Key Points

- The aim of this research was to evaluate the impact of the Big Lottery funded Plant, Eat and Teach project on its beneficiaries. The research also sought to assess the wider social value that the project is creating using a Social Return on Investment (SROI) analysis.

- The Plant Eat and Teach (PEaT) drop-in, community garden offers a safe, quiet and respectful space in which local people meet new people and learn new skills. As a community garden it aims to help people from different backgrounds to improve their quality of life and well-being.

- Social Return on Investment (SROI) is a framework for measuring and accounting for change in ways that are relevant to the people or organisations that experience or contribute to it. It seeks to capture social, environmental and economic outcomes and uses monetary values to represent them.

- Mental wellbeing is a fundamental component of good health. Mental illness is hugely costly to the individual and to society, and lack of mental wellbeing underpins many physical diseases, unhealthy lifestyles and social inequalities in health.

- The evaluation includes data from 108 people who worked in the garden; 20 individual case studies/reflections (written with/by the beneficiaries), 18 interviews with beneficiaries and 40 completed before and after Well-being Questionnaires and Health Questionnaires.

Key Findings

- There was a statistically significant increase in beneficiary social connectedness scores on the Friendship Scale from baseline (M=17.03, SD=5.45) to follow-up (M=18.65, SD=4.93), t (69) = 3.04, p= < 0.001.

- On the ONS ‘satisfaction’ and ‘life is worthwhile’ indicators beneficiary scores were higher at follow up than the region and county averages. On three of the four ONS indicators beneficiaries show statistically significant improvement (p=0.0001).

- Analysis suggests the cost of attending a local Improving Access to Psychological Therapies session per patient is £102.38 for low intensity therapy, and £173.88 for high intensity therapy (Griffiths et. al. 2014). If all 108 PEaT beneficiaries were to be given 12 sessions of low intensity IAPT the actual cost would be £132, 684; i.e. 15% more expensive than running PEaT for a year. PEaT would be 50% cheaper than attending high intensity IAPT.

- We calculate a Social Return on Investment ratio of 1:2. This means that for every £1 of investment £2 of social value is created. We feel this is a very parsimonious reflection of the value created.

- A sensitivity analysis valorising all beneficiary claims of impact, not just the ones independently validated by our own primary research, suggests that the impact of PEaT can be calculated to be a Social Return on Investment ratio of 1:3.68.
The Plant, Eat and Teach Project

PEaT is now well-embedded in local health and wellbeing networks who value this resource as a healing space for their clients. Recognising the project’s unique therapeutic approach as a space of recovery for their clients in crisis, referring agencies include: Addaction (a charity that helps people to address their addiction issues), Women’s Aid, a secure ward at Bodmin Hospital, NHS Bolitho Support Worker and importantly - the Samaritans.

There are two workers who support the project: a Project Co-ordinator and Community Enablement Officer. Both are passionate about their work and support they offer not just around gardening and growing but around using the space as a safe and peaceful environment.

All adults with mild to moderate mental health needs living in Penwith or in the surrounding area are eligible for the project.

Case study research suggests that community gardens provide tangible benefits to people’s lives, increasing their well-being, community involvement and pride in their local environment. While there are reports of a growth in community gardens in the UK, rigorous exploration of their value is often obscured due, in part, to their heterogeneous nature.

Importance of mental health & wellbeing

Mental wellbeing is a fundamental component of good health. Mental illness is hugely costly to the individual and to society, and lack of mental wellbeing underpins many physical diseases, unhealthy lifestyles and social inequalities in health.

It is estimated that mental health problems impose a total economic and social cost of over £105bn a year. The economy loses more than £30bn a year from sickness, absence and unemployment caused by mental ill health, while treating mental health problems cost the NHS and social care over £21bn a year. But the majority of the financial burden of mental illness falls on patients and their families, with the impact on quality of life costing £53.6bn.  

Access to Mental Health Support

Despite a wealth of published evidence about effective interventions to promote mental wellbeing and prevent and treat mental illness both anxiety and depression often go undiagnosed and many individuals do not seek treatment. Certain groups are known to have particular difficulty in accessing mental health services, especially those in low income groups and those with other health and social problems. This is relevant to Penwith and the surrounding rural area in Cornwall which has few community services and has pockets of social deprivation.

There is good evidence that interventions that seek to improve wellbeing at individual and community levels can help to increase resilience to the wider impacts of the social determinants of health and risky behaviours. Changes may also impact on health and social care service use, limiting dependence on more costly intensive services. Supporting social engagement and reducing social isolation also provides benefits to the wider community by enabling a possible ‘harnessing’ of potential contribution to the community through, for example volunteering and caring responsibilities.

Research Aim and Methods

This research is part of a wider University of the West of England (UWE)-led study of projects funded by the

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Big Lottery under the Healthier Way to Live Programme. In this study we sought to evaluate the impact of the Penwith Community Development Trust’s: Plant Eat and Teach project on its participants, and examine the social value that the project is creating using Social Return on Investment (SROI) analysis. Finally we used the RE-AIM framework to review the learning from evaluation.

What is Social Return on Investment?

SROI is a framework for measuring and accounting for change in ways that are relevant to the people or organisations that experience or contribute to it. It seeks to measure social, environmental and economic outcomes and uses monetary values to represent them. SROI captures wider forms of value often left out of more traditional methods of economic evaluation such as cost benefit analysis.

Interest in social value has been raised by The Public Services (Social Value) Act (2013). The Act requires public bodies to consider how the services they commission and procure might improve the economic, social and environmental well-being of the area.

The act defines social value as “the benefit to the community from a commissioning/procurement process over and above the direct purchasing of goods, services and outcomes”.

The evaluation focuses on 19 months operation of the PEaT Project (September 2013-March 2015) and includes all those who registered and took part in project activities and during this time (n=108). Beneficiaries completed baseline and follow up questionnaires at 4-10 months following enrolment. The measures covered wellbeing (ONS Wellbeing Scale) social isolation (Friendship Scale) and Health. Staff recorded self-reported personal achievements and beneficiaries recorded their own experiences.

Project Beneficiaries

Those referred to PEaT have access to a beautiful garden throughout the week. Referred beneficiaries can also access a series of workshops on a variety of topics including: cooking, horticultural knowledge and craft events. They also give opportunities for beneficiaries to gain skills through National Open College Network (NOCN) accredited courses e.g. Introduction to Horticulture and Sowing and Growing Techniques etc. Of the 108 registered participants, 25% self-referred or attended through a personal recommendation, 10% responded to promotional literature and the rest are referred from a range of organizations including: the Samaritans, GPs and health workers, Addaction, Women’s Aid and Mind amongst others.

The average age of the beneficiaries was 45, with the eldest beneficiary aged 72. 3% of beneficiaries are from a BME background. Almost a third of beneficiaries are unemployed, a quarter are permanently sick or disabled, a tenth are in some kind of employment and there are some people who are retired.

Self-reported Health Issues at Registration

Additional profiling information shows that amongst the beneficiaries over a quarter self-disclosed that they have mental health challenges (27%, N=29), others have declared they have learning difficulties (20%, n=22) and (17%, n=18) have special needs and (26%, n=28) report a current medical condition.

I had never volunteered before and for many years I have had mental health issues and have found it very difficult to be with other people. I am enjoying the PEaT Project. It has helped me with my confidence and self-confidence issues. I feel more motivated. Since coming to the project I have taken part in many different activities such as weeding, digging and planting. I think coming to the project has been good for my confidence. I feel more able to do things outside the house. I realise that taking part in the PEaT Project is helping me feel better both mentally and physically.

Beneficiary 75
Outcomes for Social Isolation
There was a statistically significant increase in beneficiary social connectedness on the Friendship Scale scores from baseline (M=17.03, SD=5.45) to follow-up (M=18.65, SD=4.93), t (69) = 3.04, p= < 0.001. What we find when looking at the raw data is over half of the beneficiaries show significant improvement on the Friendship Scale.

![Graph showing social isolation levels]

Outcomes for Wellbeing
One of the key aims of the Big Lottery funding is promotion of well-being. Looking at our baseline and follow up questionnaires there have been significant improvements on three of the key ONS indicators of well-being.

<table>
<thead>
<tr>
<th>ONS Well-being Indicator</th>
<th>Baseline (n=40)</th>
<th>Follow-up (n=40)</th>
<th>Cornwall Region (ONS, 2013^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, how satisfied are you with your life nowadays?</td>
<td>6.9</td>
<td>7.95</td>
<td>7.72</td>
</tr>
<tr>
<td>Overall, how happy did you feel yesterday?</td>
<td>6.74</td>
<td>7.85</td>
<td>7.97</td>
</tr>
<tr>
<td>Overall, how anxious did you feel yesterday?</td>
<td>3.41</td>
<td>2.90</td>
<td>2.84</td>
</tr>
<tr>
<td>Overall, to what extent do you feel the things you do in your life are worthwhile?</td>
<td>7.46</td>
<td>8.56</td>
<td>7.49</td>
</tr>
</tbody>
</table>

Improvement on the satisfied, happy and worthwhile questions shows that there are statistically significant improvements on these well-being indicators. The t-values varied from 4.484 to 4.702 and the probability value was p= < 0.001.

Before coming here I was a long term carer but became stressed out and anxious. I lost my confidence and felt very low. By interacting with other people it has really helped me to change. It makes me think I am not so bad as I think I am. It lifts you and keeps you going. I have started to see the old me and can feel me grow in confidence. Since coming to PEaT I feel mentally stronger and the exercise has improved my fitness and I take part in a lot more activities.

Beneficiary 32

Before coming here I was a long term carer but became stressed out and anxious. I lost my confidence and felt very low. By interacting with other people it has really helped me to change. It makes me think I am not so bad as I think I am. It lifts you and keeps you going. I have started to see the old me and can feel me grow in confidence. Since coming to PEaT I feel mentally stronger and the exercise has improved my fitness and I take part in a lot more activities.

Beneficiary 32

I found out about the PEaT Project through A4E. Through family circumstances I started early retirement and by coming to the project it helped me to change my social and physical well-being. I found it very happy place to be and I have made new friends. As a result of gardening I am much fitter and happier now. It helped me to put life into perspective.

Beneficiary 7

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Additional Reported Outcomes

Project exit and review records and our interviews provide descriptive data for 108 beneficiaries:

- The PEaT exit Project Health Questionnaire reveal that 90% (n=35), agree or strongly agree that their confidence has improved.
- The PEaT space allow beneficiaries time to come to terms and address various mental health issues including depression, anger management, addiction, suicide prevention and recovery from abusive relationships.
- Data from the PEaT Project Health Questionnaire shows that 92.3% (n=36) say that they agree or strongly agree that working on the project has increased their physical activity.
- Other SROI studies of community garden initiatives suggest that they can provide a significant catalytic effect towards lifestyle and behavioural change in their local areas (CCRI, 2013:24)⁵. We found evidence to support this claim from the PEaT project.

![Image](image.jpg)

Social Return on Investment Analysis

The SROI analysis involves a stage-based process that involves mapping outcomes from the perspective of stakeholders; defining the relationship between inputs, outputs and outcomes; evidencing outcomes and giving them a value; identifying those aspects of change that would have happened anyway or are a result of other factors to ensure that they are taken out of the analysis; and then calculating the SROI.

Inputs

The annual budget for the PEaT project was £113,534. This includes direct costs including the salaries for the two workers, office expenses, training, telephone etc.

Valuing outcomes

In SROI we often use financial proxies to estimate the social value of non-traded goods to different stakeholders. By estimating this value through the use of financial proxies, and combining these valuations, we arrive at an estimate of the total social value created by an intervention.

The table at the end of this report provides a summary of some of the key outcomes included in the SROI analysis and the way in which they were valued.

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Calculating the Social Value

SROI analysis found that the net SROI ratio which takes account of the amount invested is 1:2. This means that the analysis estimates that for every £1 spent on the PEaT project there is £2 of social value created.

The total impact for the 108 participants who participated in the garden was £223,727. Project beneficiaries enjoy 15% of the value generated but the largest beneficiary was the local NHS services (71%), the wider fiscal system (DWP) in terms of savings related to Employment and Support Allowance (4%), local businesses (4%) and the environment (4%), Penwith Community Development Trust (1%) and the Local Authority (1%).

Strengths and Limitations of the Research

The evaluation and SROI built upon a good set of quantitative baseline and follow-up data collected by the project. This was a tremendous achievement given that this is a project where beneficiaries work outside and can enter a large area not necessarily always been seen by the organisers in such a large space. Questionnaires used validated measures and the research team externally audited the data collection process. Additional written records held by staff provided supplementary information on the quantitative records.

There are also a number of limitations. Within the timescale and resources it was not possible to collect data for longer-term outcomes beyond 8-12 months from enrolment for most beneficiaries. However we were able to valorise some of the environmental impact. Some benefits important to stakeholders have not been fully monetised. Wider impacts of the community garden on the Penwith Community Development Trust and the local community have not been fully captured in the analysis. It was beyond the scope of the study to fully explore all of these costs and benefits.

Conclusion and Recommendations

In this evaluation and SROI report we have monetised the benefits of the PEaT project to its beneficiaries, other agencies working with the community in Penwith, the environment and local businesses. The report demonstrates a significant social return for the investment made, and the feedback from beneficiaries and stakeholders clearly illustrate the programme’s positive impact to beneficiary mental health, wellbeing and life circumstances. The number of different agencies who refer suggests that the project reach is extending and that their work is increasingly recognised by a growing number of organizations. Comparing costs and exposure to local higher intensity Improving Access to Psychological Therapies; the PEaT project would actually be 50% cheaper and beneficiaries would actually spend more time exposed to the therapy of gardening than one to one therapeutic engagement.

Using the Re-AIM7 review framework we can summarise some key areas of learning from the evaluation:

- **Reach.** The project clearly reaches adults, with mild to moderate mental ill health in the target area. Some adults with higher levels of mental ill health and social need accessed the garden space and are supported by other volunteers who have higher levels of well-being.
- **Effectiveness.** There is baseline-follow up evidence of short-term impacts. There is plausible evidence of longer term and wide ranging personal, social and environmental impact. No negative outcomes to beneficiaries or partner agencies were identified. SROI analysis helps communicate the overall social value of the project.

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• **Adoption.** The project evolved from an earlier format under the auspices of the West Cornwall Local Action for Rural and Neighbourhood Learning in Deprived Communities initiative to meet local need. Partner agencies are extraordinarily supportive and happily refer beneficiaries.

• **Implementation.** Unlike other projects in the South West Well-Bing (SWWB) portfolio this project does not draw upon a clear set of agency values. However it provides evidence to the growing claims that gardens and gardening are therapeutic spaces. Beneficiaries talk about increasing mindfulness and relaxation as key to their experiences. It is clear that what PEA'T provides is a great space for relaxation and recovery. Delivery costs compare very favourably to IAPT initiatives.

• **Maintenance.** The project is well established and has good throughput. There is positive qualitative evidence of long term effects and the SROI sensitivity analysis shows a greater return on investment of £3.68:£1. Secure funding represents a major problem for the future of the project.

**What is the RE-AIM Framework?**

RE-AIM is a useful framework for reviewing community projects that have public health goals.

**Reach**
Does the intervention reach the target population?

**Effectiveness**
Does the intervention achieve the assumed goals, without negative outcomes?

**Adoption**
Was the intervention broadly adopted at the community level?

**Implementation**
Was the intervention consistently implemented at a reasonable cost?

**Maintenance**
Does the intervention have the ability to be sustained, with long-lasting effects?

A key concern for the Penwith Community Development Trust is securing ongoing funding once the current Big Lottery funding ends. This report provides a tool for working with local commissioners and other funding bodies to identify possible sources of funding to secure ongoing delivery of the project. It also highlights ways in which improvements could be made to the project to maximise benefit to individuals and other local projects and services. For example since the project provides value for local businesses there is an opportunity for the Trust to build on these connections to explore potential income streams.

More work with local GP and Primary Care services may help to raise the profile of the project at a grassroots level. They could target their registered patients, working with the GP practices and perhaps provide an alternative route to the IAPT service.

Key recommendations arising from this study are:

• Use this report as a tool to demonstrate the value of the PEA'T Project and the Trust and for working with local commissioners and other funding bodies to identify possible sources of funding to secure ongoing delivery of the project.

• Explore opportunities for undertaking a whole system evaluation and SROI of the Trust’s activities to provide insight in to the ways in which it benefits the local community and promotes health and wellbeing in Wincanton and the surrounding area.

• Identify ways for other local services, particularly the GP Practice and IAPT service, to take appropriately refer clients to the garden space.

• Maintain and review data collection methods used in the light of the outcomes captured by this SROI and identify ways to capture all relevant outcomes to the project and future funders whilst ensuring that paperwork is minimised.

This study was led by Dr. Richard Kimberlee (UWE), Olly Biggs (UWE), with support from Mat Jones (UWE) and Phil Aubrey (Well UK), Sarah Well (PH Specialty Registrar).

We would like to acknowledge and thank all the PEA'T staff and volunteers – particularly Val Johnson and Karen Llewellyn - beneficiaries and partner agency staff linked to the PEA'T Project for their support and assistance in undertaking this research.

July 2015

For full **Evaluation & SROI Report** and details of the wider evaluation of the SWWB programme go to: [http://westbank.org.uk/](http://westbank.org.uk/) or contact [richard.kimberlee@uwe.ac.uk](mailto:richard.kimberlee@uwe.ac.uk)

For details on Penwith Community Development Trust [enquiries@pcdt.org.uk](mailto:enquiries@pcdt.org.uk)
### Social Return on Investment – some outcomes included and their values

<table>
<thead>
<tr>
<th>Outcome</th>
<th>n (%)</th>
<th>Financial Proxy</th>
<th>Value per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved well-being</td>
<td>53 (49%)</td>
<td>Cost of a workplace intervention to promote well-being (McDaid et al 2011:22).</td>
<td>£80</td>
</tr>
<tr>
<td>Managing two beneficiaries with anger management issues</td>
<td>2 (1%)</td>
<td>£100 cost of an anger management course. <a href="http://empathic-anger-management.co.uk/courses/anger-rage-relationship-2/">http://empathic-anger-management.co.uk/courses/anger-rage-relationship-2/</a></td>
<td>£100</td>
</tr>
<tr>
<td>Improved physical activity</td>
<td>53 (49%)</td>
<td>Cost per hour of joining a guided walk / one off group exercise session (£4.40). Each attends on average 44 hours in a year. <a href="http://www.leisurecentre.com/penzance-leisure-centre/PriceList">http://www.leisurecentre.com/penzance-leisure-centre/PriceList</a></td>
<td>£4.40/hour</td>
</tr>
<tr>
<td>Improved diets</td>
<td>53 (49%)</td>
<td>Cost of a takeaway meal (equivalent per session attended) 1/per month per person as average volunteer attends once per month £8.80 x 12. <a href="http://www.vouchercodes.co.uk/press/release/fast-food-britain-spends-29-4-billion-on-takeaways-every-year-298.html">http://www.vouchercodes.co.uk/press/release/fast-food-britain-spends-29-4-billion-on-takeaways-every-year-298.html</a></td>
<td>£5,596</td>
</tr>
<tr>
<td>PEA(\text{T}) provides organizations with a safe and therapeutic environment to take their clients to that would otherwise not be available or would have to be paid for</td>
<td>20 adults 20 senior citizens</td>
<td>Cost of visit to the Lost Garden of Heligan is £12/adult and £10/Senior citizen <a href="http://heligan.com/visiting-us/opening-hours-and-prices">http://heligan.com/visiting-us/opening-hours-and-prices</a> Plus cost of travel 80 miles @45p/mile</td>
<td>£1,880</td>
</tr>
<tr>
<td>Development of a pond to attract new water born species</td>
<td>1</td>
<td>Value of pond/ lake habitats per hectare. £5,949/hectare/year (2007 prices) Size of pond = 0.05 hectare. Greenspace (2009:9)</td>
<td>£297</td>
</tr>
<tr>
<td>Engagement of beneficiaries in their own gardens.</td>
<td>65</td>
<td>Average household spend on gardening equipment. Average annual spend £135.20 (ONS, 2012:1)</td>
<td>£8,788</td>
</tr>
</tbody>
</table>