The Permaculture Association UK Research Strategy 2014 – 2018

Definitions of permaculture

"The philosophy behind permaculture is one of working with, rather than against nature, of looking at systems in all their functions, rather than just asking one yield of them, and of allowing systems to demonstrate their own evolutions."

David Holmgren

Permaculture is a term coined from permanent agriculture, and permanent culture. It may be defined as the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems. Permaculture design aims to produce such systems by specifying and assembling appropriate conceptual, material and strategic components; these include housing, water systems, transport and the like and also invisible structures such as legal and financial systems, and the development of supportive social networks. Permaculture contributes to the conservation of the environment by the harmonious integration of landscape and people so as to benefit people by providing their material and non-material needs in a sustainable way.

From the Association's governing document.

Contents

****

Please send comments and suggestions on any aspect of this strategy to:

Chris Warburton Brown
BCM Permaculture Association,
London, WC1N 3XX
or email research@permaculture.org.uk

Foreword

by Ed Sears, Chair of the Permaculture Association Research Advisory Board

"Rather ten times die in the surf, heralding the way to a new world, than stand idly on the shore."

Florence Nightingale

I have been lucky to be part of the group that has pushed forward this research effort over the last four years, and the new strategy is a chance to look at what we can achieve over the next four years. Given the sprawling nature of permaculture, I think an essential requirement is to develop a research capability which is complex enough to do justice to its many facets – design, culture, agroecology, social networks, group learning, and growing herbs on the windowsill, among others.

A way to grapple with complex phenomena is to cast your net wide, exploring the broad terrain as rapidly as possible in order to scope out the areas which are generating lots of activity, and those areas which are critical as foundations for further progress but which have been left unattended and overgrown, and need pruning and a clear-out. So plans outlined in the following pages for useful tools and resources for researchers sit alongside efforts to capture an overview of the permaculture landscape, and to situate it within the whole earth system and the global search for a sustainable future.

Here we see another characteristic of permaculture research, which is that it is fractal – it 'appears the same from near as from afar'. As you zoom in, more detail appears. The permaculture movement is as interested in one person's struggle to survive and live sustainably, or the cultivation and edibility of one plant, as we are in country-level strategies or high-level conferences. There are many people at the bottom of the pyramid, and it is difficult to predict what life will throw at us, so investigation and action across all scales offers the best chance of success in influencing the outcome of our own lives.

If I have one message relating to this strategy, it is that if you think we have missed out something important or got our approach wrong, get out there, make it your life's work to put your approach into practise and explore what no-one else has so far explored ….. and come back and tell us the results!

Ed Sears
February 2014

1. Context

Why does research matter to us?

Research is one of the charitable objectives of the Association, together with education. Yet although permaculture is now nearly four decades old, and is practised by hundreds of thousands of people in at least fifty countries, published scientific papers that deal with it are few. A recent comprehensive review by Ferguson (2013, ref) considered 220 articles and books but found relatively little high quality, peer-reviewed research. It therefore seems that permaculture science does not yet exist.

The Association believes that this is currently one of permaculture's greatest weaknesses and therefore one of its greatest opportunities. Research into applications and fundamental aspects of permaculture has great potential to improve the practice of permaculture practitioners around the world. Well-documented research also raises the profile and standing of permaculture in civil society. As the prime networking body for permaculture practitioners in the UK, the Association is in the best position to systematically monitor and review the progress of permaculture on a UK-wide scale. By providing an interface with academic research, our own research efforts also enable us to feed into policy-forming scientific debates, and improve access to relevant academic research for non-academics.

The ultimate purpose of our research is to give people tools to improve their lives and surroundings. Our efforts will reflect this, with an emphasis on research into applications of permaculture and their effectiveness. We will also explore ways of making permaculture education and training as attractive as possible and of the highest quality, giving people the necessary skills to design and implement solutions that address real needs in their personal lives and communities.

What is the framework for our research?
Research carried out will be guided by the Permaculture Association's O*rganisational Aims.* Therefore, our research work will:

- improve access to permaculture
- enhance collaboration within the permaculture network
- increase knowledge of the benefits of permaculture within society
- develop permaculture theory and practice.

The programme purpose, desired results and the activities set out in this Research Strategic Plan have been fully integrated into the Association's Strategic Plan for 2014-20.

What will our specific areas of work be?

- Launching a major project with The Permaculture Farming Research Group
- Progressing with The 10-year Forest Gardens Research Project
- Building an International Permaculture Research Network
- Maintaining The Permaculture Research Digest
- Supporting the Permaculture Knowledge Base and its wiki
- Developing the research content of the Association website

- Promoting The Living Laboratory of Sustainability amongst academics
- Developing and delivering one or more large research projects with current academic partners
- Delivering the Metrics for Agro-Ecology Project
- Establishing the National Permaculture Library
- Supporting Member based trials and experimentation
- Developing a Research Handbook and support for citizen science skills within the permaculture network
- Supporting an academic conference as part of the International Permaculture Convergence in London in 2015
- Other projects that arise in response to funding calls or new collaborations.

Who will we work with and for?

- Members of the Association, in particular, teachers, designers, project leaders and students working towards the Diploma in Applied Permaculture Design.
- People interested and/or active in permaculture but not members of the Association.
- Other permaculture institutions and networks, whether in the UK or abroad.
- Other NGOs, in particular those focused on education and training, and those supporting local sustainability.
- Academic partners, in particular those with an interest in applying science to issues of sustainability.
- Students from UK and international higher education, ranging from undergraduates to doctoral candidates, and including Permaculture Diploma apprentices.

What is our geographical focus?

We will primarily concentrate on research that leads to solutions relevant for cool temperate climates, and on a scale from the personal to the bioregional/organisational. We will also conduct some research of international relevance engaging our international partners and allies.

2. Goals of the Association's Research

The Objectives of our research

All of the Association's research work shares two objectives:

1) to improve permaculture practice
2) to create a robust evidence base for permaculture.

We recognise that we cannot achieve these objectives on our own, and we need to work with a wide range of partners in the UK and around the world to achieve them. Our particular contribution to these objectives will be to enhance collaborative research work and knowledge sharing amongst permaculture practitioners and researchers.

Programme purpose

In order to achieve these objectives, we need to increase the amount of high quality research on permaculture, and to ensure that permaculture research reaches a wide audience of both academics and practitioners. This strategy sets out how we will approach both of these activities.

1) Supporting research activities which lead to publication in respected outlets (including on-line)
We wish to engage the academic community with our work, both through partnering with research active academics and with students at undergraduate and graduate levels. We will continue to forge partnership with academics, create joint projects together, and access funding from academic funding councils and government. Moreover, it has been estimated that there are 60,000 people practising permaculture in the UK, constantly investigating and testing out new environmental innovations and applying permaculture design to every aspect of life. We will tap into the research potential of this vibrant network, employing citizen science methodologies to enable permaculture practitioners to actively co-create research questions and co-investigate those questions with academic researchers.

2) Creating clear, well-used routes to share permaculture research between both academics and practitioners
By creating a vibrant, well used research network, we aim to make both the research process and its results as visible as possible. In our publications we will encourage people to take part in our research programs, and to access the results. We will make the results of our research work widely available through a number of different outlets, in print, on-line and through conferences and events. We will also seek out relevant research work done by others and publicise it using the same range of outlets. We will constantly look for new audiences who would be interested in using permaculture research findings and the outlets through which they can best be reached.

The results we want to see

From this programme purpose come seven results we intend to achieve. By 2018 we will have:
1. created permaculture research protocols
2. engaged more people in permaculture research practice
3. enabled more people to access permaculture research findings
4. engaged more students (including diploma apprentices) in permaculture research
5. increased links between The Association and universities, other academic institutions and policy makers
6. built an international research network
7. conducted high-quality research projects

The activities and outputs that will mark our progress towards these results are set out in the logical framework analysis on pages 13 and 14.

3. Our current position

Strengths

- In April 2012 the Association appointed its first Research Coordinator, Dr. Chris Warburton Brown, funded by Lush Cosmetics, Plants for a Future and anonymous donors.
- Chris has been supported by a team of volunteers who have done invaluable work on a number of projects, and strong links developed with Bradford University mean that this will continue in future years.
- The Research Advisory Board which supports the research work of the Association currently consists of 20 research active academics in six sub-groups.
- The Association's four International Research Surveys (2012-2013) have revealed a strong appetite for the creation of an international permaculture research network. Over 500 responses have been received from 50 countries.
- The on-line Permaculture Research Digest was launched in January 2013, listing 20 published items relevant to permaculture each month. It currently has around 250 hits every week, and people from 80 countries have visited.
- The Association's new Knowledge Base is almost complete, and when launched will provide a portal to a huge amount of information on permaculture, including ethics, design, principles, practical solutions and research.
- Lush cosmetics have recently funded an international research programme to create a suite of robust metrics for agro-ecology. The first phase, to be completed in 2014, looks at soil, biodiversity and water.
- The Permaculture Farming Research Group has brought together academics from six universities with permaculture practitioners, and two substantial research projects are currently being developed on urban farming and upland farming.
- The Association has created a partnership with Transition Network and Global Eco-Villages Network to offer a research platform to academics, the Living Laboratory of Sustainability. A wider partnership named 'Ecolise' brings the three networks together to support knowledge transfer and advocacy to policy makers.
- An wide network of academics interested in permaculture research has been created and three joint bids submitted to research funding councils. More will follow soon.
- Association members have shown themselves willing to engage in a range of citizen science research projects, including research into polycultural vegetable yields, small-scale wheat growing in the UK and the trialling of simple soil tests.

Weaknesses

- Funding remains limited, with only three days a week of paid work available.
- The Association has not yet secured funding for a substantial multi-year research project.
- It has proved difficult to identify all the sources of permaculture research internationally and to collate them, particularly unpublished student theses.
- Permaculture research remains marginal within academia.
- The number of papers on permaculture in refereed journals remains very small.
- Members of The Research Advisory board have offered excellent support to individual projects but are too busy to work together systematically.
- Research capacity and skills within the membership network remain limited.
- There is a far bigger audience for the Knowledge Base and the Research Digest but we have not yet worked out how to reach it.
- There is a heavy reliance on volunteers for project delivery.

4. Our approach to research

Participatory
For permaculture research to be truly inclusive, it is important that we empower members to do their own research, and share their results. Therefore, we will support efforts to demystify research to encourage engagement on the individual and project level. We will especially encourage research by non-academic members, giving training and advice wherever possible. Where appropriate, we will facilitate direct links between members and/or academics in relevant subjects. We will also make use of research offers or opportunities coming to us, whether from inside or outside the PAB membership. Access to research methodologies and results will be made as easy as possible. We will use a wide variety of means to disseminate methodologies and results.

Systematic and rigorous
We want permaculture research to be taken seriously by those not practising permaculture. We will therefore develop methodologies and processes that stand up to academic scrutiny. In parallel, we will also encourage non-academic methods of enquiry where appropriate and engage in the debate over what constitutes "proper" research. Through our dissemination channels we will aim to provide correct, evidenced information that is easily accessible.

We will also encourage people to record permaculture methods and practices that do *not* appear to work in order to enable them and others to change their practices/ methods if necessary.

Non-dogmatic
As permaculture comes out of its infancy, it is increasingly necessary to integrate knowledge and practices developed in other fields, and we will support efforts in this direction. We will encourage research into fundamental aspects of permaculture, such as ethics, ecological principles, design principles, processes and tools with the aim of keeping them up-to-date. We will also value playful & experimental ways of doing and presenting research.

Emphasis on applied permaculture
We need to understand how people use permaculture design and what prevents them from using it effectively. The emphasis of our research will be therefore be on applied research, enabling people to improve their own lives and communities. We will also help people to carry out a certain amount of "blue sky" research.

5. Research Activities

The Association's research activities have taken great strides forward since its last Research Strategy was written in 2010. A strong team is now in place to deliver the strategy, supported by a wide network of permaculture practitioners and academics. There is a much clearer knowledge of what research has been done and what future research needs are. Solid foundations are now in place. Over the next four years it is essential to consolidate these foundations and build on them. We believe the programme purpose we have set out and the results we are striving towards will successfully build on those foundations (see p.6). In order to achieve these results, a number of activities have been identified as necessary. These are set out in the Logical Framework Analysis in section 9 (p.13) and will not be repeated here.

5.1 Key roles in delivering the strategy

Five groups have been identified whose involvement will determine the success or failure of the strategy.

A key role for Association members

The Association's membership is currently relatively small, around 1,500. However these members are highly dedicated and more than 10% of them are actively involved in volunteer work for the Association. Recent appeals for volunteer participants in research trials, for example the recent soil test trial, have achieved a very high response rate. The members have two main roles to play in the Association's research. Firstly, as volunteer participants in research trials. Secondly, in suggesting and leading their own research projects. In order to facilitate member-led research projects, a research handbook is currently being written and funding is being sought to support training in research methods and research design to members. This will be especially directed at Permaculture Diploma apprentices, though not exclusively.

A key role for the Research Advisory Board

The Research Advisory Board is a group of experts who work to support the association's research work. They played a crucial role in writing the first Research Strategy (2010-14) and in securing funding for the Research Coordinator post. At the end of 2012 the board expanded to 21 members, a mixture of research-active academics and permaculture practitioners with a strong interest in research. The RAB combines two roles; setting the strategic direction of the Association's research work, including this strategy document, and giving advice and support with particular research projects, especially through providing potential collaboration partners. The RAB has one face-to-face meeting a year, in December, where the work plan for the coming year is agreed. A number of topic-focussed sub-groups also meet during the year, either virtually or face-to-face.

A key role for volunteers

In the absence of a large paid research team, many of the Association's research projects are conducted largely by students and full time and part time volunteers. Full time volunteers are placed with the Association for nine to twelve months. Currently we have three in post, two of whom are part of an on-going professional development partnership with Bradford University. For the period 2014-18 it is hoped to have full-time volunteers in post working on the Forest Gardens Project, the International Research Network, and on Knowledge Management including the National Permaculture Library. Part time volunteers offer to work for us for 200 hours, either full time or spread over several months. This is an ideal opportunity for undergraduates in their summer vacations or for overseas visitors. They work on specific, time-limited research projects.

Students can write undergraduate, postgraduate or diploma projects in collaboration with the Association, either on topics of their own choosing or on topics suggested by the Association.

A key role for project groups
In order to support research work in crucial areas, The Association has started to pull together project groups. Groups currently exist for forest gardens and permaculture farming. These groups bring together academics with permaculture practitioners. The groups set strategic direction, look at what kind of research they are interested in conducting, and develop viable research projects. They then look for funding and, if successful, begin collaborative work on delivering the research project. This is a relatively new model but so far it has had considerable success in the two areas where it has been tried, and we will create new project groups in a number of areas during 2014.

A key role for Research Partners
Collaboration with academic partners is vital if we are to make permaculture more widely known and accepted in the scientific debate. Knowledge exchange between Permaculture and related disciplines will expose a wider section of society to a permaculture approach and increase our ability to adopt new relevant knowledge. We will continue to involve a wide spectrum of academics in the RAB and in the project groups. We will also be open to collaborate with academics as and when opportunities arise; in the last few months, we have been partners in three bids submitted to academic funding councils. A particular focus of this strategic plan is building an international permaculture research network and we have made a promising start, identifying over 300 potential members in 60 countries, but much more needs to be done. We will also collaborate on specific research projects with partners from civil society where appropriate.

5.2. Existing Research Projects

Four research programmes that are already funded and under way are:

The Forest Gardens Research Project
In 2009 the association received funding to run a ten-year forest garden trial. Eleven projects that were in the process of setting up forest gardens were recruited. Baseline data was collected and a small amount of funding provided to each project towards set-up costs. The research focussed on yields, although that has been interpreted broadly to include economic, social and bio-diversity yields as well as actual crops harvested. By the start of 2014 , enough data has been gathered to enable more tightly focussed research questions to be framed, and to allow the development of a larger scale project with academic partners which involves more forest gardens. So far, three areas of particular interest have emerged and seems worthy of further study:

- The ratio between energy put into the forest garden and the energy yield
- Making a living from forest gardening
- The potential of forest gardens in amenity horticulture

The International Soil and Biodiversity Tests Project
This project brings together two of the Association's research priorities for 2014 and beyond. We believe that these two priorities are mutually supportive and reinforcing:

1) Building an international research network. Since late 2011, the Association has been conducting a phased International Research Survey to establish the current state of permaculture research practice world-wide. The next stage of this project is to use the survey findings to build an online international permaculture research network, linking researchers together by geographical location and by research topic.

2) Identifying, developing and promoting 'farmer-friendly' tests. The Association has started to identify and develop a number of simple tests which can be used by researchers and practitioners throughout the world. These include tests for measuring biodiversity, soil quality, water quality and cropping. The aim is to create a simple, comparable, scientifically valid, monitoring tool-kit that can measure and document key indicators of success for permaculture projects across the world.

The Permaculture Research Digest
The Digest is an on-line repository of recently published permaculture-related academic work, including books, journal articles, reports and and online resources. It is entirely free to use, and all items are hyper-linked to the original source or publisher. Since its inception in January 2013, *The Digest* has had over 200 items posted on it. 10,000 page views have been made, with visitors from over fifty countries.

Member-led wheat growing trial
The trial has been led by Association member Deano Martin. Here is his own description of the project:
I have been growing grains using the Bonfils method. I have been looking at a number of other ways that have been used to grow grain in an attempt to identify what might be the optimum way to grow them on a small scale. I want to compare the various ways that grain is grown, analyse them, and come up with a series of trials/experiments to identify the key components for a sustainable grain growing system of my own.
In the summer of 2013, Deano recruited six Association members from across the UK to sow grains using the methods he has pioneered and to assess the results. The trial will run for three seasons.

6. Research themes
Much of our work will be focussed on collating and disseminating other people's research. However we will also conduct our own original research (result 7 in the log frame on p.13), in collaboration with Association members and with other research institutions. We will focus our original research efforts in the following areas:

- Upland farming
- Metrics for agro-ecology
- Forest gardens
- Urban food growing
- Sustainable living

7. Resources
What resources will be needed to deliver this strategy?

Space
A minimum of four desks with computer facilities, internet access and phones
A space for The National Permaculture Library

Funding
Salaries with on-costs and pension
Library books
Volunteer expenses
Conference fees and other expenses
Contribution to central Association costs

Funding required for minimal delivery of this strategy
Research Coordinator, minimum 0.6 FTE - £18k per annum
Web Coordinator, minimum 0.2 FTE - £6k per annum
Volunteers – minimum of two FTEs at all times - £2k per annum
General planning, administration and finance support from other Association staff - £4k per annum
Total resources desired – 2 paid staff plus volunteers, £120k over 4 years

Funding required to fully deliver all aspects of this strategy – indicative figures
International Research Network Project – 1 PT staff member, £60k
Forest Gardens project – 1 volunteer, £20k
Knowledge Base Project – 1 PT staff member, £90k
Coordinator's salary including Digest – 1 PT staff member, £60k
Farming Research Project/s – depends on project/s
International Agro-ecology Metrics Project – 1 FT staff member plus volunteer, £100k (but overlaps with International Research Network Project)
Living Laboratory of Sustainability – depends on project/s
Total resources desired – 4 paid staff plus volunteers, c.£400k over 4 years

Resources currently secured
1 FT staff member plus 4 volunteers for 2014, £25k

How can resources best be used to deliver this strategy?
Leading our own research projects (see section 6 above)
Keeping the Association web pages up to date and maintaining high quality content
Creating databases where research participants can upload their own data
Developing the interactive features of the Knowledge Base, especially the Wiki
Maintaining and promoting the *Permaculture Research Digest*

8. Reviews
Progress on delivering the strategy will be reviewed annually at the Research Advisory Board annual meeting in December. Drawing on this, in January of each year an Annual Research Strategy will be produced setting out the plans for the year ahead, with clear key performance indicators agreed with the Research Advisory Board. A report on these KPIs will be produced monthly for the RAB and the Association's Chief Executive.

9. Logical Framework Analysis for The Permaculture Research Strategy 2014-18

Objectives	Activities	Indicators	Assumptions
<u>Overall objective</u> **The research team will help to:** 1. improve permaculture practice 2. create a robust evidence base for permaculture	**Our contribution will be:** to enhance collaborative research work and knowledge sharing amongst permaculture practitioners and researchers.	**We will know we have achieved this because:** 1. we can measure healthy activity across various different functions and activities within the permaculture research network. 2. permaculture literature, teaching materials and learning programmes increasingly make reference to peer-reviewed research	1. Many others around the world share these goals and will share the work of achieving them. 2. Mechanisms exist to translate scientific advances into improved practice (through teaching and literature)
<u>Programme purpose</u> By 2018, the research team will have significantly deepened the engagement of both academics and practitioners in permaculture research, and increased the amount and the visibility of high quality research on permaculture.	**To achieve this purpose we will need to:** 1. support research activities which lead to publication in respected outlets (including on-line) 2. create clear, well-used routes to share permaculture research between both academics and practitioners.	**We will know we have achieved this because:** 1.1 each year there is an increase in the number of research papers, web sites, articles, theses and books published which reference permaculture 2.1 each year there is an increase in the number of people accessing permaculture research through channels directly supported by the Association.	For both of these: 1. Pc Association continues to exist, providing admin and IT support, and active members. 2. Research Coordinator post continues to be funded. 3. Permaculture expands its appeal and its supporters in both breadth and depth.

<u>Results</u> **By 2018 we will have:**	**To achieve this result we will need to:**	**We will know we have achieved this because:**	For all of these: 1a Translation is easily available. 2a IT support available 3a Tests and guides can be developed with the resources available in a simple format.
1. created permaculture research protocols	1.1 write a research protocol document 1.2 produce guides to agro-ecology metric tests 1.3 produce guides to designing and conducting research projects	1.1.1, 1.2.1, 1.3.1, all of these things are available on the Association website in five languages (English, Spanish, French, Portuguese, Mandarin Chinese).	
2. engaged more people in permaculture research practice	2.1 conduct research trials in many countries 2.2 conduct research trials with numerous participants 2.3 establish a collection and collation system for research data	2.1.1 each year there is an increasing number of countries in our trials 2.2.1 each year there is an increase in research participants 2.3.1 each year there is an increase in people uploading data to our website	2.1a Committed participants can be found for the trials. 2.2a We overcome linguistic and bio-regional boundaries 2.3a Appropriate data collection tools can be easily developed
3. enabled more people to access permaculture research findings	3.1 enhance our web presence including the Association website 3.2 expand the audience of *The Permaculture Research Digest* 3.3 establish a Knowledge Base including a wiki	3.1.1 each year there is an increase in hits on the website's research pages 3.2.1 each year there is an increase in page visits to *The Digest* 3.3.1 each year there is an increase in page visits to the KB	3.1a Website works well, IT support in place. 3.2a There's a big enough audience to support this. 3.3a High quality of KB, Digest and web pages is sustained.
4. engaged more students (including diploma apprentices) in permaculture research	4.1 support students to learn about permaculture research methods and approaches 4.2 get student volunteers working for TheAssociation 4.3 get students researching permaculture and writing up their findings	4.1.1 a research methods handbook, an annual short training course, and on-line learning tools 4.2.1 two students are volunteering at all times 4.3.1 each year the theses and diploma designs listed on our website increase	4.1a Resources in place to support development. 4.2a We can recruit good volunteers. 4.3a IT support, it is possible to engage students.
5. increased links	5.1 enlarge The Association's	5.1.1 each year there is an	For all these:

between The Association and universities, other academic institutions and policy makers	academic network 5.2 increase the presence of permaculture in academic papers and conferences 5.3 support the creation of a permaculture research unit 5.4 ensure that policy dialogues and their outcomes make explicit reference to permaculture	increase in The Association's academic active contact list 5.2.1 each year there is an increase in papers and conferences held which reference permaculture 5.3.1 a permaculture research unit exists in a UK research organisation 5.4.1 permaculture gets mentioned in policy discussions and documents	5a Academics and policy makers are increasingly interested in permaculture, and wish to engage with permaculture research as consumers and producers.
6. built an international research network	6.1 create an international network of academics who research permaculture 6.2 set up a clear membership structure for the network	6.1.1 an active network with a web presence and a membership list 6.2.1 each year there is an increase in academics joining the network	6.1a IT support and good support tools. 6.2a A potential membership of exists and we can find them.
7. conducted high-quality research projects	7.1 identify key topics of interest and find potential partners 7.2 develop project ideas into concrete form 7.3 secure funding for projects 7.4 implement the projects successfully 7.5 disseminated project findings	7.1.1 an annual themed research event (e.g. farming research) 7.2.1 at least two project proposals written annually 7.3.1 at least one project gaining funding annually 7.4.1 at least one project implemented annually 7.5.1 one academic paper published per project	7.1a Themes exist which can attract a good audience. 7.2a/7.3a Ideas are adaptable into projects which appeal to funders. 7.4a We can deliver (with our partners) 7.5a We can produce work of high quality.