local, ethical, environmentally friendly food.

<sup>&</sup>lt;sup>4</sup> Calculated as a percentage of ingredient spend.

A number of SROI studies have been conducted on FFL and similar initiatives (Durie, 2008; Lancaster et al., 2008; Kersley & Knuutila, 2011; Stein, 2012; Couteney, 2012). These have mainly identified benefits to the local economy. Little research has examined the health, educational and wider benefits of programmes such as FFL when delivered at the local authority level. In order to examine the wide ranging impacts of the social value created by FFL local commissions we selected two local authority areas of Calderdale and Kirklees for case study analysis.

#### **Research process**

The study followed the standard stages of SROI analysis (Cabinet Office, 2009). Approval for the research was obtained through the UWE HAS Research Ethics Committee. For the two case study areas we focused on a 24 month period and sought to reflect all aspects of commissioned work. Forty seven stakeholders were interviewed to provide perspectives on the outcomes of the programme. These individuals were selected on the basis that (a) they represented a wide range of perspectives on the initiative and (b) they included individuals that were both directly involved and, to minimise sources of bias, those peripheral and/or independent from the initiative. Stakeholders included school teaching staff, school cooks, catering managers, catering suppliers, staff from local food businesses and producers, hospital staff, programme delivery staff, commissioners and advisors to the programme (see Figure 1 below). Additional sources of information about stakeholders' perceptions of outcomes were available through programme records. A total of 78 written statements were analysed from training feedback forms, FFL and FFLCM award application forms, teacher questionnaires completed as part of pupil survey research (Jones et al., 2015), case study reports and press releases.

Figure 1; Stakeholders report on the outcomes of Food for Life: Examples of feedback from 47 interviewees

"The skills one of our students got [from cooking skills in school] directly helped him get an apprenticeship with a caterer." [Calderdale, Secondary Head Teacher #1]

"I've found we've been able to do some quite difficult topics through food-based lessons, for instance cooking lessons have been a great opportunity to compare food origins and learn about carbon footprints." [Kirklees, Primary Teacher, #3]

"Parents have said to me that their children are asking lots of questions about where food comes from. It's been a good project for getting whole families involved" [Calderdale, Primary Teacher, #4]

"We have had well attended events with the majority of parents and the local community attending. We've got to meet people from local groups we didn't know about, like the bee keepers club and the allotment society." [Calderdale, Primary Teacher #2]

"I now have a very active role in cooking club, tasting sessions...I'm getting listened to... I'm very proud of my kitchen." [Kirklees, Primary Cook #3]

"Business has been good. With me and the rest that's six jobs and I'd say most of them are off the back of our schools [and local authority] contracts..."[These contracts are] helping us get over the 'stigma' about organic - that organic is time-consuming to process, expensive or unreliable. They're learning. We're learning too about what orders we can and can't do." [Kirklees, Supplier #4]

"For us the [FFL] catering mark has given us a structure. We've got a very good relationship with FFL. We need to continuously promote the service and FFL helps with this... If we hadn't been working together the [school meal] take up might not have been as high as it is." [Kirklees Caterer #2]

The research sought to make a comprehensive assessment of costs. In addition to local authority and clinical commissioning group funds, we factored in funds from the Big Lottery, the Department for Education and the cost of some staff time in school, hospital and catering settings.

Although SROI is not centrally focused on outputs, a notable feature of the programme was the scale and reach of the initiative, particularly in primary and special schools in the two areas. For example, over the 24 month period of the commission:

- in Kirklees 56 schools out of a total of 182 had enrolled with FFL or achieved an FFL award.
- in Calderdale 27 schools out of a total of 113 had enrolled with FFL or achieved an FFL award.
- in both areas FFL continued to support schools (40 in Kirklees and 43 in Calderdale) that had already enrolled with the programme prior to the commission.

These data indicate that over 60,000 children and young people, 2,500 teaching staff and almost 1000 catering staff were exposed to the FFL programme for the two areas combined.

Stakeholders reported 55 outcomes that we grouped thematically, assessed in terms of their potential overlap, and examined their viability for inclusion in the next stage of analysis. This involved the identification and collection of potential sources of evidence to estimate the impact of these perceived outcomes. We used data from a cross-sectional evaluation survey of Key Stage 2 pupils; staff training feedback evaluations; FFL programme monitoring and evaluation records; other survey data, for example on hospital food; questionnaire returns from food suppliers and caterers; and direct reports from interviewees. The study examined both negative and positive outcomes, and sought to locate appropriate financial proxies to support monetary valuation.

### 3. Results

### 3.1 Overall SROI results

The social return is expressed as a ratio of present value divided by value of inputs. Although there are likely to be impacts of the programme over many years, we calculated the value of the impacts only up to three years. This was intended to provide funders with an understanding of the social value of the programme over the shorter term of a local planning cycle.

Stakeholders in the two case study areas identified a similar range of outcomes and data sources. This was not surprising given that the commissions had similarities in programme design and delivery. Stakeholders also reported synergy and collaboration between the two local commissions with regard to staff training, food procurement and hospital settings work. We therefore produced a SROI ratio based upon the combined findings of the two case studies.

The total financial value of the inputs for the two case studies was £395,697 and the total present value was £1,743,046. This provided a SROI ratio of £4.41 of social value created for every £1 of investment.

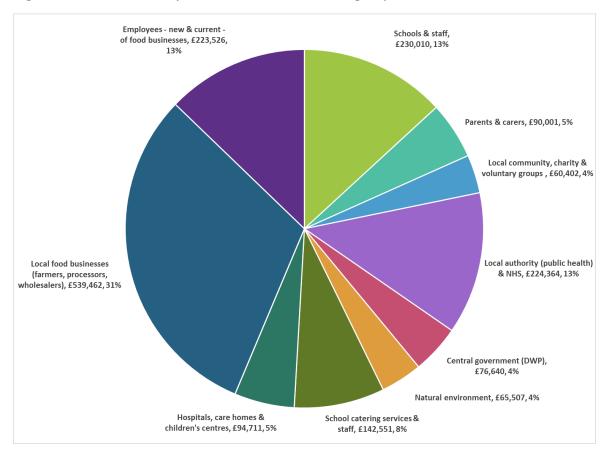
#### 3.2 Share of value by stakeholders and interest sectors

The value of the programme can be expressed with regard to different stakeholders or sectors of interest. A breakdown is provided in Figure 2.

Local suppliers (farmers, processors and wholesalers) retained or gained new sales through contracts with caterers. The stability of large ongoing contracts lent greater business security, contributed towards new local job opportunities, job security and increased sales of goods direct to the public through farm shops, market events and other outlets. These changes are also beneficial to central government in the form of local employment creation, tax revenues and reduced welfare spending.

School catering services benefited from the FFL Catering Mark in terms of business security, retention of contracts, improved staff performance and increased capacity to develop and implement procurement of sustainable foods. Small increases in school meal sales over the 24 month period could be attributed to FFL in some schools, although the evidence was mixed in this respect. Cooks and other catering staff benefited from training opportunities, peer networking and improved job satisfaction.

Perhaps one surprising finding was the role of Food for Life in supporting the working practices of teaching and catering staff. Some of this took the form of curriculum support, skills development, expert support and networking opportunities. Other outcomes - albeit less tangible - were reported to carry equal weight, including the role of FFL in promoting enjoyment and a sense of accomplishment at work. Some senior leaders in schools, catering agencies and other settings felt that the link between positive food culture and staff wellbeing was not a peripheral benefit, rather it underpinned a productive and high performing education workplace.



### Figure 2: Share of value by shareholders and interest groups

Local Authority Public Health and the local NHS are likely to have benefited from improvements to the dietary health of children. Research in Kirklees and Calderdale found that Year 4-5 pupils in schools engaged with FFL were twice as likely to eat five or more portions of fruit and vegetables a day compared to pupils in schools not involved in the programme. We used this data to estimate the short term and longer term impact on reduced healthcare use. In the absence of a widely accepted approach to assessing the economic value of interventions designed to improve the diets of children and young people we developed a 'willingness to pay' approach with key stakeholders in Public Health. This built upon national evidence of diet-related burden of disease and its economic impact scaled to the local level. We adjusted for the role of other key factors, such as the work of Kirklees Council Catering Service that has developed in synergy with that of Food for Life.

Food for Life was a popular programme in schools and other settings and acted as a bridge with local communities. Parents and carers benefited through improved relationships with school and volunteered at FFL school events, which in turn support children's readiness to learn and overall wellbeing. Rather than duplicating the work of other community and charitable agencies, FFL largely helped stimulate local voluntary activities through, for example, market events and community visits. The proactive approach of the FFL programme teams in partnership work with other agencies was a theme running through the stakeholder interviews Through interviews with stakeholders and external evidence we identified a range of financial proxies to place a value on these 'softer outcomes', including equivalents in the form of training, volunteering and fund-raising.

New settings work with hospitals, care homes and children's centres were in the early stages during the 24 month commission period. The main benefits took the form of staff training and expert support to caterers and senior management in changing organisational practices. Work in hospital settings had advanced quickly, despite major challenges in terms of the organisation scale, and there was some evidence of a positive impact on reducing food waste and patient satisfaction with hospital food.

Improvements in reduced food wastage and reduced transportation were the main environmental benefits that we were able to quantify. As has been reported in other research, other outcomes for the natural environment and sustainability were more difficult to evidence at level of a local authority study. A scaled up SROI analysis of the national FFL initiative, and particularly the FFL Catering Mark, would provide an evidence platform to examine more clearly the impacts of, for example, improved biodiversity from organic food production methods, reduced consumption of meat and dairy products and higher animal welfare standards.

### 3.3 The case study areas: similarities and differences

Kirklees and Calderdale case study areas illustrate important features of FFL local commissions including the role of grass roots networks, coordinated local food strategies and different catering models. They show how benefits can be created through extending work from schools into other settings such as hospitals, early years and care homes. As adjacent local authorities the two areas also acted as a basis for understanding the social value of FFL at a sub-regional level.

The SROI ratio for Calderdale (£1:3.70) was lower than that for Kirklees (£1:5.12). A number of reasons could account for these differences:

- 1. The pupil and other populations of Kirklees are about twice those of Calderdale. This means that potential reach and scale of the programme in Kirklees was significantly greater than that of Calderdale.
- 2. The catering systems are very different. The local authority caterer in Kirklees has contracts with nearly all schools in the authority and holds the Silver Food for Life Catering Mark. Large numbers of stakeholders are therefore affected by changes in FFLCM-related practices. By contrast reforms to school catering in Calderdale are more heterogeneous and less systemic across all schools.
- 3. It is possible that the Calderdale programme creates similar value to the Kirklees programme. However the availability of evidence, suitable indicators and appropriate financial proxies was more difficult to locate in the case of Calderdale than in Kirklees.

These factors show that it is not advisable to make crude comparisons between the two areas, without first taking into account the different local contexts.

### 3.4 Sensitivity analysis: testing the results

Sensitivity analysis is a method for testing the extent to which the SROI results would change if we adjust estimates or removed factors from the analysis. The lowest estimate, based on halving the value of all outcomes, produced a ratio of £1:2.21. The highest estimate, based on reducing dropoff for all outcomes, produced a ratio of £1:6.29. The majority of sensitivity analyses found SROI ratios between £1:3.06 and £1:4.46.

### Figure 3: SROI sensitivity analysis for the case study areas

Sensitivity Analysis	Calderdale	Kirklees	Two case studies combined
Findings from analysis	£3.70	£5.12	£4.41
Increasing deadweight to 50%	£2.33	£3.16	£2.75
Increasing displacement to 50%	£2.89	£3.18	£3.04
Increasing attribution to 50%	£3.06	£3.60	£3.33
Changing drop-off to 10% for all outcomes	£6.91	£7.51	£6.29
As above, drop-off 75%	£3.48	£4.03	£3.75
Halving all values of outcomes/ beneficiary numbers	£1.85	£2.56	£2.21
Removing all dietary health-related outcomes	£3.18	£4.56	£3.87

The role of the programme in improving the dietary health of children was a challenging area for valuation due in part to the lack of well-established financial proxies. Removing the value of all dietary health-related outcomes for children reduced the SROI ratio by a relatively small amount overall, from £1:4.41 to £1:3.87. Overall, multiple changes to the estimates of deadweight, attribution and drop-off indicates that substantial changes would have to be made to the assumptions in order for the ratio change from positive to negative. These calculations show that even when significant changes are made to the analysis the results still show clear evidence of social value being created up to 3 years after the FFL intervention.

#### 4. Discussion

#### 4.1 Overview and Implications of the research for Soil Association Food for Life

This SROI analysis of FFL was innovative because it took into account a considerable body of evidence from local stakeholders, evaluation fieldwork and external research to develop a whole system account of the social value of a healthy and sustainable food settings and area-based programme. This type of research can be used to inform policy makers of benefits of coordinated action with public service caterers. It also provides additional support for producers and farmers seeking to mainstream the supply sustainable food through leading catering services.

The research supported Soil Association Food for Life to demonstrate the impact of the Food for Life approach when delivered across settings throughout a place or area (defined by a local authority boundary in this case). The research will also support Food for Life to understand the impacts of the programme better which will in turn support further programme developments in the future. The research also provides an important evidence-base that can be used to provide rationale for implementation of the approach in local areas.

#### 4.3 Strengths and limitations of the study

This study built upon the principles and methods adopted in previous SROI research. We gathered the perspectives of a large number and variety of stakeholders and used this information to underpin the analysis of outcomes. We took into account a considerable body of evidence from evaluation fieldwork and external research and the study benefited from the availability of well recognised and established financial proxies for many of the outcomes. In order to avoid overclaiming on the role of the programme in creating change we factored in the role of other initiatives and changes in the national policy environment such as the introduction of Universal Infant Free School Meals. The validity of the findings has been explored with key stakeholders and further assessment will be made as the findings of the study are disseminated.

One of the challenges concerned creating an account that adequately captured the scope and breadth of the impacts. This placed limits on the resources available to collect comprehensive data across all outcomes. Some stakeholders declined or were unable to provide detailed supporting data. We focused on short term outcomes rather than those that might result over a longer period beyond three years. A further discussion of the strengths and limitations of the study is presented in the full technical report (Jones et al., 2016).

### 5. Conclusions

This study found that FFL is valued by schools, civil society, local business and wider stakeholders as a locally commissioned programme in local authority areas. The SROI provides a financial measure of this value: that for every £1 spent on FFL there is social value of £4.41 created over a three year period. In the analysis, multiple adjustments to the role of different outcomes and other factors shows that the social value is likely to fall between a lowest estimate of £2.21 and a highest estimate of £6.29. The clustering of values around a narrow range of £3 to £4 lends confidence to the validity of the results.

The methods and findings from this research are significant for other Food for Life local commissions, the Food for Life Catering Mark and other area-based food programmes, such as the Sustainable Food Cities initiative, both in the UK and internationally. In many instances, the bottom-up research method places limits on the generalisability of SROI results because stakeholders are making locally specific judgments on value. However in this study the close correspondence with other SROI studies in terms of methodology and findings suggests that a similar range of outcomes can be anticipated in other areas where an FFL programme model is implemented, especially where the programme is directed at schools and public service catering - and engages with other settings such as children's centres and hospitals.

#### 6. References

Arvidson, M., Lyon, F., McKay, S., Moro, D. (2010) *The ambitions and challenges of SROI.* Birmingham: Third Sector Research Centre.

Banke-Thomas, A. O., Madaj, B., Charles, A., & van den Broek, N. (2015). Social Return on Investment (SROI) methodology to account for value for money of public health interventions: a systematic review. *BMC Public Health*, *15*(1), 582.

Cabinet Office (2009) *A guide to Social Return on Investment,* Cabinet Office and SROI Network: London.

Courteney, P. (2012) The Local Food programme: A Social Return on Investment Approach. CCRI.

Durie, S., (2008) *Hungry for Success – Local Food for School Meals: a predictive SROI Report,* Social Economy Scotland and Communities Scotland.

HESA (2014) Higher Education Statistics for 2012-13. http://www.hesa.ac.uk/index.php?option=com\_heicontacts&Itemid=87 Jones, M., Dailami, N., Weitkamp, E., Kimberlee, R., Salmon, D. & Orme, J. (2012) Food Sustainability Education as a Route to Healthier Eating: Evaluation of a multi-component school programme in English primary schools. *Health Education Research*, 27 (3). 448-458.

Jones M, Pitt H, Oxford L, Orme J, Gray S, Salmon D, Means R, Weitkamp E, Kimberlee R & Powell J (2016) *Food for Life: a Social Return on Investment Analysis of the Locally Commissioned Programme. Full Report.* UWE Bristol.

Jones, M., Pitt, H., Oxford, L., Bray, I. & Orme, J. (2015) *Pupil survey in local commission areas: Food for Life's impact on primary school children's consumption of fruit and vegetables.* UWE Bristol.

Kaphingst, K. M., and French, S. (2006) The role of schools in obesity prevention. *The Future of Children*, 16(1), 109-142.

Kersley, H. & Knuutila, A. (2011) *The benefits of procuring school meals through the Food For Life Partnership: An economic analysis,* New Economics Foundation.

Lancaster, O. & Dune, S. (2008) *The Social Return on Investment of Food for Life School Meals in East Ayrshire.* Footprint Consulting Limited.

ONS (2014) Changes in the older resident care home population between 2001 and 2011. http://www.ons.gov.uk/ons/dcp171776\_373040.pdf

Orme, J., Jones, M., Kimberlee, R., Weitkamp, E., Salmon, D., Dailami, N., Morley, A. and Morgan, K. (2011) *Food for Life Partnership Evaluation: full report*. University of the West of England, Bristol.

NHS (2015) NHS Choices, Work Place Health. NHS. http://www.nhs.uk/Livewell/workplacehealth/Pages/workplaceoverview.aspx

Soil Association (2012) Our History. https://www.soilassociation.org/

Soil Association, Food for Life Catering Mark (2015) *Handbook 2015 for Schools.* <u>http://www.sacert.org/catering/standards</u>

Stein, M. (2012) *Public Sector Food Procurement & Sustainability in UK Schools.* Salford University Conference <u>http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2012/IFSA2012\_WS4.2\_Stein.pdf</u>