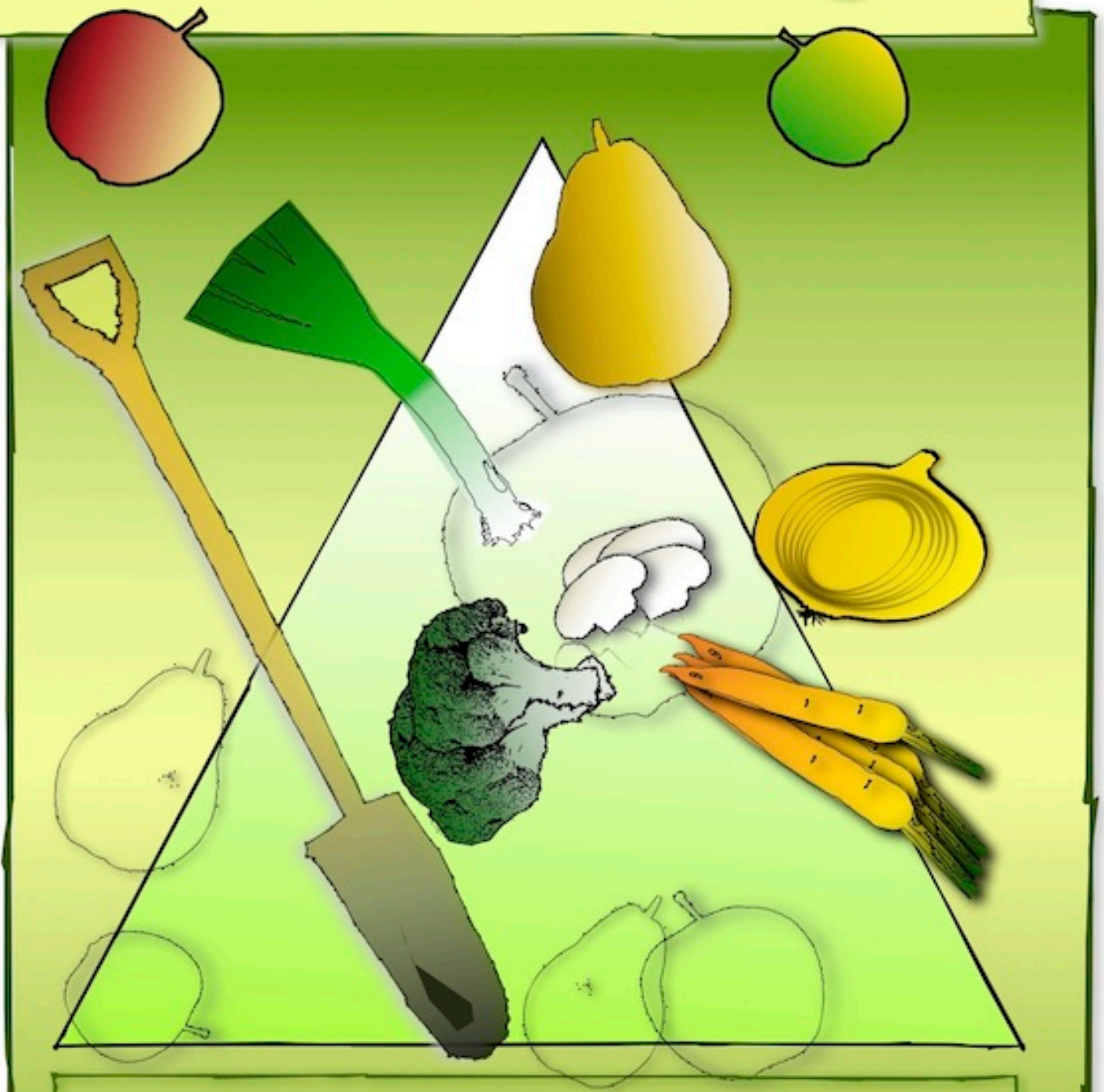
Opportunities for Community Food Growing



An initial enquiry into land and ideas for community food growing in the town of Callander

By Callander and Climate Change, March 2012

Opportunities for Community Food Growing

An initial enquiry into land and ideas for community food growing in the town of Callander.

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1 INTRODUCTION

This study is an enquiry into opportunities for community food growing in Callander[1], both identifying unused areas of land in Callander that could be turned into community growing spaces and/or biodiversity areas, and exploring community food growing schemes as seen in other communities in the UK which show potential and suitability for Callander.

This study forms an integral part of the Callander and Climate Change 2 project, reflecting on ideas, actual initiatives and delivering input for future activities. Information for this study has been gathered during the course of the project between April 2011 and March 2012. It is the intention to use the outcomes of this study for further local food initiatives in Callander.

2 THE CONTEXT

In a time when climate change and the peaking of resources such as oil but also of essential topsoil minerals such as phosphorous[2] are threatening our lifestyles and food production, we need to seriously rethink the way we grow, transport, package and distribute our food.

> "Our soils have degraded over the last 200 years due to intensive agricultural production and industrial pollution. This [...] may be magnified by climate change. Safeguarding our soils for future generations means managing them better, reducing degradation and building resilience to increasing pressures in order to provide a sustainable food supply and cope with our changing climate." [3]

We will no doubt explore a range of solutions to the challenges ahead, but it seems evident that a more localised and smaller scale food production that does not depend on fertilisers or pesticides would not only cut 'food miles' massively, but increase future food security and regenerate topsoil.[4]

It would also reduce unfair trade, pollution and the cutting down of rain forests in other parts of the world, all linked to current industrial agricultural practices and mostly in developing countries.

Although local and small-scale food production may not be enough to meet all local food needs, it would go a long way towards improving our health and the health of our environment.

On top of providing us with fresh food, it raises our awareness, increases our knowledge and skills, enhances biodiversity and last but not least generates jobs in a more localised economy. Local food production is sustainable on all levels, environmental, social and economic and greatly enhances community resilience.

3 PEOPLE

Callander and Climate Change is a community group in Callander, a Scottish village of about 3500 residents at the entrance of Loch Lomond and the Trossachs National Park, just 16 miles North of Stirling. The group received funding from the Scottish Climate Challenge Fund and has been working in the community since November 2009 to raise awareness about climate change and sustainability, and to support members of the community in taking measures to reduce their carbon footprint, whether through energy efficiency measures, low-carbon transport or local food production. This study is part of the second project period from April 2011 - April 2012 and aims to explore availability and suitability of land in Callander for community growing spaces.

Local background

At the end of 2009, local fruit and vegetable growing in Callander was limited to some residents growing food in their own gardens. Because of an urgent demand for allotments, championed by a local resident, Callander and Climate Change held a public meeting about local food growing. This led to the set-up of a local Allotment Group. The group initially met every month but after another year and a half of fruitless efforts to acquire suitable land, group members felt disillusioned and the initial enthusiasm ran dry.

At the beginning of 2011 an opportunity seemed to arise when one of the local landowners showed a willingness to discuss a site. However, after a few meetings spread out over a year, negotiations remained unsuccessful.

The Allotment Group then contacted Scotland Community Land Advisor Sheila Hobbs from the Community Land Advisory Service (CLAS) who, after meetings with both private landowners in Callander, advised the group to explore alternatives.

Scotland Community Land Advisor Sheila Hobbs:

"As a general summary, my discussions with local landowners have not proved fruitful. I felt the greatest potential would lie with the land zoned for business / industrial purposes as I cannot see that it will be developed in the short term. Having spoken to the owner's agent, however, it seems that the owner is unable to allow the use to be changed and for the community to lease it even for a short period of time and this will adversely affect the Estate when selling this land for development due to taxation law. The agent was keen to point out that the estate involves itself in community projects and has reached agreement with a community elsewhere for allotment provision so it was a case of being unable to help, rather than unwilling. As part of the CLAS submission to the emerging Community Empowerment and renewal Bill process, I suggested that changes should be made to legislation to allow communities temporary use of land without affecting the financial position of the landowner".

Members of the Allotment Group and Callander and Climate Change became more and more convinced of the need for local food growing. Contact with other community groups had broadened their horizon and increased knowledge and understanding of other options. Allotments could be included in a much wider local food scheme, with a broad appeal involving many more Callander people.

Involvement of local people and groups

The number of people involved with food growing in Callander has increased considerably over the two and a half years of raising awareness about the advantages of local food production and consumption by Callander and Climate Change.

Community groups such as the Greening of Callander, The Horticultural Society, The Scottish Wildlife Trust, Callander and Climate Change and McLaren Community Leisure Centre have formed an umbrella group with the working title 'Fruitful Callander'. They are now working with the Callander Primary School, McLaren High School, the Callander Youth Project and with local individuals to explore and establish projects related to the growing of food ornamental greens and spreading wildflowers in town.

Although not everyone in these groups shares the same views on climate change, all members are keen to share their passion for growing with each other and with members of the local community. It is this common ground that has already made for some successful projects, the biggest one being the Callander Community Orchard.

During the Callander Charrette Community Consultation in December 2011, it became clear that Callander's young people, in particular, were interested in learning more about growing their own food and were keen to involve older generations. This could be a point of focus for future activities and a start has been made with the building and planting of no-dig raised beds at the Callander Youth Project, which saw an intergenerational mix of locals involved.

Existing Food Projects

Callander Community Orchard and Fruit Trees

As part of Callander and Climate Change's 2011-2012 project period, and after exploring several sites in Callander for availability and suitability, community group Fruitful Callander planted a Community Orchard of 33 fruit trees in November 2011 at McLaren Community Leisure Centre. Its Board actively supports the orchard and two staff members have been trained in Orchard Care and Management, which will ensure proper care and maintenance of the community orchard.

An additional 117 fruit trees were planted throughout the town: Callander Primary School planted 11 trees in their school garden, and a street community in Bridgend planted 5 trees. The Callander Youth Project planted 10 trees in their back garden, and the local Roman Camp Hotel added 5 trees to their walled garden. At South Church Street, 3 trees were planted.

The chair of McLaren Leisure Centre Board offers a hand to Callander's youth

Another 83 fruit trees were distributed throughout Callander in people's private gardens to form a 'virtual orchard' for the benefit of wildlife and local fruit production.

In addition to the staff members of McLaren Leisure Centre, two project officers from Callander and Climate Change were trained in orchard care and management and will be able to educate and train members of the public in planting and caring for fruit trees.

Callander Youth Project No-Dig Raised Beds

On top of the small orchard of 10 fruit trees, Callander and Climate Change helped design, build and plant 5 no-dig raised beds at the Callander Youth Project's base, the former Bridgend Hotel. A total of 17 square meters were planted with herbs and vegetables using permaculture principles.

This raised-bed project is the start of an exemplar permaculture based community garden, inspired partly by the educational side of the Gartmore Walled Garden project.

Future challenges

Callander residents are a challenging mix of people to engage with sustainability; it's a tourist town (businesses have an outward focus) as well as a commuter town (the working generation depends on travel) and a retirement town ("the future is no longer my concern"). Other communities (e.g. Linlithgow) have expressed similar findings.

There is no easy solution to this challenge, but when reaching out to people in any community, it's important to understand where they are coming from and to translate the need for more sustainable food production into activities residents consider useful, valuable and worth committing to.

In Callander's case, food growing projects that enhance the town attractiveness, decrease the need to shop elsewhere and bring people together to share skills, knowledge, experience and – last but not least - enjoyment and fun. This will enhance community cohesion and increase food security and resilience. Although it is always a challenge to get more people involved in local projects, food projects seem to genuinely appeal to people.

We depend upon food for our very survival and it's as if that brings about an almost intuitive respect for food growing activities. Stirling Council's Land Services department was quite concerned about vandalism when they first started their Edible Borders project (one activity of the Incredible Edible approach[5]), but found the opposite was true. Not only did none of the sites planted suffer from vandalism, but Stirling Council gardeners, local residents and visitors all responded very positively to the vegetable plots put in place[6].

4 ENVIRONMENT

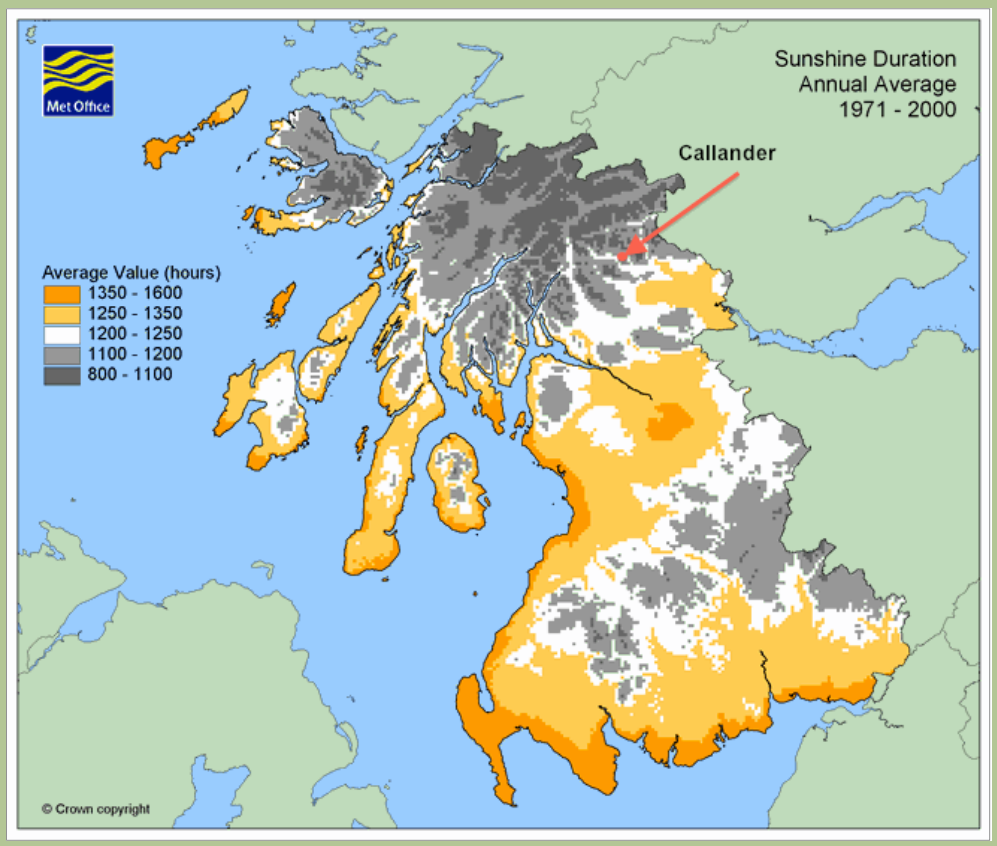
Callander may not be the best place for food growing; the soil is fairly poor (eroded and rocky), and lacks drainage, which is why sheep or cattle are grazing most of the land.

Callander's climate is influenced mostly by western weather patterns, which means high humidity levels throughout the year, and a relatively low average of sunshine annually.

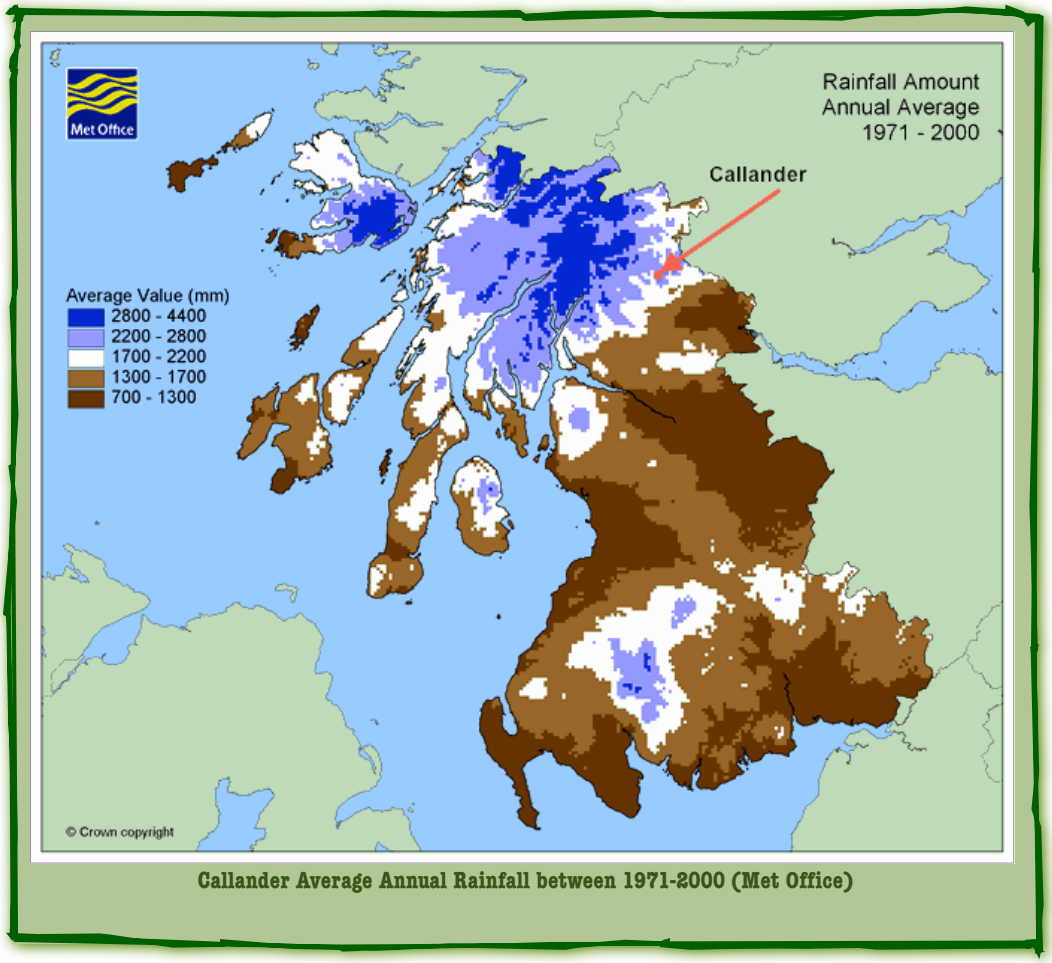
(See maps on next page)

Callander residents will need to find solutions to the conditions above; organic and permaculture principles respect, work with nature rather than fight it[7], and manmade solutions such as south facing walls or poly tunnels, create microclimates in which food can be grown succesfully.

Although food growing will be challenging here, it would be a restorative process in itself: improving local eco-systems, enhancing biodiversity and nourishing the soil back to health. On top of that, it would generate a lot of knowledge and experience about successfully growing food in the Western regions of Scotland, which could be shared with other communities.



Callander Average Annual Sunshine duration 1971-2000 (Met Office)



Callander Average Annual Rainfall between 1971-2000 (Met Office)

5 LOOKING FOR LAND

From March 2011, Callander and Climate Change project officers visited numerous potential sites (see appendix -1-), and spoke with local landowners and Stirling Council officers to discuss unused plots of land that could be used for the growing of food. It was a lengthy process and only in the last two months of the project did it lead to promising results.

Callander has a good amount of suitable land for food growing, but most sites near the center of the town are owned by private landowners, who expressed no interest in donating or leasing any land to the community for the purpose of food growing.

From the beginning of site assessment, Stirling Council was helpful in identifying Council owned sites but most sites were either too small or unsuitable because of water logging problems.

Low Carbon Stirling Edible Borders

In the meantime, in Stirling, the Council's Land Services Department had become involved with Going Carbon Neutral Stirling, planting herbs and vegetables in Edible Borders, a scheme that has run successfully since 2008 in Todmorden in England (Incredible Edible Todmorden[8]).

This scheme does not necessarily require more land, but instead uses existing council owned and maintained plots, replacing annual ornamental plants with herbs and vegetables.

The Edible Borders have been so successful that the Council has now put in an application for additional funds with COSLA (Convention of Scottish Local Authorities).

After speaking with Stirling Council's Land Services Department Manager David Crighton and GCNS's Emily Harvey, and considering the lack of land availability/suitability, Callander and Climate Change decided to further explore the Incredible Edible approach as one of several approaches to the growing of food in Callander.

Contact with Pamela Warhurst and Mary Clear from Todmorden led to a fuller and deeper understanding of this approach to community food growing in face of the challenges ahead (more detailed information below).

After discussing possibilities at the Grow Forth Food Summit in Stirling mid February 2012, the Council's Land Services Department decided to transform one of the annual beds at Lagrannoch Crescent in Callander this year, supporting the Fruitful Callander group to promote and showcase the Edible Borders concept in the town.

McLaren Leisure Centre

Mid January, a site near the entrance of McLaren Leisure Centre was looked at for a few small allotment plots or a community growing space. The National Park and Stirling Council were approached and planning permission has been requested. If planning permission is granted, Fruitful Callander will consult with the local neighbours about plans for food growing on this site. Stirling Land Services will be included in our discussions as this could well be a good site for Edible Borders too.

South Church Street

Since Stirling Council took away the public toilets on this site, Fruitful Callander has been exploring the idea of creating a permanent community garden in the area and making it a feature that would enhance South Church Street. The Callander charrette discussions suggested that the town should focus more on the river and this garden project with the curving wall would help direct both locals and visitors towards it.

The site lies on what is currently the main walking route to school from the east end of Callander. Proposals have been made to Stirling Council in order for the Callander Community Development Trust to have a clear mandate to take a 'lease' on the site. It would seem that there is no prohibition on erecting a permanent structure (e.g. dry stone wall of modest dimensions) and plans include several fruit trees and an Edible Border or raised beds.

Local woodland

Mike Strachan, representatice of the Forestry Commission, suggested a meeting to discuss woodland allotments, particularly on the smaller woodlands on the edges of the town. (source Sheila Hobs).

Balvalachlan

At the time of the writing, there is little land available in Callander or its immediate surroundings for food growing on a medium (±1 acre) or larger scale (2-5 acres).

However, since the beginning of 2012 new opportunities seem to be arising. Stirling council is making an effort to include Callander's need for more community food growing space in their land purchasing decisions for future burial grounds. Land Advisor Sheila Hobbs confirmed the Council's intentions after a stakeholder meeting she attended end of December 2011.

> "I discussed your situation with Stirling Council. The Council was sympathetic to your cause and felt that the cemetery proposal would indeed come forward in a relatively short period of time and due to the long term nature of the scheme, land would be available to you over a relatively long term. The council felt that it may be able to reach agreement with you for the management of Council verges, flower beds etc which may help you in the short term to create gardening opportunities to at least showcase your ideas. It also said that the cemetery planning application should get permission by March 2012, that formal cemetery works would not begin immediately and that it is a long term burial strategy so there would be opportunity for good sized long term gardening area there. We all appreciate that the cemetery lies a little way out of

This is promising news, but no information is available yet as to the size of the area discussed above or when actual preparations of the site could begin: the site may need soil testing, water drainage and infrastructure put in (road and/or cycle paths) for access. We do not expect cultivation to happen this coming growing season (2012). Negotiations will hopefully start soon after planning permission has been granted in March 2012.

7 AN OVERARCHING APPROACH
(to community food growing)

"Incredible Edible Callander"

It will be a challenge to increase local food growing in Callander for reasons cited before. However, there is one community approach we came across that really shows much promise.

> "People [...] can rise to the challenges of the future without waiting for "the powers that be" to do the thinking and acting for us. For that we need to take risks, to learn to, not always, ask permission, to step out of comfort zones risking embarrassment or worse in order to do what we know is right and necessary. Initiative taking, leading by doing, generosity and sharing, these are keystones."
>
> **Pam Warhurst, Incredible Edible Todmorden**

The Incredible Edible Approach to the growing and sharing of food, has its focuses on developing the collective skills of a community. Initiated in 2008 by Pamela Warhurst MBE, (current chair of the Forestry Commission for England, Scotland and Wales) and Mary Clear, Todmorden's Community Development Officer at the time. From the beginnings with herb gardens, they've taken to planting and growing vegetables and trees.

They have now planted several orchards and there are more to come. They are working with public bodies to use their land – like the fire station and the railway station – or to work with them on their own 'Incredible Ideas' – like social landlord Pennine Housing. Every school in the town is involved in growing with IET and they promote food-based learning for the community as a whole.

It quite naturally raises a new awareness about the food that we eat and where it comes from. It re-acquaints children and grown ups with the history of food in their town, reconnecting us with the land and, on top of food, growing a sense of place and belonging. Incredible Edible Callander could also bring together all Callander's existing food projects and the people involved in them (the community orchard, the CYP permaculture garden), and all future initiatives.

The ethos of growing and sharing creates a fertile environment for preparing for the time ahead socially as well as practically.

The biggest difference with many other approaches is the focus on social or collective change rather than individual behaviour. The Incredible Edible approach focuses on our behaviour as social beings, and the building of community cohesion. As such it does not only address all issues surrounding food production and consumption, but also important issues such as the challenges of social unrest and future competition over food resources.

It's all about the understanding of our food chain and making changes in every single stage of that chain. Incredible Edible encourages, enables and empowers people of all genders and ages to do their own thing and can include a wide range and diversity of projects (see IET brochure, available for download from their website). It offers opportunities for training and (self-) employment in food related businesses.

Potential Incredible Edible sites that may become available within the next few months (season 2012) in Callander are:

- South Church Street (raised beds and fruit trees)
- McLaren Leisure Centre (community growing space)
- Callander Youth Project (permaculture garden)
- Stirling Council's Edible Border plot

We believe that the Incredible Edible approach fits our circumstances perfectly and would be the best way forward for Callander to continue to grow food, community cohesion and resilience for the future and increase food security. One of the main traits of the Incredible Edible approach is that it's very hands-on, inclusive and empowering.

All information of this project is available for download from the Incredible Edible Website: www.incredible-edible-todmorden.co.uk. With their kind permission we have added a summary of their detailed report 'How to grow Sustainable Communities' (see appendix 3).

Meanwhile, more cities, town and villages in the UK and internationally (Netherlands, France, Germany, Italy, South Africa and more) are adopting the Incredible Edible approach. An Incredible Edible Network is available for advice, support, materials (toolkit), etc. Filmmaker Steven Hay has recently made a short film highlighting the success of this approach. The film can be viewed online at http://vimeo.com/36838823.

Benefits of (organic) local food growing:

- decreases the costs of fresh fruit and vegetables
- improves soil condition
- improves people's health
- increases biodiversity
- improves rural economies (small farms support growing fruit and vegs, and rearing animals)
- improves local employment by creating job opportunities throughout the food system
- enriches local communities as money earned is spent in the community
- re-skills people in preserving and preparing food from scratch (cooking and baking)
- reconnects people with their food and with the soil
- reconnects people with each other, enhancing community cohesion

Just a few 'incredible' ideas for Callander!

- Edible borders: growing fruit and vegetables in borders round the town
- Egg-citing: small scale chicken rearing
- Community herb gardens
- Container food growing
- Fruity Business: how to grow soft fruit and fruit trees; how to preserve fruit
- Growing bodies: involve the Police, the Tourist Information Centre, the National Park, the Library
- Cooking in Callander, with the support of local business
- Permaculture Garden at the Callander Youth Project, teaching young people to grow their own
- Food projects in collaboration with the Primary School and the High School

7 CARBON REDUCTION AND

When we think of Climate Change, we tend to think of energy and transport issues rather than food issues. We have all heard about solar panels and how we need to insulate our homes, and most of us are aware that cars and flights emit considerable quantities of carbon dioxide.

But how and what we eat has just as big an impact on our changing climate. No less than thirty percent of greenhouse gases can be traced back to our food system, from food growing (especially in industrial agriculture), processing, packaging and transportation[9]. This impact is not always transparent however and there are a lot of hidden carbon emissions in bringing our dinner to our plates.

There is a strong relationship between food, transport and energy. The diagram on page 11[10] shows how complicated our food chain has become and how much energy goes into the growing, processing and transporting of food. The whole system depends on the availability and burning of cheap fossil fuels. Pesticides and fertilisers are not only made of oil, but their production demands a lot of energy, which is generated by the burning up of fossil fuels such as oil and natural gas. Plastic packaging is made of oil and requires energy to make it. Transport in all stages of food production needs gallons of oil. Heating and lighting of greenhouses and factories requires energy, which is generated by burning fossil fuels. Farm equipment (combine harvesters etc) uses oil. Cooking, refrigerating and freezing of processed foods all use a lot of energy generated by burning fossil fuels, etc etc.

> "It takes up to 140 liters of water to produce one cup of

There are a few rules of thumb we can live by to reduce carbon emissions related to our food system. Generally speaking, common sense applies. Buying conventionally grown strawberries from the USA that have been flown into the UK under refrigerated conditions amounts to eating gallons of fossil fuels.

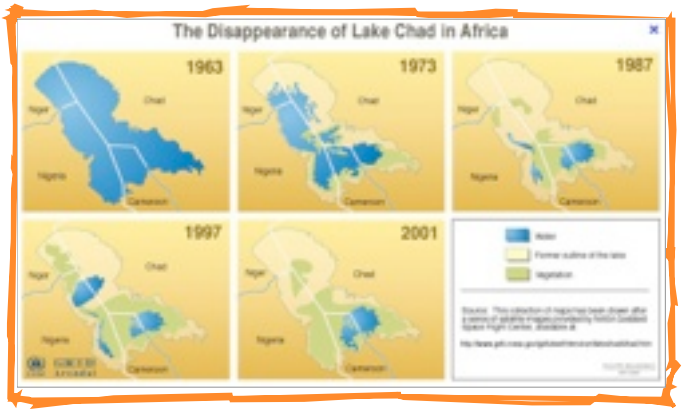
Growing them in the garden or buying them when they are in season from a local farmer is low-carbon and more sensible. Although buying from local shops can be more expensive, cheaper prices in supermarkets externalise the true costs of our food system, and dump the consequences in the laps of our children and grand-children.

Additional issues to food production

On top of carbon emissions produced, there are additional challenges to our food system.

Water

In addition to producing massive amounts of greenhouse gasses, global food production is using up valuable water resources in many developing countries. Rivers are drying up and lakes are shrinking; Climate Change is likely to make things much worse.



Lake Chad disappearing under the pressure of industrial agriculture and climate change[11]

The "Average household water use for washing and drinking in the UK is about 150 liters a person daily, but we consume about 30 times as much in 'virtual water', used in the production of imported food and textiles; taking virtual water into account, each of us soaks up 4,645 liters a day."[12]

Pollution

The use of pesticides, herbicides and fungicides has a negative impact on the environment and on our health. According to the Soil Association: "Around 31,000 tons of chemicals are used in farming in the UK each year to kill weeds, insects and other pests that attack crops. There is surprisingly little control over how these chemicals are used in the non-organic sector and in what quantities or combinations."

Figure 5 Principle sources of greenhouse gases in the food supply chain

Orange arrow indicates transport

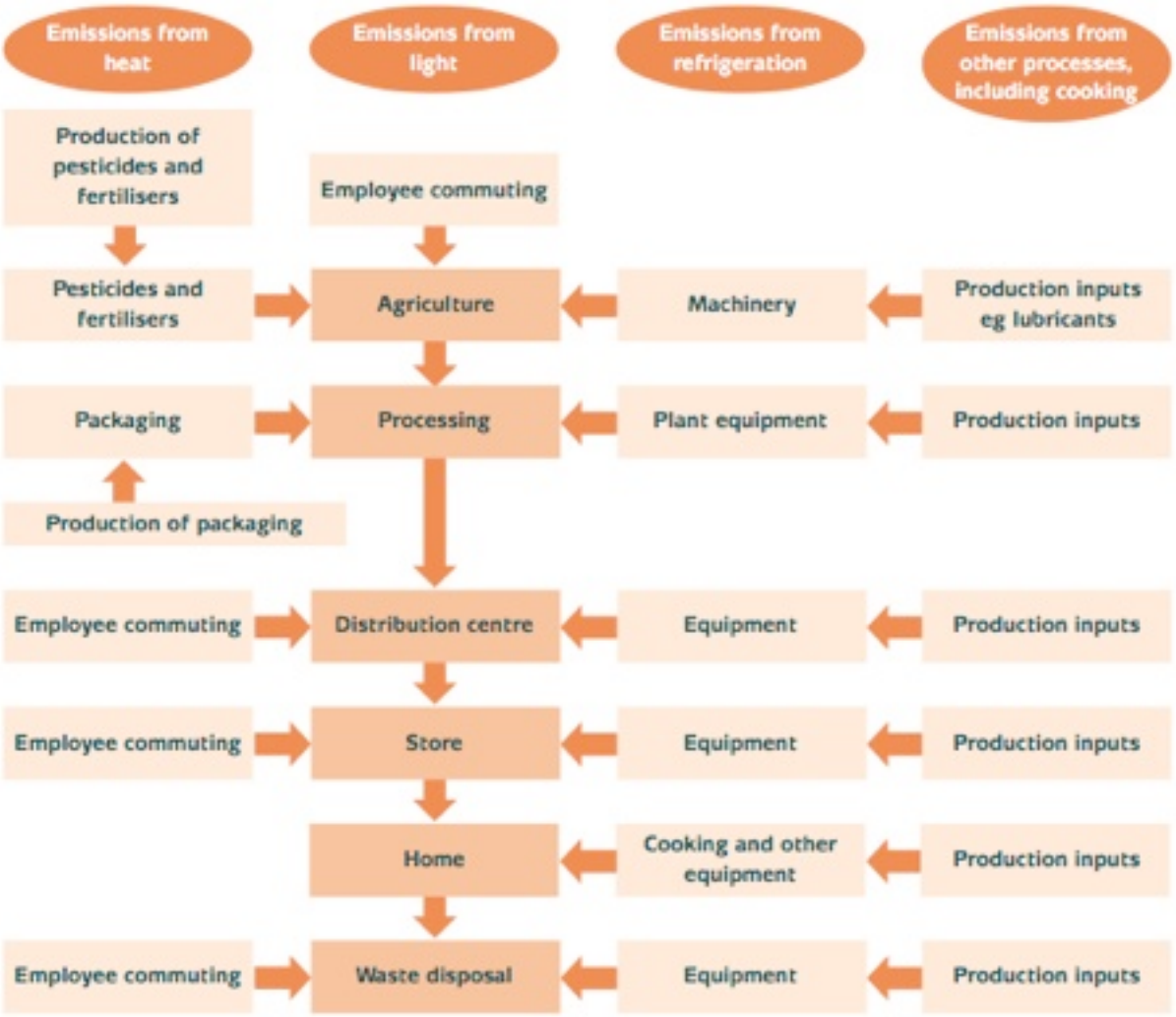


Diagram taken from United Nations Economic Commission for Europe (UNECE), Health and Environment, Trans European Programme: http://www.thepep.org/ClearingHouse/docfiles/wise_moves.pdf)

What we do know is that 150 of the available 311 pesticides commonly used have been identified as potentially causing cancer and many of us would have been exposed to these pesticides before we were born. The most dangerous chemicals used in farming, such as organophosphates, have been linked with a range of problems including cancer, decreasing male fertility, fetal abnormalities, chronic fatigue syndrome in children and Parkinson's disease[13]. The use of fertilisers is not without concern either: "Excess nutrients from fertilisers in lakes, rivers, and groundwater can cause algal blooms, eutrophication, and subsequent dead zones. In addition, nitrates are harmful to aquatic organisms by themselves. The main contributor to this pollution is nitrate fertilizers whose use is expected to "double or almost triple by 2050"[14].

Animal Welfare

Intensive animal farming, or factory farming, is a threat to animal welfare conditions. "Often crammed together in conditions that prohibit natural behaviour, factory-farmed animals are prevented from eating, exercising or forming relationships as they are meant to. In some cases, they are even forced to live without daylight. These poor conditions often cause animals to become seriously ill. To keep them alive long enough to produce food, antibiotics are used. In addition to the dreadful living conditions, factory farms are characterised by forced growth rates, which cause terrible suffering."[15]

Benefits of local food projects

If we want to secure a healthy, continuous and reliable food supply for the future, lower our collective carbon footprints and build community resilience and cohesion, local food projects have a very important role to play.

Growing food locally:

- reduces food miles, and therefore reduces carbon emissions and pollution related to transport;
- reduces the use of food preservatives (added during processing), and therefore reduces carbon emissions and environmental and health risks related to their production and consumption;
- minimises packaging, and therefore reduces carbon emissions and pollution related to plastic production and disposal;
- reduces carbon emissions related to the processing of food, such as refrigeration and freezing;
- reduces food waste as 'imperfect' food will be simply

The Incredible Edible Food-print

The Incredible Edible approach - like the growing of food, is an organic process and focuses on community cohesion as much as on local food growing; it's very difficult if not impossible to measure carbon reduction prior to the activities.

However, as the Incredible Edible approach covers all aspects of the food system from production to consumption, it will help reduce individual and community carbon emissions considerably: local people growing their own food will reduce their (direct and indirect) food miles as most of their fruit and vegetables will be grown within a walkable or cycle-able distance. Packaging is absent, and food waste can be avoided, or used for composting in order to return to the soil. Food is picked, prepared and consumed on the same day: zero waste in practice.

Incredible Edible Callander Carbon Savings

We hope that these activities will generate more interest and spark more local initiatives, as it did in the original Incredible Edible town: Todmorden.

> "In under two years, **Todmorden** has transformed the way it produces its food and the way residents think about the environment. Compared with 18 months ago, a third more townspeople now grow their own veg; almost seven in 10 now buy local produce regularly, and 15 times as many people are keeping chickens. The town centre is dotted with "help yourself" vegetable gardens [70 large raised beds]; the market groans with local meat and vegetables, and at all eight of the town's schools the pupils eat locally produced meat and vegetables every lunchtime. It's a complete turnaround," said Pam Warhurst, a former leader of Calderdale Council, board member of Natural England and the person who masterminded the project – called Incredible Edible – and motivated her friends and neighbours to join in. "Our aim is to make our town entirely self-sufficient in food production by 2018 – and if we can carry on at the same rate as we've done over the past 18 months, since we had our first meeting, and set this initiative up, we're going to make it."[16]

Once the project gets underway in Callander and growing spaces have been confirmed and planted, more accurate figures will become available. It could be interesting to see how these compare with other approaches and possibly try to measure carbon reduction and other benefits, if a research element was added to any future project and was suitably funded.

CONCLUSIONS & RECOMMENDATIONS

After taking into consideration all the above opportunities for food growing in Callander, this feasibility study reaches the conclusion that, to increase Callander's food growing potential, it could:

A. adopt the Incredible Edible approach in the heart of Callander

and should future negotiations prove successful,

B. develop a larger scale food growing project at Balvalachlan, further afield

In the current financial climate, and after in depth discussion with the funding officers from Stirling Council and from the Scottish Climate Challenge Fund, the latter is the most appropriate of all funders to approach for either or both schemes.

Other grant makers who could be approached would be the local Airtricity Fund, Leader, Big Lottery and some smaller funds[17].

Incredible Edible activities undertaken during the growing season 2012 will not only raise awareness and 'grow' local involvement in the growing of food locally, but could considerably increase community engagement with the Balvalachlan food growing project in the near future. This is important for funding prospects.

We suggest that in time, the Callander Community Development Trust organise an interactive community consultation to involve everyone in the decision making about the development of such a large site and set up a steering group to manage the process and the project professionally, guaranteeing long-term viability.

Estimated costs for an Incredible Edible Callander project:

At present, Incredible Edible Todmorden "[...] is managed through a strategic board, and through an activists' council. The day-to-day management of the programme is supported by two part-time Food Inspirers, and much of the physical infrastructure work is carried out by students on the modern apprenticeship scheme, and participants of the restorative justice programme, as well as drawing upon a considerable community of local volunteers." (Cambridge Education: http://www.camb-ed.com/Home/Aboutus/Sustainability/IncredibleEdibleCaseStudy.aspx)

Based upon the above, we can suggest a rough idea for a budget:

2 Project Officers @ 3 days a week (£25.000 pro rata), year 1	£30,000.00
2 Project Officers @ 3 days a week (£25.000 pro rata), year 2	£30,000.00
Food Festival, year 1 + 2	£ 8,000.00
9 workshops @ £250 each (excl. July/Aug and Dec), year 1 + 2	£ 4,500.00
Promotion and Publicity @ £125 per month, year 1 + 2	£ 3,000.00
100 Fruit Trees, 50 Soft Fruit bushes, Vegetable plants and seeds	£ 6,000.00
Materials for raised beds (40 beds @ £100 per bed)	£ 4,000.00
Total:	£ 95,500.00

APPENDIX 1
Sites visited in and around Callander

This section explores availability and suitability of land from the prospect of community food growing. Assessment includes (in no particular order):

1) availability of a site
2) access to the site
3) the state of the soil and possible health hazards from pollution
4) site growing conditions such as wind direction, exposure, water logging, sun and shade
5) consultation with direct neighbours of sites
6) land use and - if need be - planning permission (which in Callander may require contact with both Stirling Council and the National Park Authority)

A list of potential sites was identified through consulting maps and satellite imagery to look for areas of green space.

COUNCIL OWNED SITES

The Meadows
This area of land lies next to the river, which during very wet weather floods regularly. As such it is unsuitable for food growing.


The Meadows

Woodland to the North of Ancaster Road
This area of land is quite densely wooded: lack of light and roots from surrounding well established trees make the site unsuitable for growing food.

Open space at Bracklinn road
Same conditions as the woodland to the North of Ancaster Road.

Southern most part of school grounds at McLaren High School
This site was visited with Willie Hamill of Stirling Council and a support officer from the ARI (Allotments Regeneration Initiative). The problem at this site is the fact that it has been used as a dumping ground when the school playing fields were dug. It would take a lot of time, labour and costs to a) change its use and establish planning permission, b) return it to a suitable piece of land for food growing. If and when developed, it would provide about 15 allotments at the most. It may be suitable for the planting of additional fruit trees.

Playing fields at the back of Camp Place
This area is used as a play area/park for young children and is also used as a football pitch for the local football clubs. Thorough and careful consultation with the community using it would be needed to discuss a possible change of use for food growing. It might prove a good site for a community growing space such as a community garden if the surrounding community could be engaged with such plans and committed to (help) maintain it.

Small area at the back of Finglas Gardens
This area is at the back of a street of rural houses. It is a wooded area on a shaded slope next to the river. There is no road access to it. Considering the above, it would be unsuitable for food growing.

DRUMMOND ESTATES

Beside Stirling Road between the Callander Health Centre and Finglas Gardens

This land is already earmarked for housing. Negotiations are ongoing to change its use to retail for the building of a supermarket and planning permission is being sought. The landowner, who lives in England, is not willing to lease the site temporarily for food growing. If a supermarket or any other type of development goes ahead we could endeavour to negotiate including land for food growing as part of detailed planning.

Land between Stirling Council's Lagrannoch Depot and Roman Camp

As above, this land is to be exploited commercially. The private landowner is not interested in leasing this site, neither permanently nor temporarily.

CAMBUSMORE ESTATES

The landowner initially showed an interest in discussing the use of some of his land (approx. 1 acre) for food growing but negotiations stalled. At our request, they were reopened by Community Land Advisor Sheila Hobbs from FCFCG, but this did not lead to a positive result. Sale of the land for future development was mentioned as a reason. Temporary use of land until other land would possibly become available was not embraced as a solution.

VALTECH

Valtech is a company based in Edinburgh who owns the small piece of land next to Stirling Road by Finglas Gardens and the grass verges running along the south side of Stirling Road. The small patch by Finglas Gardens, which was identified as a potentially suitable site, is seemingly going to be used for building. The other areas along Stirling Road are unsuitable and Valtech is not agreeing to have any sort of food growing along these areas (such as edible borders).

HEALTH CENTRE (NHS LAND)

There is a fair sized patch of land at the back of the Callander Health Centre. We have asked permission from National Health Service to use this site for food growing. Negotiations are ongoing since the first contact was made in March 2011. It's a lengthy process but the outlook is positive.

ROMAN CAMP HOTEL

The management of the Roman Camp Hotel is not inclined to give up any of their land for community food growing. The site is very near the river and home to beautiful old trees and wildflowers. The Roman Camp head gardener is keen to work alongside community groups to increase awareness about food growing, swap seeds and plants and possibly offer their walled garden for horticultural visits and workshops.

FARMLAND

Letters were sent to all surrounding farms. Claish Farm, Trean Farm and Ballachraggan Farm all replied that they do not have any land available for local food growing.

PRIVATELY OWNED LAND

We have not approached this private landowner, who owns land adjacent the river as it is very waterlogged. Also, use of it for the purpose of food growing would no doubt meet with local resistance as it would considerably change the views toward the river and Ben Ledi in an otherwise naturally looking area.

This is quite a large site off the old railway next to Balgibbon Drive. The owner has expressed an interest in selling this land for development. We can endeavour to negotiate the inclusion food growing patches (e.g. fruit trees) as part of the detailed planning application.

MCLAREN LEISURE CENTRE

Entrance site

A small site on the right hand side of McLaren Leisure Centre's entrance was identified as possibly suitable for food growing, either a few plots for allotments or alternative community growing space. Despite the presence of hogweed on this site, it shows potential. It's accessible, visible and definitely needs improving from its current state of rubble dump (like the adjacent council owned plot). However, the site's change of use requires planning permission and consultation with homeowners living opposite the site. Negotiations are underway. The soil may need testing at this location.

Site next to the rugby pitch

This site is currently looked at for additional space to the rugby pitch. Only if unsuitable for that purpose it might it become available for food growing.

APPENDIX 2
Information and Support

From the very beginning of our investigation into available and suitable land for food growing, we consulted with several professional bodies and community groups and projects.

PROFESSIONAL BODIES CONSULTED

Forth Environment Link, 'a leading provider of environmental education and action for sustainable living in the Forth Valley area and beyond'. Diane Alderdice of FEL's Orchard Initiative provided us with fantastic support and practical help throughout the project period(s). In collaboration with Elmwood College, FEL offered members of the Callander community the opportunity to participate in an Orchard Care and Management Training. This is to ensure proper care for the Callander Community Orchard.

Federation for City Farms and Community Gardens 'exists to support, represent and promote community-managed farms and gardens across the United Kingdom'. Community Land Advisor Sheila Hobbs has been very supportive in reopening negotiations with landowners.

COMMUNITY PROJECTS CONSULTED

Incredible Edible Todmorden (contact: Pam Warhurst)
A passionate group of people "working together for a world where all share responsibility for the future wellbeing of our planet and ourselves". The project aims to provide access to good local food for all, through:

- working together
- learning – from field to classroom to kitchen
- supporting local business.

Low Carbon Stirling Edible Borders, Stirling (contact: Emily Harvey)
In partnership with GCNS and Stirling Council, Stirling Council's Land Services team has transformed seven city garden sites planting a collection of vegetables, herbs and annual bedding. "This project is providing a unique learning opportunity for 3 Modern Day Apprentices and the apprentices will follow the journey of the Edible Borders from seed to harvest later on in the year".

On the Verge (contact: Leigh Biagi)
On the Verge is a campaign launched in spring in the Stirling area to sow wild flowers that will attract the bee population. The idea behind the project is to use as many green spaces as we can identify in and around Stirling to sow nectar rich wildflowers, both perennial and annual, in order to provide readily available food sources for ailing bee populations in the hope of aiding their recovery.

The Fife Diet
The Fife Diet is a project which targets people's food buying and eating habits. So far it has signed up over 1.200 people in Fife and beyond to eat more local, organic, seasonal food. It also promotes less intensively reared meat consumption, less waste and more composting. Alongside this they promote local producers, support community allotments and grow your own.

Gartmore Walled Garden (contact: Gillian Forster)
The Gartmore walled garden project is a horticultural project which offers apprenticeship-type placements for school leavers with learning disabilities.

Transition Linlithgow (contact: Alan Brown (Co-ordinator) and Sadie Flanagan (Food))
Transition Linlithgow aims to encourage and support the communities of Linlithgow, Linlithgow Bridge and surrounding areas, to transition towards a low carbon, environmentally sustainable and resilient future.

APPENDIX 3
Summery of the Incredible Edible Programme

Summary of 'How to grow sustainable communities', the basic ideas and approaches used by the Incredible Edible programme, a community enterprise that is based in the UK.

The context

The programme emerged from shared concerns over a set of deteriorating circumstances:
We feel that they are evident as social, economic and environmental challenges.

Social: our people feel disempowered, frustrated by change that they have little or no power to influence, and worried about issues which appear too big to solve such as climate change. This leads to frustration with existing systems, fear of the future, and lack of self-belief to be able to do anything about it. We need to create a language and a medium for change that takes people along a route that is different, that helps them to grow more positive, empowered and healthy which in turn will build their ability and readiness to absorb change.

Economic: the existing economic model is a social, environmental and financial disaster, creating more problems than it solves. It is built upon a failed industrial model of endless economic growth through insatiable consumption, which damages the environment and exhausts natural resources. We need an alternative economic model that is ambitious for the right social, economic and ecological reasons. These new staring points can be used to design a prosperous economy that has a respect and interest for people, community well being and for the natural environment in which it operates.

Environmental: our natural environment is under immense strain resulting from our exploitative approach to its resources and our lack of awareness of how the natural world functions. We need to reconnect people with the land, helping them to engage in the local environment and learn the behaviours and skills that will ensure its ecological diversity.

The concept

We think that the concept we have created in Incredible Edible can be applied anywhere. It is an approach to community renewal that can suit any context, be it large or small, urban or rural. The reason for this confidence in our programme is because it is designed upon established tools for self-reliance in response to social, economic and environmental change - personal and collective action, shared ownership and a sense of place. In this programme we focus upon growing food, a naturally occurring, and therefore almost globally applicable strategy.

The approach is very cost effective and can be developed with existing levels of finance. It is a simple idea that spreads virally, in that people enthusiastically share insights, their ideas, their activity and their learning in very practical ways. The result is that people can quickly see the effect of their efforts, it raises their awareness of the food potential of their local environment, it opens them to the possibility of new forms of enterprise, and it provides them with a local food source.

The combination of these factors makes the programme both motivating and inspiring, and ensure its momentum. Our feeling is that this simply builds upon basic human social technology - where the people, their ideas, imagination, curiosity and creativity facilitate a behaviour shift. It serves as a powerful way to engage the maximum number of people in the minimum amount of time to reconnect with their social, their economic and their environmental community.

People quickly get the point of local food, it is not a hard sell, but equally important it is not a quick fix. It takes time to establish and integrate the idea into long-term structural solutions in each of the areas defined by the spinning plates. If we can learn to feed ourselves in our communities, and establish this as a long-term fabric of our local economies, then over time we can aim to become more food secure and at the same time, have a greater degree of understanding and awareness of our relationship and responsibility to develop our community harmoniously with the environment.

Cornerstones

Just as with the idea of sustainability – it's a way of living and of looking at life. Here are some of the cornerstones of what we do.

Creating opportunities for people to imagine and develop new projects

Finding land and space within the built environment to grow food, using buildings, micro-finance and other tools and resources to rethink that approaches that are currently taken.

Investment in local enterprises that support food production within the community.

Providing the route to training in land skills and to environmentally conscious ways of distributing and buying food.

Enabling actions by public bodies to help people to help themselves allowing organisations in authority to re-design their approaches to support and facilitate community renewal by helping them to help themselves.

Removal of obstacles to local action – e.g. by taking away legal boundaries, covering public liability and campaigning.

Essential changes

We are finding that people everywhere recognize the urgent need for action but are often unsure how to act. We are also finding that people are recognising that top-down action alone will not be enough, and that people can make a huge difference in their simple everyday changes in the way they participate and contribute to the world around them.

We are also realising that technological solutions on their own will not be enough. We need to change the way we think and live, and how we value our environment. We have been learning valuable lessons through Incredible Edible about local action focused on food, and how it can make a real difference to the way our communities' function.

By Paul Clarke and Pam Warhurst, directors of Incredible Edible Ltd. Contact: paul.clarke@iqea.com

NOTES

[1] Because of very promising negotiations with a local landowner about the set-up of a Local Food Initiative on a sizable plot of land in Callander, a broad local food feasibility study was initially planned for, and included in the 2011-2012 Callander and Climate Change application. The main aim of the intended study was to explore the feasibility of such an ambitious project: to provide the town with part of their food needs. In the end an agreement could however not be reached between the landowner and the community. By then the Callander and Climate Change project was of course well underway and the project officers involved had started looking into alternative opportunities for local food growing. The study therefore changed its scope and became an enquiry into opportunities for community food growing in Callander.

[2]ABC Science, Stephen Pincock: http://www.abc.net.au/science/articles/2010/08/05/2973513.htm

[3] Defra, Safeguarding our Soils, 2009: http://archive.defra.gov.uk/environment/quality/land/soil/documents/soil-strategy.pdf

[4] United Nations special rapporteur on the right to food: Report Agroecology and the right to food: http://www.srfood.org/index.php/en/component/content/article/1174-report-agroecology-and-the-right-to-food

[5] Incredible Edible Todmorden: http://www.incredible-edible-todmorden.co.uk

[6] Source: David Crighton, Manager Stirling Land Services

[7] For more information, visit the Permaculture Association's website: http://www.permaculture.org.uk

[8] Incredible Edible Todmorden: www.incredible-edible-todmorden.co.uk

[9] Friends of the Earth: http://www.foe.co.uk/resource/briefings/food_climate_change.pdf

[10] United Nations Economic Commission for Europe (UNECE): Transport Health and Environment, Trans European Programme (http://www.thepep.org/ClearingHouse/docfiles/wise_moves.pdf

[11] Pict)ure taken from United Nations Environment Programme (UNEP) website: http://www.grida.no

[12] http://www.guardian.co.uk/environment/2008/aug/20/water.food1

[13] Soil Association: www.soilassociation.org

[14] Tilman, D; Fargione, J; Wolff, B; D'antonio, C; Dobson, A; Howarth, R; Schindler, D; Schlesinger, WH et al (2006-03-21). "Forecasting Agriculturally Driven Global Climate Change"

[15] World Society for the Protection of Animals:http://www.wspa.org.uk/wspaswork/factoryfarming/default.aspx

[16] The Independent: http://www.independent.co.uk/environment/green-living/todmordens-good-life-introducing-britains-greenest-town-1830666.html

[17] http://www.farmgarden.org.uk/home/local-food-project/funding-links