

GORGIE CITY FARM COMMUNITY GARDENING PROJECT

SOCIAL RETURN ON INVESTMENT (SROI) REPORT

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Covering activities between Jan-Dec 2009



**GORGIE
CITY FARM
EDINBURGH**



**Federation of
City Farms
& Community
Gardens**

This report has been submitted to an independent assurance assessment carried out by The SROI Network. The report shows a good understanding of the SROI process and complies with SROI principles. Assurance here does not include verification of stakeholder engagement, data and calculations. It is a principles-based assessment of the final report

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1 SUMMARY

“It is invaluable to the community”. This is how one visitor described Gorgie City Farm in Edinburgh, its work with children, young people and disadvantaged adults, and the huge benefits it has on people’s physical and mental health, community cohesion, the local economy and the environment. There is a great deal of qualitative research¹ to support these claims, but unfortunately very little quantitative evidence. Funders and policy makers are increasingly looking for figures to match the facts, so Social Return on Investment (SROI) has been developed as a way to try to value the “invaluable”.

SROI puts a financial value on the impact of an activity that otherwise may not be given value and therefore may not feature in decision making. (For more details on the background and principles of SROI see Appendix b). This SROI analysis has shown that the Community Garden Project at Gorgie City Farm benefits a wide range of “stakeholders” (including volunteers, visitors, the NHS, the local council and the environment) and that **for every pound invested in the Project by funders, £3.56 of social value is generated**. In other words, the value of the investment is more than tripled.

This value is likely to be an understatement, as we have been cautious in our calculations. For example, several Outcomes and stakeholders were excluded from the analysis, and it is likely that financial proxies have underestimated the value of some Outcomes (see the Audit Trail section for more information.)

However, SROI is about much more than just the investment ratio. This analysis has been a useful exercise for the Community Garden Project. For example, the staff have discovered facts they didn’t know before, including the wonderful news that one of their volunteers had completely stopped taking their anti-depressant medication as a result of being at the Farm. The SROI analysis has also been beneficial for Gorgie City Farm as an organisation, to recognise the value of the Community Garden Project. When the Community Garden Project started in 2005, some staff were sceptical: “it’ll never work – people are only interested in the animals!” As you will see from the results of our surveys and quotes from visitors, volunteers and other service users, this analysis has proved that this is just not the case.

¹ *The True Value of community farms and gardens: social, environmental, health and economic*, Helen Quayle, Federation of City Farms and Community Gardens, 2007

2 SCOPE

i. Background

Gorgie City Farm is a thriving community project in a deprived and densely populated part of Edinburgh, established in 1982. It is a green oasis where local people, most of whom don't have gardens, can come and visit for free, to learn more about nature and where their food comes from, or simply to relax away from the bustle of the city.

The farm offers a wide range of activities, including:

- Volunteering opportunities with farm animals, small pets and in the gardens, for adults and young people, especially those who are socially excluded
- Educational tours and workshops on a variety of topics, including mini-beasts, life cycles and 'Bread: from field to table'
- "Young Farmers" holiday clubs
- Produce stall selling affordable fresh fruit and vegetables
- Cafe
- Workshop, producing hutches, runs and garden furniture
- Pet boarding, for small animals
- Mobile pet service, taking small animals to gala days and hospitals/hospices/schools
- Gardening services, especially for elderly local people

Gorgie City Farm has four distinct garden areas: wildlife, vegetable, herb and education gardens. These gardens have existed for many years (the most recent, the education garden, was completed in 2000), but they were tended by staff until 2005 when the Community Garden Project was established. Now the gardens are cared for by a team of up to 25 volunteers per year.

ii. Purpose of the report

Gorgie City Farm already has many years of anecdotal evidence of the benefits of its activities. An SROI report will help to communicate this impact to stakeholders, especially existing and potential funders, in a more robust format. This is especially important in the current economic climate, as the Farm's core grant from the City of Edinburgh Council has been frozen for the last five years. The Farm is also beginning a review of its current activities and staff roles. The results of this SROI report will help inform this strategic planning process.

The Federation of City Farms and Community Gardens (FCFCG) has assisted with this SROI report. The FCFCG supports, promotes and represents community gardens and farms in the UK, and currently has 73 members in Scotland. The SROI report on Gorgie City Farm will be useful to the FCFCG as an example of the impact of community farms and gardens in general, when speaking to policy makers. It will also be useful as a relevant, worked example to other community farms and gardens in the FCFCG Scotland network who want to undertake their own SROI reports.

iii. Audience

This SROI report is aimed primarily at Gorgie City Farm's funders, both existing and potential, as well as the Farm's board and senior management who are responsible for undertaking the current strategic review of the Farm's activities.

The SROI report will also be used by the FCFCG to influence policy makers and to share with other community gardens.

The most relevant reporting format to suit these audiences is a concise, user-friendly written report. Volunteer names have been changed. However, it is unlikely that this written report, with its technical

SROI calculations, will be an appropriate way to communicate the results of the SROI analysis with some of Gorgie City Farm's stakeholders. It will be more useful to communicate with some of the volunteers who have learning difficulties and/or literacy problems verbally on a one to one basis or as a group.

iv. Resources

Gorgie City Farm had no budget for this SROI analysis. However, the FCFCG was able to allocate staff and a small amount of funding for external help from an SROI consultant, especially with the Impact Map.

v. Author of report

The author is the Scotland Development Manager with the FCFCG, and has attended several training events on the SROI process. She also has nine years of experience of budgeting, monitoring and evaluating community farm and garden projects as Community Garden Project Manager at Gorgie City Farm (2005-7) and Training and Education Manager, Spitalfields City Farm, London (2001-4).

The author has worked at Gorgie City Farm as a paid member of staff, as a volunteer, and, currently, as a member of the Board. The FCFCG office where she works is also based at Gorgie City Farm. Therefore, she has an in depth knowledge of Gorgie City Farm's work and activities.

The author was assisted by other staff at Gorgie City Farm when necessary, and would especially like to thank Emma, Donna and David for their help and their patience answering her many questions!

vi. Focus

As already mentioned, Gorgie City Farm offers a huge range of activities. It was not possible to analyse the impact of all of these activities within the scope of this SROI report. Instead, the focus has been the work of the Community Garden Project, as this has the most relevance to other community farm and garden projects in Scotland. (Of the 73 FCFCG member projects in Scotland, only three have livestock. All have community gardens.)

vii. Type of SROI

Gorgie City Farm's Community Garden Project was established in 2005. Consequently, as the work is already underway and not a new activity, this SROI analysis is evaluative, rather than forecast. The Community Garden Project is currently grant funded, and is therefore already collecting good outcomes data.

viii. Time period

This SROI analysis covers the time period from January to December 2009. It is important that the outcomes data is as up to date as possible, but also that the analysis period spans an entire 12 month period, as the number of participants in Gorgie City Farm's Community Gardening Project varies significantly with the seasons (there are more volunteers in the summer, when the weather is better for working outside).

Most of the data was collected in 2010. Additional data was collected in 2011 to comply with the SROI Network assurance process.

3 STAKEHOLDERS

i. Identifying Stakeholders

The following people and organisations affect or are affected by the work of Gorgie City Farm’s Community Garden Project:

- Volunteers
- Families of volunteers
- Local people (visitors) – adults and children
- Customers at the produce stall
- City of Edinburgh Council (Health and Social Care)
- Other organisations providing social care services
- Schools
- Nurseries
- Volunteer Centre Edinburgh
- Funders
- NHS
- Local businesses
- Other projects on Gorgie City Farm (pet lodge, farm, education)
- Other community gardens in Edinburgh
- Staff

With the resources available it was not possible, or even desirable, to include all of these stakeholders in the final SROI analysis. Therefore, the stakeholders above were assessed, and only those who experience “significant and measurable change” as a result of the activities of the Gorgie City Farm Community Garden Project were included. The changes the stakeholders experience can be positive or negative, and the Outcomes can be intended or unintended.

Stakeholder	Changes experienced	Included or excluded in the analysis?
Volunteers	Improvement in mental and physical health; increased knowledge of how to grow their own food.	Included. Main beneficiaries of the Community Garden Project.
Families of volunteers	Reduced caring responsibilities if volunteers experience improved mental/physical health.	Excluded, because most volunteers don’t live with their families
Local people (visitors) – adults	Access to green space and local, fresh produce; improved knowledge of how to grow their own food; safe, convenient green space for children to play and learn about nature	Included.
Local people (visitors) – children	Opportunity to learn about nature and play in green surroundings	Included
Customers at the produce stall	Access to fresh fruit and vegetables; healthier diet.	Excluded. Customers could buy produce elsewhere.
City of Edinburgh Council (Health and Social Care)	Access to green space and volunteering opportunities for their clients.	Included, but combined with other organisations, below
Other organisations providing social care services	As Council, above	Included, but combined with the Council social services, above
Schools	Access to green space for practical outdoor lessons and to introduce city children to nature	Excluded. Gardens were used for education before Community Garden Project was established.
Nurseries	As schools, above	As schools, above
Funders	No significant change	Included
NHS	Reduction in GP visits and use of counselling services due to improved physical/mental health of volunteers	Included.
Local businesses	Loss of business to Gorgie City Farm produce stall	Excluded. Produce stall turnover not large enough to be significant.

Other community gardens in Edinburgh	Competition for funding; shared resources and information	Included, and widened to include “community projects” as well as community gardens
Staff	Job satisfaction	Excluded. Could be employed elsewhere.
The environment	Reduced waste by practising, and encouraging, composting and buying locally. Increased biodiversity	Biodiversity included. Reduced waste and composting targets excluded due to difficulty in measuring outputs.
City of Edinburgh Council (Parks & Greenspace)	No longer responsible for maintaining bus stop are outside the farm.	Included.

ii. Involving Stakeholders

This took place in two stages: ‘engagement’ with each set of stakeholders, to identify the way that the Community Garden Project affected them, and more detailed ‘data collection’ about specific Outcomes.

Stakeholder	Engagement	Data collection
Volunteers	Talked to volunteers. Based on many years’ experience working with volunteers in a community garden setting.	Questionnaires discussed and filled in a group setting. All 16 volunteers surveyed
Organisations providing social care services	Conversations and emails with four care providers	Questionnaires received from 6 care providers (out of 7 = 86% response rate)
Local people (visitors) – adults	Spoke to 32 visitors, asking open question about why they like the gardens at the farm and how they and their children benefited.	Visitor surveys (94 completed)
Local people (visitors) – children		
The environment	Review of relevant scientific research	Visitor survey to work out change in environmentally friendly behaviour of visitors
City of Edinburgh Council (Parks & Greenspace)	Conversation with Parks and Greenspace staff	Data obtained from staff at Gorgie City Farm and City of Edinburgh council
Other community projects in Edinburgh	Conversation and email with Redhall Walled Garden	Conversation and email with Redhall Walled Garden. Also data obtained from Gorgie City Farm staff
Funders	No need to involve as Outcomes for funders all covered elsewhere	

Involvement methods were kept as simple as possible, and were adapted to suit the needs of each stakeholder. For example, many of the volunteers have support needs and trouble with reading and writing, so the best way to gather data from them was to fill in the questionnaires face to face and in small groups.

Questionnaires were designed to be as simple as possible (e.g. tick boxes rather than asking open ended questions) both to encourage responses and to make analysis easier (see appendix C for an example of the surveys used). However, for each question, there was also the option to answer “something else” or “other” to make sure all outcomes were captured.

We probably would have had better results (more complete questionnaires) if we had had the time to go through the questionnaires with visitors. This would probably have resulted in more surveys being returned, which would also have been beneficial as our sample size (94) is very small compared to the overall number of visitors per year (approx 4000). However, neither the FCFCG nor Gorgie City Farm had the resources for such an intensive data collection method. Given the small size of the sample, we have discussed the reliability of the data we received back during sensitivity analysis and tested our assumptions accordingly (see section 8 for more on this).

4 OUTCOMES AND EVIDENCE

i. Inputs

The major inputs for the Community Garden Project are money and time. It is interesting to note that most of the stakeholders are affected beneficially by the project, while most of them do not contribute anything to it.

a. Money

During 2009 the total amount of funding received by the Community Garden Project was £31,600, from Scottish Natural Heritage (£11,720), Groundwork (£7,500), Awards for All (£4,880) and the Barcaple Foundation (£7,500). These grants are based on the principle of “full cost recovery” and therefore include all the costs incurred in running the project, including a share of the general Gorgie City Farm overheads for heating, lighting, insurance, management and audit costs etc...

b. Time

The current convention in SROI is that the time spent by the beneficiaries on a programme is not given a financial value. Therefore, the time the Community Garden Project volunteers spend considerable maintaining the gardens, has not be counted in this analysis. However, without this considerable effort by the volunteers, the gardens at Gorgie City Farm would not be so well maintained, and other stakeholders would not experience the same Outcomes. Therefore, we have included the volunteers’ time as an input in the Sensitivity analysis (section 8) to see what difference this makes to the final SROI ratio.

c. Donations in-kind

No significant in-kind donations were received during 2009.

ii. Outputs

The Community Garden Project provides:

- **Supervised volunteering sessions, especially for people with extra support needs and mental health problems.** Volunteers are involved in all aspects of the Project, including planning, planting, weeding, harvesting and maintenance. The gardens are all communally worked. There are no individual plots and all the produce is shared, which promotes team working and friendship.
- **Relaxed and attractive green spaces for children to play** – including the Education Garden, the Vegetable Garden, the Herb Garden and the Wildlife Garden
- **Training in gardening skills.** Volunteers learn informally, as well as studying for accredited qualifications from Borders College. Topics covered include how to identify tools, plants and wildlife, how to care for particular species of plants, and how to plan a garden all year round.
- **Fresh produce for volunteers.** Volunteers share the vegetables they have grown, and they are encouraged to take them home to eat with their families. For many of them, this will be the first time they have ever eaten a courgette or pepper or salad leaf. To help the volunteers get used to eating more healthily, the Community Garden Project also runs occasional cookery classes.
- **Fresh produce for members of the public.** Any excess produce is sold to members of the public, generating income for the Farm, and providing fresh, healthy produce for locals. This also gives volunteers from the Garden Project an opportunity to learn new skills, such as how to work a till, paperwork and dealing with customers.
- **Informative signs for visitors and guided tours for groups,** giving information about the types of plants and wildlife found in the gardens.
- **Maintenance for the raised beds by the bus stop outside Gorgie City Farm.** The volunteers now maintain this area that used to be looked after by the council, weeding it, pruning the shrubs, clearing the litter, and brightening up the area with colourful plants.

- **Maintenance for all the green areas on the farm**, including the ponds, vegetable plots, composting area, fruit trees, hedges, bird-boxes, wildlife habitats, raised beds (in the play park, by the tractor, etc.).

iii. Outcomes – how the Project affects its stakeholders

The Community Garden Project affects stakeholders, such as volunteers, visitors, the NHS, and the council, and these changes are called Outcomes. The Outcomes listed below were identified through open discussions with stakeholders, and cover a wide range of changes, including improvements in self confidence, private gardens being more attractive to wildlife and a reduction in demand for mental health services in Edinburgh. How these changes take place is called the “theory of change”, and this is explained below for each stakeholder. Where appropriate, explanations have been backed up by relevant scientific and sociological research.

Interestingly, a few Outcomes were included in the questionnaires, but then excluded at the next stage (i.e. not assigned a financial proxy), as they were found not to be significant. For example, we collected data to find out if visitors did more of their weekly shopping at the Produce Stall. However, the increase was so small (0.7%) the Outcome “increased amounts of local, fresh produce bought by locals” was excluded. Full details of other Outcomes that were excluded during the analysis are provided in the Audit Trail.

i. Theory of change for Volunteers

Outputs: Supervised volunteering sessions (planning, planting, weeding, harvesting, maintenance). Garden infrastructure (ponds, vegetable plots, composting area, fruit trees etc..) Vegetables to take home. Training in gardening skills.

Outcome: Improvements in confidence and self-esteem

- Caring for the gardens at the Farm encourages responsibility and requires dedication and motivation, as the plants will die if volunteers don't turn up to care for them. There is also the promise of produce to harvest, which acts as an incentive to keep volunteers interested. They feel enormously proud when seeds they have planted grow to fruition and are eaten and sold.
- Training in gardening skills helps volunteers improve their knowledge and confidence, to the extent that established volunteers will often mentor new recruits.
- A pleasant environment has a significant positive effect on self esteem²

“David may choose to stay in bed if there was nothing to encourage him otherwise, there would be no motivation. David needs motivation and feels he is serving a purpose at the farm. He can take great pride in telling others he WORKS at the farm.”
David's carer

Outcome: Better mental health

- The Community Gardening Project provides a safe, relaxing environment where people with mental health problems (eg: depression, stress and paranoia) can begin to recover. They are all treated as ‘gardeners’ rather than stigmatised as being ‘mentally unwell’, and are valued members of the gardening team. As one carer says “In my experience clients who have a good routine in a positive environment are more likely to continue developing their lives in other areas, this should increase their chances of improving

“I don't worry about the past as much.”

² Pretty, Peacock, Sellens, Griffin. Mental and physical health outcomes of green exercise. *International Journal of Environmental Health Research* October 2005; 15(5): 319-337

their mental health and assist them in maintaining their [housing association] tenancy". The Community Garden Project at the Farm provides a good routine and a positive environment.

- Attention Restoration Theory, holds that "natural settings and stimuli... seem to effortlessly engage our attention, allowing us to attend without paying attention....nature provides a respite from deliberately directing one's attention. As a consequence...time spent in nature allows us to recover from mental fatigue and leaves us with enhanced effectiveness and a sense of rejuvenation"³.
- Experimental evidence shows that gardening can promote relief from acute stress (significantly lower cortisol levels were found in a group assigned gardening, rather than reading, after performing a stressful task)⁴
- Viewing pictures of vegetation (not even real greenery) caused people to be more relaxed and less anxious than viewing urban scenes without any nature (as measured by influences on alpha amplitude, heart rate and emotional state).⁵
- Patients recovering from gall bladder surgery with rooms with views of nature and trees had shorter hospital stays, took fewer painkillers and received fewer negative evaluations in nursing notes than a control group with views of a brick wall.⁶

Outcome: Going out more with friends

- By sharing tasks in the gardens, rather than working on individual plots, volunteers share experiences, make new friends, and develop a strong sense of community and pride in their work.
- Community gardens...provide opportunities for socializing with and learning from fellow gardeners and residents that may normally be unavailable. This aids community cohesion by dissolving prejudice about race, and economic or educational status.⁷

Outcome: Eating more healthily

- Volunteers are much more likely to try new food if they have grown it themselves.

Bunty ate mainly chips and ready meals, until she grew a courgette from seed. She was suspicious about trying it, but agreed, as she was so proud of having grown it herself. The staff gave her cooking instructions and she shared it that evening with her father (who had also never had a courgette), instead of having a fish supper. Now, although she hasn't stopped eating chips, she is very keen to try new fresh vegetables.

- Low fruit and vegetable consumption is a major risk factor relating to mortality⁸, while vegetable consumption is higher among gardeners involved in community gardens, compared to non-gardeners⁹.

Outcome: More active

- Volunteers are encouraged to be more active, in digging, weeding, emptying wheelbarrows, turning compost piles etc. This is often a very effective way to get people to be more physically active, as many of them would switch

The Community Garden Project "helps to fill Brian's week and get him out of the house. Brian enjoys the outdoors work and it is also good for his physical health". Brian's carer

³ From Kuo, FE (2001) Coping with poverty: Impacts of environment and attention in the inner city. *Environment and Behavior*, 33(1), 5-34

⁴ Van den Berg and Custers (2010) Journal of Health Psychology "Gardening promotes neuroendocrine and affective restoration from stress

⁵ Ulrich, RS (1981) Natural versus urban scenes: some psychophysiological effects. *Environment and Behavior*. 13, 523-556.

⁶ Ulrich, RS (1984) View through a Window May Influence Recovery from Surgery. *Science*. 224 (April 1984): 420-1.

⁷ Lewis, CA (1992) Effects of plants and gardening in creating interpersonal and community well being. In Relf, D (ed) Role of Horticulture in Human Well-being and Social Development: A National Symposium. Timber Press, Arlington, Virginia, pp 55-65

⁸ WHO, Global Health Risks, Mortality and burden of disease attributable to selected major risks

⁹ Stein, M (2008) Community Gardens for Health Promotion and Disease Prevention. *International Journal for Human Caring*. 12 (3) 47-52

off if you mentioned the gym.

- Green spaces in urban areas counteract “sedentary” lifestyles and could make a contribution to increased physical activity.¹⁰

Outcome: More knowledgeable

- Volunteers are often given tasks that suit their abilities, but they are also asked to learn new skills and try new situations.
- Established volunteers often mentor new volunteers showing them skills they have learnt in the gardens.

“I find challenges more rewarding now”. “It has improved my English, I learnt to work in sale (till...)”

Outcome: Giving something back to the community

- Volunteers often say they like working at Gorgie City Farm because it is a local charity, and they enjoyed visiting when their families when they were younger. This is reflected in visitor comments, for example, one visitor said they have “more faith in people doing good” as a result of their visits to the gardens at the Farm.
- This is supported by scientific and sociological research that shows that the physical state of a local area affects the self-esteem of residents¹¹ and that green space is linked to greater community spirit, and reduced violence and crime¹². This is partly because green spaces encourage people to venture outside more than spaces devoid of nature, so they are more likely to meet other people and form social ties

ii. Theory of change for organisations providing social care services

Outputs: Supervised volunteering sessions for volunteers with extra support needs

Outcome: Increased capacity to work with clients

- In our survey, carers commented that the Community Garden Project had a beneficial effect on their clients’ attitudes and behaviour. This means support workers are free to spend time with other clients, or working with the volunteers on different aspects of their lives.
- As one carer said “A significant amount of my time as a support worker is spent trying to get clients involved in activities and groups in their community to help clients become less isolated and explore their interests as individuals, as David already has these needs met by his work at the Farm this enables me to spend more time working with David to identify other areas of his life which he would like to develop or improve.”

When he started volunteering at Gorgie City Farm, Colin could only come “when a carer was free to bring me.” Now he comes “once a week come in a taxi, have lunch, go home in a taxi on my own.” Working independently is good for independent living skills and self confidence.

iii. Theory of change for visitors - adults

Outputs: Safe space for children to run around/ Four interactive garden areas, with signage

Outcome: No need to worry about kids

- There are only two exits to the Farm, and both of these are some way from the gardens. Therefore, parents can feel confident that their children can run about safely without straying onto the road.

¹⁰ Hu, Liebens, Ranga (2008), Linking stroke mortality with air pollution, income and greenness in northwest Florida: An ecological study. *International Journal of Health Geographics* 7, article number 20.

¹¹ Haney, TJ (2007) Broken windows and self-esteem: subjective understandings of neighbourhood poverty and disorder. *Social Science Research*. 36, 968-994.

¹² Kuo and Sullivan (2001) Aggression and violence in the inner city: Effects of environment via mental fatigue. *Environment and Behavior*. Special Issue 33. (4) 543-571

Outcome: Opportunity for kids to learn about nature and gardening

- Nearly $\frac{1}{3}$ of visitors reported that they don't have their own gardens. The gardens, and signage, at Gorgie City Farm are an important practical resource for adults to show their children how plants grow and where food comes from.
- The more natural and unstructured the environment, the 'richer children's play is as an educational activity'¹³.

iv. Theory of change for visitors – children

Outputs: Safe green space for children to run around and play with others

Outcome: More active/ More interaction with other children

- Children playing in the gardens are often running about, playing hide and seek, filling up small wheelbarrows, digging and sharing experiences (eg: smelling flowers) with other children, even children they haven't met before.
- Children have a particular attraction to natural environments. Numerous studies have found that they often prefer to play in natural or wild spaces^{14, 15}

v. Theory of change for the NHS

Outputs: Supported volunteering sessions for people with mental health problems

Outcomes: Reduced demand for mental health services/Reduction in the cost of prescribing

- For the reasons given earlier, most volunteers experienced an improvement in their mental health as a result of working at the Community Garden Project. They reported that they felt more positive and therefore visited doctors and counsellors less frequently and took less medication. This means direct financial savings for the NHS as they will spend less on doctors, support workers and medicine. (NB two volunteers also reported taking more medication, but this was due to external factors, not because of their time at the Community Garden Project).

vi. Theory of change for the environment

Output: Informative signs and training/ Hedges, ponds, bird-boxes, wildlife habitats

Outcome: Private gardens are more attractive to wildlife

- The Gardens are full of signs for visitors, letting them know what varieties of vegetable have been planted, how to grow their own, how to compost at home or how to attract wildlife to their own gardens, etc. Volunteers receive formal and informal training in all these areas as well, and they are encouraged to practice what they learn at home.

Outcome: Space for wildlife in the city

- The Community Gardens at Gorgie City Farm provide a green oasis for wildlife in an urban area. There is a pond, always full of frogs, a wildflower meadow, providing nectar and pollen for bees, lots of undisturbed corners for creatures to hibernate and many bird and bat boxes. The City of Edinburgh Biodiversity Action Plan is considered when deciding what to plant, and several endangered species have been planted in the Gardens. Native species are chosen where possible (e.g. local Scottish apple trees), and pesticides and artificial fertilisers are avoided. As the volunteers' regular weeding proves, the variety of plant species is greater in the Gardens than it would be if left untended.

¹³ Farné, R (2005) 'Pedagogy of play', *Topoi*, 24, 169–8

¹⁴ Tranter, P and Malone, K (2003) 'Geographies of environmental learning: an exploration of the children's use of school grounds', *Children's Geographies*, 2, 1, 131–55

¹⁵ Lester, S and Maudsley, M (2007) *Play, naturally*. London: Children's Play Council

vii. Theory of change for the City of Edinburgh Council (Parks & Greenspace)

Outputs: Maintaining raised beds by bus stop outside Gorgie City Farm

Outcome: Reduced cost of maintaining public spaces

- The local authority used to be responsible for the upkeep of the area outside the farm, which was undertaken by their groundsmen. However, the area was not treated well – shrubs were not pruned, weeds took over, litter accumulated and there was little colour.

Now the area is cared for by the Community Garden Project volunteers and the litter is cleared, the shrubs are pruned, the weeds are removed and many colourful plants have been added. The improvement is obvious to see, and the council no longer has to pay for the maintenance of the area.

viii. Theory of change for other community projects in Edinburgh

Output: Supported volunteering sessions

Outcome: Increased capacity to work with other clients

- Gorgie City Farm Community Garden Project is part of a network of other community projects and community gardens in Edinburgh, who share advice, equipment, ideas, and volunteers. These community projects sometimes visit each other for inspiration, and sometimes refer volunteers to another project, so that the volunteers can get a broader range of experiences.

The Community Garden Project at Gorgie City Farm provided placements for two volunteers from Redhall Walled Garden and one from Bridgend Community Allotments, thereby freeing up three places at other community garden projects in Edinburgh, so they could work with new volunteers. Redhall Walled Garden works specifically with adults with mental health problems, who have to commit to at least three days/week. They particularly appreciated being able to sign post people to Gorgie if they were outwith their specific client group (eg: people with learning difficulties, or not ready to commit to three days/week).

*“We had some long term vols who essentially no longer required high levels of support but weren’t or won’t ever be paid work ready but benefited from routine. [It was good] to have a non specialist outdoor project to re sign post people to”
Redhall Walled Garden*

ix. Funders

All of the Outcomes relating to funders of the Community Garden Project are covered above, in relation to other stakeholders.

5 INDICATORS AND FINANCIAL PROXIES

An indicator is a way to measure an Outcome, and a financial proxy is a way to value an Outcome. It is important to note that many indicators and proxies are based on assumptions and estimations. We used the www.sroiproject.org.uk database to help find useful indicators and financial proxies, as well as other SROI reports and we have tried to value each Outcome fairly, and in relation to the values placed on other Outcomes. For example:

- the visitor engagement and data collection showed that an important benefit of the gardens at Gorgie City Farm was to provide a convenient, safe space for children to play. It could be argued that a suitable proxy for this Outcome would be a private garden. However, the value of this proxy would be tens of thousands of pounds, and multiplied by an indicator of 'number of adult visitors' (approx 4000) this would give a total value of millions of pounds. This would be totally out of balance with the values for other Outcomes (thousands of pounds), so it was decided to use a proxy with a lower value. We asked visitors where else they would go so that their children could run around, and took an average value for these activities (going to the park (free), going to the botanics (free, but included the cost of return bus fare) and going to a local soft play centre (monkey bizness))
- volunteers reported that they were more active as a result of attending the Community Garden Project. Other SROI projects have used gym membership as a proxy for this Outcome, but this was deemed inappropriate as none of the volunteers would use a gym. Instead we used the cost of a guided walk as a proxy. This gives the Outcome a far lower value, but it is a more relevant proxy.
- it was very hard to value the volunteer Outcome 'better mental health', as it could be argued that an improvement in an individual's mental health is so beneficial to them it is priceless! We decided to use the cost of counselling for one hour/week for a year as it was assumed that this would have had a similar effect on mental health improvement as attending the Community Garden Project once a week. Hourly counselling prices in Edinburgh are £40-60/hour, but we decided that the most appropriate for our volunteers would be a special rate of £22/hour for people on low incomes, as most of our volunteers have low incomes.

The table below explains the assumptions and estimations we made when using these indicators and proxies to calculate quantities and value (negative indicators and values are in red). Gorgie City Farm estimate 50,000 adult visits/year, based on cafe takings, donations and several visitor surveys.

Stakeholder	Outcome	Indicator	Qty	Assumptions to calculate quantities	Financial proxy	Value in £	Assumptions to calculate value
Volunteers	Improvements in confidence and self esteem	Number of volunteers reporting increase in self confidence	8	Number taken from volunteer questionnaire	Cost of training course 'How to be more self-confident'	1195	nef's SROI conducted for Coventry's Local Enterprise and Growth Initiative (LEGI) (unpublished)
	Better mental health	No. of volunteers reporting fewer visits to doctor/counsellor	6	Number taken from volunteer questionnaire	Cost of local counselling for one year (1 hour/week @ £22/hour (rate for people on low incomes))	1,144	http://www.wellspring-scotland.co.uk/fees.htm
	Going out more with friends	Number of additional hours spent with friends	1534	Number taken from volunteer questionnaire	Cost per hour of conservation holiday	5.42	www.sroiproject.org.uk database (from Greenlink study originally)

	Eating more healthily	Number of volunteers who reported eating more healthily	7	Number taken from volunteer questionnaire	Average household spend on takeaways and snacks (avoided if eating healthily)	353.6	Family Spending Survey 2009
	More active	Number of additional hours spent walking	1066	Number taken from volunteer questionnaire	Cost per hour of joining a guided walk	2	www.transpentland.co.uk/transpentland_walks.html
	More knowledgeable	Number of volunteers who have gained/are studying for a qualification	6	Number taken from volunteer questionnaire	Cost of gaining similar level qualification with Edinburgh Garden School	153	www.gardenschool.eu
	Giving something back to the community	Number of volunteer hours worked on Community Garden Project	3528	Number taken from volunteer questionnaire	Hourly wage for garden staff at Gorgie City Farm (because volunteers are helping do their job)	7.24	Hourly rate for Garden Assistant at Gorgie City Farm (£7.24)
Organisations providing social care services	Increased capacity to work with clients	Number of hours of support worker time that are freed up because client attends Community Garden Project	624	Number taken from one carer questionnaire, and extrapolated	Hourly rate for support worker	30	Carer questionnaire
Visitors - adults	No need to worry about kids	Number of visits where visitors report this benefit	24000	48% adult visitors said they didn't need to worry about their kids when visiting the gardens. Multiply by overall number of adult visits (50,000)	Cost of similar activity (as suggested by visitors in survey)	2.25	Average cost of getting bus to botanics, going to local park for free and monkey bizness soft play
	Opportunity for kids to learn about nature and gardening	Number of visits where visitors report this benefit	39000	78% adult visitors said their kids learned about nature when visiting the gardens. Multiply by overall number of adult visits (50,000)	Cost of similar activity (as suggested by visitors in survey)	4.15	Average cost of getting bus to botanics, going to local park/running around in own garden for free and visiting Butterfly World
Visitors - children	More active	Number of visits where visitors report this benefit	20000	40% adult visitors said their kids were more active when visiting the gardens. Multiply by overall number of adult visits (50,000)	Cost of similar activity (as suggested by visitors in survey)	2.9	Average cost of going to local park for free and monkey bizness soft play
	More interaction with other children	Number of visits where visitors report this benefit	20000	40% adult visitors said their kids interacted more with other kids when visiting the gardens. Multiply by overall number of adult visits (50,000)	Cost of similar activity (as suggested by visitors in survey)	6.50	Session at local playgroup (Balgreen playgroup, http://balgreenplaygroup.wordpress.com/faq/)
NHS	Reduced demand for mental health services	Reduction, in hours, of visits by volunteers to doctors	311	Number of hours reported by volunteers in volunteer survey	Cost of GP consultation	31	www.sroiproject.org.uk (originally from www.pssru.ac.uk 'Unit Costs of Health and Social Care')
		Reduction, in hours, of visits by volunteers to support workers	572	Number of hours reported by volunteers in volunteer survey	Cost of a consultation with a community nurse	35	www.sroiproject.org.uk (originally from Scottish NHS Cost Book 2008)

	Reduced cost of prescribing	Number of volunteers who have changed their medication levels	3	Number taken from volunteer questionnaire	Cost saved per person	22.8	Cost of low level dose (20mg) of Fluoxetine (anti-depressant) for one year from British National Formulary (www.bnf.org)
	Increased cost of prescribing	Number of volunteers who have changed their medication levels	2	Number taken from volunteer questionnaire	Increased cost per person	-630.36	Cost of increase from 20mg to 60mg of Fluoxetine (anti-depressant) for one year from British National Formulary (www.bnf.org)
The environment	Private gardens are more attractive to wildlife	Area of gardens that people spent extra hours gardening in	5.6	27% of survey respondents spent more time gardening. Multiply by number of adult visitors (4167) =1125 people did extra gardening. Average size of garden estimated to be 0.005 ha (used Google earth and size of gardens in BUGS report (32-940m ²) Decided to take value near bottom of this scale, as most houses near farm have only small gardens). So, 1125 x 0.005 =5.6ha of gardens that have been improved.	Biodiversity value of land/ha/year	289	Estimate based on Williams, E., Firn, J. R., Kind, V., Roberts, M., & McGlashan, D. (2003).
	Space for wildlife/biodiversity in the city	Area of the gardens in hectares	1	From 1:1250 Ordnance Survey map	Biodiversity value of land/ha/year	289	Estimate based on Williams, E., Firn, J. R., Kind, V., Roberts, M., & McGlashan, D. (2003).
City of Edinburgh Council (Parks & Greenspace)	Reduced cost of maintaining public spaces	Reduced hours of maintenance for public spaces per year (number of hours/year beds are now maintained by Gorgie City Farm)	96	From Gorgie City Farm records	Hourly rate for CEC groundsman	6.26	City of Edinburgh council, Recruitment team, 0131 469 5447
Other community gardens in Edinburgh	Increased capacity to work with other clients	Number of Community Garden Project volunteers who have been referred from other community gardens in Edinburgh	3	From Gorgie City Farm records	Cost per year of working with these volunteers	1042.56	Hourly rate for Garden Assistant at Gorgie City Farm (£7.24)
Funders	All outcomes for this stakeholder considered elsewhere.			None necessary			

6 IMPACT

The financial impact of each Outcome for each stakeholder was calculated using the following formula:

$$\frac{(\text{financial proxy for outcome} \times \text{quantity of outcome}) - (\text{deadweight} + \text{displacement} + \text{attribution})}{\text{x duration (adjusted for drop off and Treasury discount rate)}} = \text{SROI ratio}$$

i. Deadweight – how much of the Outcome would have happened anyway

Volunteers: 44% of volunteers reported that if they weren't volunteering as part of the Community Garden Project, they would volunteer elsewhere. Therefore for most volunteer Outcomes, we used 44% for deadweight, as the volunteers would probably have got most of the benefits of volunteering from another project.

However, volunteering at Gorgie City Farm is likely to encourage physical activity and a better diet more than volunteering in, for example, offices or charity shops, so the deadweight for these Outcomes was arrived at separately. For the Outcome relating to physical activity, we used the percentage of volunteers who said that if they weren't volunteering at the Farm they would take part in another activity (31%). To estimate the impact of the Farm on volunteers' eating habits we used figures from the latest Scottish Health Survey representing the percentage of the population who eat healthily anyway (average 12.5% for areas with the same SIMD score as the Farm).¹⁶ Similarly, to estimate the impact of the Community Gardening Project on the physical activity levels of visitors, we used information from Scottish Health survey showing that 40% of adults achieve the recommended amount of physical activity anyway.¹⁷

The Outcome relating to changes in mental health was given a deadweight of 50% (see below under NHS for explanation).

Visitors: We used data collected from the visitor survey to measure Deadweight for visitor Outcomes. The most popular alternative activity for the Outcomes to do with 'Not having to worry about your kids', 'Learning about nature' and 'Being more active' was going to the park (66%, from visitor survey). For 'Interacting with other children' it was visiting a friend (32%).

NHS: All of the Outcomes relating to changes in mental health were given an estimated deadweight of 50%. Research has shown that as many as 80% of people being treated for depression and 20% of people with schizophrenia will experience a spontaneous remission of their symptoms.¹⁸ The volunteers at the farm have a wide range of profound and enduring mental health issues, so a figure between 20% and 80% was used.

Environment/City of Edinburgh Council: these Outcomes were given a deadweight of 0% because the Outcomes are explicitly linked to Gorgie City Farm and if the Community Garden Project had not existed, the Outcomes would not have taken place

Social care organisations/other community gardens: there are only two other community garden in Edinburgh where carers and other community gardens could have referred their volunteers, so the

¹⁶ www.scotland.gov.uk/Topics/Statistics/SIMD/SIMDPostcodeLookup and

www.scotland.gov.uk/Topics/Statistics/Browse/Health/TrendDiet

¹⁷ www.scotland.gov.uk/Topics/Statistics/Browse/Health/TrendPhysicalActivity

¹⁸ E.g.: Lambert et al, Acta Psychiatrica Scandinavica Volume 118, Issue 3, pages 220–229, September 2008 and www.rcpsych.ac.uk/mentalhealthinfoforall/problems/depression/depressionkeyfacts.aspx

deadweight for these Outcomes reflects this (estimated at 30%, because Gorgie City Farm would have a third approximately a third of the 'market' for volunteers with support needs interested in gardening).

ii. Displacement – has an Outcome been created at the expense of another stakeholder group

The vast majority of Outcomes in this analysis were considered to have entirely positive effects, and the only Outcomes which could have had negative effects related to people visiting the farm, as this meant that they weren't visiting another attraction. However, data from the visitor survey shows that if visitors weren't coming to the farm, they would most likely take part in other free activities such as going to a park or visiting a friend. Only 21% of alternative activities suggested by visitors in the visitor questionnaire involved an entrance fee to another attraction, so we have used this as the displacement figure. This is probably an overestimation, however, as many of the fee playing attractions suggested by visitors are so large (eg: zoo, soft play) that their visitor numbers wouldn't be significantly affected by people visiting Gorgie City Farm instead.

iii. Attribution – how much of an Outcome is due to external factors

For example, volunteers might benefit from an increase in self esteem partly because they attend the Community Garden Project, but also partly because they have a supportive family and take part in other activities in the week. The amount due to their family would be the attribution rate for this Outcome.

Volunteers and visitors and social care organisations: we used data collected from the volunteer and visitor surveys to calculate attribution. We asked visitors, volunteers and carers how much they thought the changes to their lives were due to their participation in the Community Garden Project, and took the average figure. This was 58% for volunteers and 53% for visitors, which is equivalent to 42% and 47% attribution to other factors. For the carers (organisations providing support services) the average figure was 100% attributable to Gorgie City Farm (i.e. 0% attributed to external factors).

Other community gardens: the Outcome relating to other community gardens (volunteer referrals) was also considered to be entirely due to the Community Garden Project, as this activity took place entirely at Gorgie City Farm.

NHS: as the Outcomes for the NHS related to volunteer behaviour, we used the data above, from the volunteer survey to calculate attribution. 42% of the improvements to volunteers mental health can be attributed to external factors.

Environment: The attribution rate for the environmental impact of the Community Gardens was deemed to be 0%, as it is the Gardens themselves that benefit wildlife, rather than other green space. The attribution rate for the environmental impact of visitors gardening more in their own gardens was harder to estimate, and was based on a trend in the general population showing a 27% increase in interest in gardening¹⁹.

City of Edinburgh Council: there were no other landscape improvement works near the farm in 2009, so all benefits for the council were a direct result of the work of the Community Garden Project.

iv. Duration – how long an Outcome lasts

¹⁹ **People growing own fruit and vegetables to beat recession as Good Life returns** By Louise Gray, Environment Correspondent, 18 Feb 2009, www.telegraph.co.uk/gardening/howtogrow/fruitandvegetables/4682111/People-growing-own-fruit-and-vegetables-to-beat-recession-as-Good-Life-returns.html

For some Outcomes, Duration is straightforward. For example, if Gorgie City Farm stopped caring for the bus stop area outside the Farm, it would quickly deteriorate, and if the Community Garden Project ceased, so would volunteer referrals to the Project.

Other Outcomes are more difficult to deal with and it's possible that most other Outcomes would have endured beyond December 2009. However, we have taken a conservative approach and all Outcomes were deemed to have a duration of only one year, except eating more healthily, being more active, being more knowledgeable, and benefits to the environment.

"Healthy eating" and "being more active" were considered to be lifestyle changes, and therefore assumed to endure longer than the life of the project. It is also probable that volunteers would retain some of information they had learned for longer than one year ("being more knowledgeable"). In all cases, however, it was assumed that eventually, the benefits of the Outcomes would diminish if the volunteers ceased to attend the Community Garden Project, so each Outcome was assigned a duration of two years.

The environmental benefits from the project were deemed to last five years, as this is an SROI convention, and it is clear that, even if not cared for, green spaces continue to have some benefits to wildlife and biodiversity.

v. Drop off – how impact decreases with time

Drop off relates to Outcomes that continue for longer than one year. For example, immediately after a training course, it could be assumed that 100% people retain 100% of the information; one year later perhaps 80% people remember 80% of the information; after two years only 50% of people remember 50% of the information. Therefore, the impact of the training is reduced each year.

As we don't have any empirical data relating to drop off for our Outcomes, we have again taken a conservative approach to avoid overestimating social value. For the Outcomes "eating more healthily" and "being more active" drop off was estimated as 50%. This was based on anecdotal evidence from the FCFCG's considerable experience of working with a variety of community groups, which shows that volunteers' enthusiasm wanes if staff support is withdrawn. The benefits of training ("being more knowledgeable") were considered to be more enduring and assigned a drop off of 25%. This was based on the experience of staff at Gorgie City Farm's Community Garden Project who noticed that even many months after the end of a formal training course, volunteers retained most information and were more knowledgeable.

Environmental Outcomes were assumed to have no drop off, as wildlife and biodiversity would still benefit even if the gardens were not looked after by volunteers. In fact, there may be an argument that wildlife and biodiversity benefits would increase, rather than decrease, if the Community Garden Project ended, as there would more undisturbed areas for hibernation.

It is unfortunate that the Duration and Drop Off figures used in this report are based so heavily on estimation and assumption, rather than on collected data. If resources allowed, it would be good practice to talk to volunteers after one year, and again after two, to ask them if they are still more active, eating more healthily and more knowledgeable, as a way of verifying the assumptions and estimations that have been made.

vi. Discount rate – adjusting for the future value of money

The future value of money is lower than its value today, because of inflation and lost opportunity (i.e. it's better to have £5 today than £5 in a year's time, because if you only have the £5 in a year's time, you will have missed out on the opportunity of spending the £5 for a year). Therefore, any *future* social

value calculated in the Impact Map (i.e. in years 2-5) must be discounted so that it can be compared with the *current* investment value. We have used the Treasury's discount rate of 3.5%, as this is widely accepted by accountants and economists.

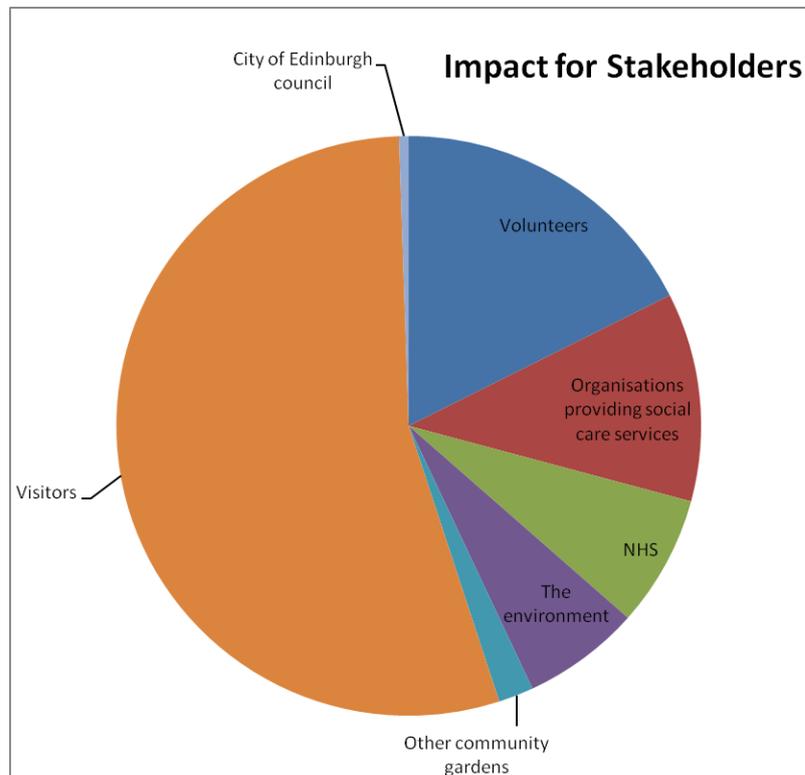
7 RESULTS

The results are shown in full in the Impact Map in Appendix a, and summarised below:

	Year 1 (2009)	Year 2 (2010)	Year 3 (2011)	Year 4 (2012)	Year 5 (2013)
Total value of Community Gardening Project to stakeholders	£105,477	£2,749	£1,470	£1,470	£1,470
Total value, adjusted for discount rate of 3.5%	£105,477	£2,656	£1,421	£1,421	£1,421
Total value of Community Gardening Project to stakeholders, adjusted for discount rate					£112,395
Total investment in Community Gardening Project (ie: funding)	£31,600				£31,600
SROI ratio (total adjusted value/total investment)					£3.56

Therefore, the SROI ratio for the Gorgie City Farm Community Garden Project in 2009, is £1:£3.56. This means that for every pound invested in the Community Garden Project in 2009, an extra £3.56 of social value was generated. In other words, the value of the original investment was more than tripled.

The impact of the Community Garden Project on each of its stakeholders is shown in the chart below. It is obvious that the Project has the biggest impact on visitors, which is not surprising given the number of people who visit the farm every year and the fact that, unlike other attractions, the farm does not charge for entry. Volunteers are the other major beneficiary of the Project, which is also unsurprising given that one of the main reasons the Project was established was to work with and benefit volunteers.



8 SENSITIVITY

To calculate the SROI ratio for the Gorgie City Farm Community Garden Project we used data collected from stakeholders wherever possible, but it was necessary to make a series of assumptions and estimations as well, for quantities, deadweight, displacement, attribution, duration and drop off. These assumptions and estimations have all been explained and justified in sections 5 & 6.

A sensitivity analysis challenges these assumptions and estimations, to see what effect changing their values would have on the calculated SROI ratio (for example, what if our estimation is wrong and there would be no lasting environmental benefits if the project ended?).

Encouragingly, the results, in the table below, show that even if very unreasonable assumptions about duration, drop off, quantities, attribution and deadweight are made (e.g. halving quantities or doubling attribution), the SROI ratio for the Community Garden Project is still more than one. Only in our “worst case scenario” showing no enduring Outcomes, 80% deadweight (what would have happened anyway) and 70% attribution to other causes, does the ratio drop below one.

Original assumption	New assumption	SROI Ratio	New SROI Ratio	Difference
Quantities taken from surveys	Quantities 50% lower than reported	3.56	1.78	-50.00%
	Quantities 25% lower than reported	3.56	2.67	-25.00%
Average deadweight is 38%	Deadweight is 80%	3.56	1.44	-59.55%
Average attribution is 34%	Attribution is 70%	3.56	1.80	-49.44%
	Attribution is 15%	3.56	5.09	42.98%
Some outcomes endure	No outcomes endure	3.56	3.34	-6.18%
6% average drop off for outcomes which endure	20% average drop off for outcomes which endure	3.56	3.50	-1.69%
Some outcomes endure; average deadweight is 38%	No outcomes endure; deadweight is 80%	3.56	1.39	-60.96%
Some outcomes endure; attribution is 34%	No outcomes endure; attribution is 70%	3.56	1.71	-51.97%
Some outcomes endure; deadweight is 38%; attribution is 34%	No outcomes endure; deadweight is 80%; attribution is 70%	3.56	0.73	-79.49%
Don't include beneficiary time as an input	Do include beneficiary time as input (using indicator and proxy for Outcome 'Giving something back to the community', ie: £7.24/hour x 3528 hours)	3.56	1.97	-44.66%

The sensitivity analysis shows that quantities (i.e. numbers of volunteers and visitors) have a significant effect on the SROI calculation. This is understandable, but we can be very confident of the numbers relating to volunteers, as all volunteers were surveyed. The data on number of visitors per year are fairly robust, as they are based on years of data collection by Gorgie City Farm, but it should be remembered that the figures relating to the proportion of the total visitor population who have experienced an outcome have been scaled up from a much smaller survey group. This is, however, unavoidable, as it would be completely impractical to survey 4,000 visitors per year. When the sample size was checked using a sample size calculator, it was determined that we could be 95% sure (confidence level) that the true percentage of the visitor population who had experienced each outcome was + / - 10% of the percentage we found (confidence interval of 10). In the sensitivity analysis we made sure to check what the effect on the ratio would be if the quantity of visitors

experiencing outcomes was even lower than this (25%, 50%) and concluded that there would still be a positive return.

Attribution and deadweight have the same effect on the SROI ratio, but again, we can be fairly confident of these estimations. In many cases attribution was based on self-reported survey results, and where this information was not available, we have erred on the side of caution and chosen a more conservative figure. For example, as many as 80% of people with depression recover without intervention, but only 20% of people with schizophrenia²⁰. Therefore, as the volunteers at the Community Garden Project have a range of mental health problems, we chose a deadweight figure half way between 20% and 80% for the Outcome of ‘better mental health’.

Duration and drop off had a much smaller effect on the results.

Obviously, the best way to confirm these SROI results would be to check the assumptions and estimations against real data collected in the future. For example, volunteers could be re-interviewed after one year and again after two years, to find out if they were indeed still more active, eating more healthily and more knowledgeable, as predicted. If more resources were available, a greater number of visitors could have been surveyed, which would have increased the confidence in the results.

²⁰ <http://www.rcpsych.ac.uk/mentalhealthinfoforall/problems/depression/depressionkeyfacts.aspx> and Lambert et al, *Acta Psychiatrica Scandinavica* Volume 118, Issue 3, pages 220–229, September 2008

9 AUDIT TRAIL

During the course of the SROI analysis, we considered including additional stakeholders and Outcomes. The table below explains why these stakeholders and Outcomes were eventually excluded.

Stakeholder	Outcome	Reason for not including outcome
Families of volunteers	Reduction in time spent caring for volunteer	Not material (most volunteers don't live with their families)
City of Edinburgh Council	Reduction in anti-social behaviour (and therefore saving in clean up costs by council)	Not material. Although there is some research to suggest that green spaces reduce crime in an area, it would be very hard to prove this Outcome or show how much was due to the Community Garden Project.
Local businesses	Reduced income because of increased spending at produce stall on Farm	We collected data on the percentage increase in visitors' weekly shopping at the produce stall. The result was 0.7% which was not considered to be taking away significant trade from local businesses.
Visitors	Increased healthy eating	Although 25% of visitors reported "eating more fruit and vegetables" this is impossible to quantify, as so many other factors are involved. Many visitors said they already ate healthily, and the percentage increase of produce bought from the produce stall was not significant (0.7%).
Other community gardens	Competition for funding	Excluded because it was not possible to find out whether Gorgie City Farm applied for the same funds.
Environment	Increased carbon emissions	This could be a negative Outcome as more than half (57%) of visitors get to the farm by car. However, it's not clear how to measure this Outcome or what the deadweight would be.
NHS	Reduction in demand for health promotion services	Visitors and volunteers reported being more active, either as a result of walking to/around Gorgie City Farm, or from weeding and digging in the Gardens. It is likely that this change will also result in savings for the NHS, but via a more indirect route, so these benefits were not considered to be material Outcomes for this SROI analysis.

Some financial proxies also proved problematic, and probably resulted in underestimating the impact of the Community Garden Project. For example, the financial proxy for an increase in biodiversity is very low, but undervaluing environmental benefits is common in SROI analyses.

Throughout the analysis it has been hard to determine how much of the value of Community Garden Project relates directly and exclusively to the activities of the Community Garden Project, and how much is due to the location of the Community Garden Project within Gorgie City Farm. For example, our visitor survey showed that visitors spent 34% of their time in the four garden areas (rather than the farmyard, pet lodge etc.). Therefore, it could be argued that if the average number of adult visits to the Farm per year is 50,000, then the average number of visits to the gardens is only $50,000 \times 34\% = 17,000$. To combat this, all visitors were specifically asked how much of each Outcome was due to visiting the *gardens* at the farm (rather than just visiting the farm). It must also be remembered that the gardens are an integral part of the farm, contributing to the upkeep, atmosphere and activities for the whole site. Most visitors don't distinguish between the farm and gardens, so it would be impossible, and inappropriate, to try to determine how much value belongs to the gardens 'on their own'.

10 STAKEHOLDER REVIEW

An important part of the SROI process is to verify the results both internally, with stakeholders, and externally, with the SROI network.

The author checked the results of this analysis with the stakeholders, by talking to the volunteers, and emailing the report to visitors, carers and people in the council and at Redhall walled garden who had expressed an interest in seeing the results.

Talking to the volunteers was the most challenging aspect of the stakeholder review, as many of them have learning difficulties and problems with literacy and numeracy. Therefore, the overall themes of the report were explained face to face, rather than just handing out the very detailed full document.

If time and resources had allowed, it would probably have been better to arrange face to face sessions with other stakeholders as well, as very little feedback was received by email. Happily the comments that were received were positive (eg: 'interesting', 'useful') and confirm that the assumptions made in the report are appropriate.

The draft report was also discussed at several conferences with representatives from community gardens and community health projects in Scotland, and it was reviewed by an assessor from the SROI network.

These discussions were very helpful, and resulted in a few of the outcomes, proxies and indicators being changed.

11 APPENDICES

b SROI background and principles

Developed initially by the Roberts Enterprise Development Foundation in the USA over 15 years ago, SROI methodology has evolved and been developed in Europe and most recently in the UK by the SROI Network. The Network is a membership organisation with a wide range of partners, including organisations with an interest in measuring social value, SROI practitioners, Investor interests, funders, researchers/academics and individuals. For more comprehensive information please refer to The Guide on SROI²¹ which can be downloaded at www.sroi-uk.org.

SROI is based on the following principles:

Principle	Description
Involve stakeholders	Inform what gets measured and how this is measured and valued by involving stakeholders
Understand what changes	Articulate how change is created and evaluate this through evidence gathered, recognising positive and negative changes as well as those that are intended or unintended
Value the things that matter	Use financial proxies in order that the value of the outcomes can be recognised. Many outcomes are not traded in markets and as a result their value is not recognised
Only include what is material	Determine what information and evidence must be included in the accounts to give a true and fair picture, such that stakeholders can draw reasonable conclusions about impact
Do not over claim	Only claim the value that organisations are responsible for creating
Be transparent	Demonstrate the basis on which the analysis may be considered accurate and honest, and show that it will be reported to and discussed with stakeholders
Verify the result	Ensure independent appropriate assurance

²¹ A Guide to Social Return on Investment – Nicholls J et al 2009 Cabinet Office, Office of the Third Sector

c. Sample Questionnaire



The staff at Gorgie City Farm want to check that the Community Gardening Project is working well, and to find out if there are things we need to improve. We also want to show our funders what difference the Project makes to the lives of all the people who use it – everyone from the volunteers and their families to the council and the NHS. This is especially important right now, as it is harder than ever to find funding in the recession.

We are using a method called “**Social Return on Investment**” (SROI) to measure the impact of the Community Gardening Project. We will work out how the Project changes people’s lives and then we will try to work out how much this change is “worth” in pounds. This will be difficult (can you tell how much someone’s “happiness” is worth?) but the SROI system is has been developed for this purpose. In the end, we hope we will be able to show our current, and future, funders that for every £1 they invest in the Project, their money will buy many more pounds’ worth of benefits for the community.

To do this SROI study, we need your help! We need you to answer the following questions (this should take about 15 minutes). It doesn’t matter if you can’t answer/don’t want to answer them all and if you’re not sure about an answer, please just give us your best guess. We will keep your answers confidential, although we may use some of your comments in our final report (we will change everyone’s names). If you don’t want us to use your comments at all, that’s fine too, just let us know.

Please return your form to Emma or Donna at the farm (Gorgie City Farm, 51 Gorgie Road, Edinburgh, EH11 2LA) **by March 22nd**. If you have any questions, please give Emma or Donna a call on 0131 337 4202.

(If there is someone else in your family who has also been affected by [*insert volunteer name here*] attending the Community Gardening Project, (mum, dad, granny, granddad, brothers, sisters, uncles, aunties etc...), please ask them to fill in a form too)

Volunteer name.....

1. How often do you attend the Community Garden Project?
.....days/week

2. What did you do before you started working on the Community Garden Project?

- stayed at home
- went to the pub
- attended a day centre
- volunteered somewhere else. If so, where?
- paid employment

- took part in another activity. If so, what? Sport? Arts? Hobby?
.....
- other.....

3. What would you do on [insert days that the volunteer attends] if you weren't at the Community Garden Project?

- stay at home
- go to the pub
- attend a day centre
- volunteer somewhere else. If so, where?
- work in paid employment
- take part in another activity. If so, what? Sport? Arts? Hobby?
.....
- other

4. What do you do for the rest of the week when you're not at the Community Garden Project? (tick all that apply)

- stay at home. How many days/week?
- go to the pub. How many days/week?.....
- attend a day centre? How many days/week?
- volunteer somewhere else. If so, where?
How many days/week?
- work in paid employment. How many days/week?
- take part in another activity. If so, what? Sport? Arts? Hobby?
.....
How many days/week?
- other

5. How has your life changed in the last year, because you've been working at the Community Garden Project?

- Do you feel more confident?
- Have you made more friends?
- Do you feel more positive?
- Have you learned something new?
- Do you feel healthier?
- Are you more active?
- Do you eat more healthily?
- Have you got a job?
- Do you feel more part of the local community?
- My life has changed in other ways. Please explain:

6. How much are these changes because of your work with the Community Garden Project? (put a cross on the scale below)

All.....A lot.....A bit.....None

7. How can we measure these changes?

- Do you take less medication now? If so, how much less?
10% less.....50%less.....100%less
Please give details:.....
- Do you spend less time visiting the doctor/hospital/counsellor/support worker? If so, how much less?
Used to visit doctor/hospital/counsellor/support worker....hours/week
Now visit doctor/hospital/counsellor/support worker.....hours/week
- Do you go out with friends more? If so, where?.....
How much more often?
Used to see friendshours/week
Now see friendshours/week
- Have you got a job or increased your hours at your current job? If so, what is the job?
How many hours did you work?.....hours/week
How many hours do you work now?.....hours/week
- Have you got a qualification? If so, what?
- Do you teach other people about gardening now? How often?
.....
- Do you come to the Community Gardening Project more regularly/frequently than when you started?
How many hours did you come/week when you started?
- Do you work on your own more often now? Please explain
- Are you more active now? If so,
 - Do you walk more? If so, how much more?
Used to walkhours/week
Now walk.....hours/week
 - Have you joined a sports' club? If so, which club?
.....
How often do you attend?
- Do you smoke/drink/take non-prescription drugs less? If so,
How much did you smoke/drink/take drugs before? (1 = not at all; 10 = all the time)
1.....2.....3.....4.....5.....6.....7.....8.....9.....10
How much do you smoke/drink/take drugs now? (1 = not at all; 10 = all the time)
1.....2.....3.....4.....5.....6.....7.....8.....9..... 10
- Do you eat more healthily now? How many meals/week are healthier?
.....
- Other (please give more details).....

8. If you have a support worker, please tell us their name and contact details so we can send them a questionnaire, to find out how the Community Gardening Project has affected their life too:

Name of support worker:.....
Contact details of support worker:.....

Thank you!!

We hope to finish our report on the impact of the Community Garden Project by June.