Participatory practical research in the Demeter Association

Practitioners and scientists conduct research together



Research

Author: Dr. Christopher Brock

Research coordinator at Demeter eV,
board of the Forschungsring eV
christopher.brock@demeter.de



The idea of collaboration between practitioners and scientists in research projects has always played an important role in organic farming. In biodynamic farming, for example, experimental work is also one of the first activities of practitioners: an agricultural test ring was founded during Rudolf Steiner's lectures on agriculture in 1924. Such collaboration can take place in different ways. According to Stephen Biggs, there are at least four different forms. He distinguishes between contractual, consultative, collaborative and collegial cooperation.

Contractual cooperation - the term is perhaps not entirely optimal - means here that farmers grant scientists access to the farm or individual areas in order to carry out research there. In this case, the farmers are only involved in the research with the business or part of the business as an object, but are not involved as people.

In consultative collaboration, farmers are involved in the research as individuals by questioning them on specific points and thus recording their knowledge.

Biggs compares this to the relationship between doctor and patient. Here the researchers take the active role and define the questions, while the farmers remain passive and simply answer the questions.

Biggs describes working together as equals as collaborative work. Scientists and practitioners shape the research process together and contribute their respective concerns and skills.

Finally, in collegial collaboration, the scientists support finding results using the informal knowledge systems of the practitioners. The research process is essentially guided by the concerns and approaches of the practitioners.

Participatory research: Participation as a success factor

In practical research at Demeter and Forschungsring, we always try, wherever possible, to be collaborative or collegial

Implement forms of cooperation. However, these require that all those involved in a research project are, on the one hand, interested in active participation and, on the other hand, have the necessary skills, knowledge and opportunities for this. The partners form a research community that designs, carries out and evaluates a project together.

The roles and tasks of the individual people can be different, but it is important that this does not create a hierarchy, but rather that the equal and cooperative way of working is maintained.

This way of working is referred to as participatory research, although the term is used slightly differently in the social sciences than in the natural or engineering sciences. Fundamentally, however, it is always about ensuring that the people or groups affected by a research topic participate in the research process. The great strength of participatory research is that the results arise in the community of participants and are not brought to those involved from outside. Those involved bring their respective perspectives and knowledge into the planning and implementation of the research project, thereby ensuring that the results are relevant and applicable for everyone. At the same time, the way we work increases the confidence of those involved in finding the results and thus promotes acceptance of the results themselves.

Participatory research is therefore particularly suitable if a project is not about pure advances in knowledge, but rather if the project is intended to have an influence on real issues and processes. For this reason, participatory approaches are used with great success in regional or local development projects. The advantages for practical research in the biodynamic context are also obvious: the groups affected by a problem are involved in solving it and, in conjunction with scientists and, if necessary, other partners, ensure that the structure of the research work meets the real conditions taken into account and the results can actually contribute to solving the problem.

>>>

How is participation achieved?

Participatory practical research is a real challenge to implement because the demands on the organization of such projects are high, from planning to completion.

In an overview article, Mark Reed names eight success factors for collegial cooperation, which we would like to follow up on here:

There needs to be a clear commitment to participatory work. This includes the willingness of everyone involved to engage with other positions and perspectives, to contribute constructively and to develop and/or implement the project together with all partners. Teamwork is the key competency of participatory collaboration.

Important actors (stakeholders) should be involved in the process as early as possible. The idea for a research project is usually not developed by all subsequent partners, but by individual groups, e.g. specialist working groups in Demeter eV. In the course of project development, it then becomes clear which other partners should sensibly be included in the project. These partners should then be involved at the earliest point at which their involvement in project development makes sense and is desirable.

When integrating partners, care must be taken to ensure that all relevant groups and, if necessary, representatives of different positions are included. This plays a role in our projects especially when knowledge is to be created to clarify critical points, for example in disputes in Demeter specialist working groups, or when the research results are to be used as a basis for policy decisions at Demeter.

There need to be clear goals for the project that all partners share. On this basis, it is determined which knowledge should be developed and why this knowledge is needed. In contrast to academic projects, our practical research projects are usually not about advancing knowledge as an end in itself, but rather about working on a practical question. In contrast to academic projects, our projects fundamentally have a social component. Different interests and requirements of the actors must be taken into account. This is the basis for successful practical research. The way in which the partners work together must therefore be defined. The requirements of the project, but also the individual technical and time capacities of the partners, must be taken into account here.

Participatory collaboration requires very good coordination. This makes the projects even more expensive, but organizing the collaboration and the discussion process is actually a core task of project implementation.

The different requirements, framework conditions and working methods for finding knowledge in the academic area and in practice must be brought together. This point is also crucial. There is no point in planning an experiment that meets scientific requirements but cannot be carried out under practical conditions. Conversely, certain minimum requirements for conducting scientific experiments must also be met in practical experiments so that an experiment can be evaluated and produce a result. Bringing together these different requirements and prerequisites is a challenge, but also incredibly exciting.

An institutional framework is needed, i.e. structures that enable the implementation of participatory projects. For this purpose, the research coordination institution was created in Demeter eV (together with Forschungsring eV), which is responsible for the planning and coordination of research projects. In order to carry out projects, it is usually necessary to acquire third-party funding.

Examples in the Demeter context

We are currently carrying out three projects at Demeter eV in which the participatory approach in research collaboration is consistently implemented: The DeBien project, initiated by the Federal Demeter Beekeeping Specialist Group, on the effects of the barrier between the brood and honey area on honey quality, life processes in the Beehive and labor economic aspects have been led and carried out since 2018 by a project group made up of beekeepers, the beekeeping consultant, employees of the Demeter office and the research coordinator. In the individual project phases with the focus on "honey quality" and "life processes in the beehive", the group is supplemented by bee experts and specialist scientists. The research project is carried out in a division of labor: beekeepers carry out the experiment, scientists/ experts collect data and carry out analyses, but conceptual decisions and finding results are fundamentally the task of the project group as a working group of science and practice.

There is also a project initiated by the miller specialist group on the effect of extrusion processes on the quality of the grain products produced, as well as a project initiated by the Demeter Packaging Advisory Board to evaluate various alternatives to conventional plastic packaging in the area of "green freshness". These projects are also carried out by working groups in which representatives from practice work together with scientists on an equal footing.

I would like to thank my team colleagues Katrin Bader, Lucas Knebl and Tabea Meischner and Corinna Nieland for the valuable comments on the draft article!

And, the Biodynamic Test Ring, which was launched in the winter, will focus on practical questions regarding the use of preparations.

Research across associations

In order to promote practical research for the organic agriculture and food industry beyond the association, Demeter eV has joined forces with Bioland and Naturland in the Association for Organic Practical Research (VÖP). Together with other partners from consulting and science, the VÖP is carrying out the Nutrinet network project. Here, strategies for better nutrient management in organic farming are developed and tested in a total of six regional networks using a participatory approach. Other joint projects include GrazyDaiSy for grazing management in dairy farming, or a project for the valorization of cracked and dirty eggs. The KleeLuzPlus demonstration network is about promoting the cultivation and use of domestic smallgrain legumes. However, a participatory way of working cannot always be implemented here. Due to the objectives and work structure of the projects, sometimes only consultative collaboration with practice takes place, in which knowledge levels or operational data are collected, for example for sustainability analyses.

This too has its value and justification. However, we can only achieve the further development of biodynamic farming with genuine and equal cooperation. •



Sources

Biggs SD, 1989, Resource-poor farmer participation in research: a synthesis of experiences from nine national agricultural research systems, OFCOR Comparative Study Paper 3, The Hague (NL) • Cargo M., Mercer SL, 2008, The value and challenges of participatory research: Strengthening its practice, Annual Review of Public Health 29, 325-350 • Lilja N., Bellon M., 2008, Some common questions about participatory research: a review of the literature, Development in Practice 18, 479-488• Martin A., Sherington J., 1997, Participatory research methods – implementations, effectiveness and institutional context, Agricultural Systems 55, 195-216 • Reed MS, 2008, Stakeholder participation for environmental management: A literature review, Biological Conservation 141, 2417-2431