

Case Study

Rothamsted Research

A public dialogue on developing guiding principles for Rothamsted Research's work with industry

Vital statistics

Commissioning body:

Rothamsted Research via the Biotechnology and Biological Sciences Research Council (BBSRC)

Duration of process:

12 months: October 2013 – September 2014

Total public participants involved:

49

Total stakeholders and experts involved:

24 external stakeholders and scientists at a stakeholder event, 11 members of the Oversight Group

Cost of project:

£179,000 total,
Sciencewise co-funding = £51,000

Rothamsted Research is an agricultural research institute that has been in existence for 170 years. It produces high-quality scientific research which shapes modern agricultural practice, and continues to provide scientific innovations and advice to the farming community. It is a respected authority, largely due to its long history, independent status, excellence of science and the fact that it is predominantly publicly funded.

Rothamsted Research wants to increase its engagement with private companies to increase opportunities for applied research and impact, and to diversify its funding profile. However, it recognised that there are tensions and drawbacks arising from universities and research institutions working more closely with industry. Rothamsted Research is committed to engaging stakeholders and the wider public in its work and wanted to ensure that its new strategy was underpinned by a comprehensive understanding of public attitudes.

Consequently, Rothamsted Research decided to run a public dialogue that aimed to produce a shared position between it and the local public on the principles and values that would inform its engagement with industry, and to feed into the development of its Knowledge Exchange and Commercialisation strategy.

Commissioning body view

“ We have gained reassurance/self confidence that we are doing things in the right way that the public want and expect. It's all important – good to see how much Rothamsted Research is valued and that the public appreciate that we continue to do research to safeguard researchers and their prospects. ”

Rothamsted Research staff member.

Influence on policy and policy makers

The main achievement to date has been the dialogue's reinforcement that Rothamsted Research is working in a way that is commensurate with the expectations and interests of the public. The medium to long-term impact of the dialogue is closely linked to the Knowledge Exchange and Commercialisation strategy that will be developed and will be informed by the dialogue results.

One other immediate impact is that the results of the public dialogue have been seen to add weight to any negotiations Rothamsted Research has in the future with industry, the media and others.

“ It gives Rothamsted more evidence to back up any standards that they have and advocate. ”

Oversight Group member



Background

The past couple of decades have witnessed a broader emphasis on the role of academic institutions as catalysts of technological innovations and economic growth, as well as repositories of knowledge. In this context, research institutions have been encouraged to develop closer working relationships with industry. The idea is that closer collaboration with industry will lead to a more effective connection between knowledge, technological innovations and markets, so increasing the economic and social impact of research. In addition, research/industry collaboration might lead to attractive new sources of funding for academic institutions, something that is increasingly important given the current financial climate.

In response to this changing context and to meet research challenges, Rothamsted Research wants to increase its engagement with private companies. However, it recognises there are also tensions and drawbacks arising from universities and research institutions working more closely with industry – including around control of intellectual property (IP) and constraints on the traditional model of conducting and disseminating publicly funded research.

To inform decision-making in ways that could mitigate these potential tensions, Rothamsted Research began to develop a strategy for commercialisation and partnership with industry. Rothamsted Research's public engagement strategy committed it to build social, political and economic dimensions into research activity and it felt that the development of the strategy should be underpinned by a comprehensive understanding of public opinion on the matter.

Parallel to this, BBSRC was looking increasingly to research institutes to lead and own public dialogue activities. As part of the institute assessment exercise, all institutes that receive strategic funding from BBSRC were encouraged to change their approach to public engagement to be more dialogue driven.

Rothamsted Research decided to run a public dialogue to produce a shared position between it and the local public on the principles and values that would inform its engagement with industry. It was also hoped that this public dialogue would serve as an exemplar for future public dialogue work at Rothamsted Research and for other BBSRC funded institutes.

Key messages from the participants

Overall, participants placed great value on Rothamsted Research, especially its long history, impressive track record, expertise and charitable status. Participants identified that closer relationships with industry were important for Rothamsted Research to achieve impact and diversify its funding base. However, most of the discussions during the dialogue focused on the tensions that typically arise in academic-industry collaborations because this approach enabled participants to develop guiding principles that they felt would mitigate these tensions.

Participants' views about Rothamsted Research and industry were analysed and clustered under five themes:

Working for the public good

Working for 'the public good' and ensuring the possibility for 'humanitarian usage' of knowledge and products was strongly supported by participants. However, there was an acceptance that the concept of the public good is difficult to define. Most commonly, participants described it in terms of projects that make a contribution to human wellbeing, environmental sustainability or improved food production.

Participants identified potential industry constraints upon Rothamsted Research's ability to work for the public good that related to tensions surrounding the private ownership of patents and the use of products for profit making, rather than humanitarian, reasons. As such, they suggested that all research outputs developed with industry should be subject to a humanitarian usage clause.

Other suggestions included:

- Ensuring reinvestment of profits back to Rothamsted Research and/or Government
- Undertaking an assessment of a company's ethical track record before agreeing to work with it
- Carrying out an assessment of potential scientific, ethical, socioeconomic and environmental implications of research projects before taking them forward.

“Rothamsted's integrity is more important and more valuable than money.”

Public participant, London collaborative workshop.

Independence and integrity

Maintaining Rothamsted Research's independence and integrity was an important principle raised by public participants. Participants saw credibility as one of Rothamsted Research's most valuable assets, which relied on it being able to speak independently, based on rigorous and objective scientific research. However, there were concerns that working more closely with industry might inhibit Rothamsted Research's ability to work freely or jeopardise its reputation as an independent research institute.

Measures to protect Rothamsted Research's independence and integrity when working with industry included:

- Establishing ethical partnering criteria
- Maintaining a diverse private funding portfolio so as not to become too over-reliant on one company or project
- Assessing any risks to its independence and integrity before agreeing industry collaborative projects.

Transparency and public involvement

There was significant agreement from participants that transparency and greater public involvement are very important in Rothamsted Research's engagement with industry. Regarding transparency, it was seen as important that Rothamsted Research communicates the aims, beneficiaries and financing of all its work. On public involvement, while aware of practical difficulties, public participants insisted that a degree of public involvement remained important, given that so much of Rothamsted Research's funding is public.

Open access to results

Open access to results was deemed important by public participants who felt that all research should eventually be in the public domain. This reinforces current practice, where there can be a short period of exclusive access before publication. However, participants also understood that exclusive access to results for a certain period of time could be an important condition of industry funding.

Participants also felt that the encouragement of knowledge transfer should be a policy advanced by Rothamsted Research to increase access and use of the knowledge its research generates.

Reconciling idealism and pragmatism

Most of the principles developed by participants carried a moral or ethical weight, and focused on the potential constraints industry might place on Rothamsted Research's ability to operate in an independent

and ethical manner. However, participants were also keen to ensure that the principles they proposed would not jeopardise Rothamsted Research's ability to work effectively with industry. This difference in approach was described by one group at the collaborative workshop as principles that are 'idealistic' and those that are 'pragmatic'. Although these priorities were not always viewed as conflicting factors, there was certainly a tension between the two issues and most participants identified a need to find a suitable balance between them. Wherever participants considered the balance should lie, the topic of undertaking effective contract negotiation was common and participants were keen to ensure that Rothamsted Research placed a high value on the service it offers to industry.

The dialogue activities

The main objectives of the public dialogue were:

- To engage in discussion with a diverse group of the publics and stakeholders on Rothamsted Research's work with industry
- To develop a set of guiding principles, on the basis of the public and stakeholder engagement, for Rothamsted Research's work with industry
- Support the development of a culture of listening and engaging in dialogue within Rothamsted Research
- Outputs disseminated to other public-funded research institutions.

The dialogue project, which was guided and overseen by an Oversight Group (OG) of eight external stakeholders and three Rothamsted Research staff, consisted of:

- A scoping exercise including a web-based review and 11 stakeholder interviews. The results informed the dialogue process, workshop materials and the recruitment of the public
- Two simultaneous public workshops with a total of 49 participants near Rothamsted Research's facilities in Harpenden and Exeter on Saturday 25 January 2014. Each workshop lasted a full day (10am to 4pm). An incentive of £60 was paid to each participant
- One stakeholder workshop with 24 participants (including 16 external stakeholders) held at Rothamsted Research on 29 January 2014 to discuss the public's guiding principles
- One final collaborative workshop with a subset of 29 of the public participants and eight stakeholders on 8 February 2014. This reviewed, discussed and agreed a set of guiding principles. Public participants received an incentive payment of £70 each
- Analysis of all data collected, using NVivo™ software for coding, followed by reporting. Reports were reviewed by the OG before being finalised for publication.

Public workshops. The workshops aimed to familiarise public participants with Rothamsted Research's work, to share some of the potential tensions of Rothamsted Research working with industry and to develop initial 'guiding principles' from this.

Participants were recruited by a professional agency, to a quota sample specifying a broadly defined set of criteria such as age, gender and disability. The aim was to recruit 25 members of the public to attend each public workshop. In practice 24 attended in Harpenden and 25 in Exeter, all with varied backgrounds, experiences and perspectives.

The recruitment strategy for public participants ensured that at least two-thirds of participants had never heard of Rothamsted Research before and that there were no participants who worked in related industries such as farming or biotechnology or were involved in environmental campaigning. This, and the other criteria in the recruitment specification, were designed to ensure that participants would bring a range of views into the room.

Information provided to support the workshop discussions included materials on the concept of guiding principles, case studies to illustrate potential tensions (mosquito repellent, pesticides and salmon stocks, and improving the nutritional quality of food), and information on Rothamsted Research's history and plans.

Stakeholder workshop. The aim of the stakeholder workshop was to introduce stakeholders to Rothamsted Research and its work, establish the main objectives of the project and to elicit their feedback on the initial draft guiding principles from the public workshops.

The OG provided an initial list of relevant stakeholders and others were then identified using a chain-referral (or 'snowball') sampling strategy. The list included stakeholders and experts from academia, business, farming and third-sector organisations.

In total, 24 participants attended the stakeholder workshop at Rothamsted Research in Harpenden (16 were external stakeholders).

Collaborative workshop. A final collaborative workshop brought together members of the public from the first workshops who were interested and available (29 participants) and stakeholders (three external and five from Rothamsted Research) to discuss, review and agree a prioritised list of guiding principles.

What worked especially well

The collaborative event at the end enabled the public participants to engage directly with the stakeholders and the contribution to the guiding principles to be finalised. For the public participants, this event provided an opportunity to gain more of an understanding of the reality for stakeholders, and to explain themselves and be able to pose questions. It enabled the stakeholders to gain insights into the questions and priorities of the public. Although, initially, it was valuable for the public and stakeholders to meet separately, the understanding of and reaction to the public's guiding principles was a richer engagement when carried out face to face with stakeholders.

The management group (MG) within the project was particularly effective (alongside the OG), and comprised representatives from Rothamsted Research, the delivery contractor, Sciencewise and BBSRC. There was clarity from the outset as to who was part of it and the role. Throughout the project design/ planning and implementation process, 30-minute weekly 'catch-up' calls were held. These were invaluable to the process to develop, question and take forward the workshop design and materials. Half-hour meetings encouraged a focus and prioritisation of issues, and enabled the team to work effectively together.

What worked less well

Sufficient time is required for the design and planning phases of a project. The tight timescale of design and planning meant that many activities were carried out in an overlapping fashion. In practice, the project was delivered to time and budget, which was a significant achievement. However, projects need to be planned to include

sufficient time for design and planning, which also needs to factor in the multiple layers of decision-making (i.e. consultation with the MG and OG), and iteration of plans and materials. The ability of this project to do this was severely constrained. The time constraint could have been managed more effectively if the implications of the tight timescale had been flagged earlier as a cause for concern and appropriate action taken (e.g. ensuring sufficient notice given to stakeholders to enable them to attend events).

A multi-stage dialogue requires sufficient time between events. Here, the sequence of events and tight timescales meant that four workshops were held over two weeks. This was highly ambitious for even the most administratively efficient systems. It also did not allow much time to digest findings and reflect upon the appropriate methods for taking the findings forward to the next stage. Projects need to factor in sufficient time to do this.

The recruitment agency, sub-contracted by the delivery contractor, recruited 14 of the 24 participants for the Harpenden workshop through another agency that used a database rather than on-street recruitment. Although the public participants that were ultimately recruited did fulfil the criteria, there was a concern expressed by Rothamsted Research that this may have affected the process as some were 'repeat participants' who were used to taking part in such processes. The evaluators concluded that it did not invalidate the findings. However, they reflected that it is critical, when contracting a third party to carry out the recruitment of public participants, that measures are in place to ensure that it is carried out as per the brief, and that systems and safeguards are in place if the desired approach to recruitment is not initially successful.

Clarity is needed around the depth of public views being sought. In this case, expectations differed as to the depth of understanding of public views being sought (e.g. unpacking why comments were made by the public and what was meant by them).

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Commissioning body

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