

FACING THE GAP BETWEEN RESEARCH AND PRACTICE IN DANISH FARMING SYSTEMS: A REFLECTION AROUND THE CASE OF ORGANIC POULTRY PRODUCTION

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Abstract

The gap between research and practice is a situation that needs passion and patience to be improved. Communicational skills seem to be a major factor, but issues like values, trust building, and respect might also have significant influence. Furthermore, the dominance of the transfer of technology model of extension represents a strong barrier. The present paper calls for holism and respectful and patient listening. Facilitation of a participatory learning process based on systems thinking is suggested as a way to improve the situation in the case of Danish organic poultry production. Some of the challenges are discussed in this paper and questions are being posed to the workshop.

Keywords: Participatory action research, Communication, Organic poultry production

Introduction

The technological development in animal production had progressed so much by the 1960's that certain farming systems became intensified enough to be considered as factories. In western countries this in turn initiated interests in animal welfare as very strongly expressed by Harrison (1964). Since then, there has been significant Danish research contribution to this area, with feather pecking and cannibalism in poultry being two main issues researched (e.g. Vestergaard, 1994). However, the feather pecking problem has not yet been addressed adequately, and there is still a strong demand for research in this damaging behaviour (e.g. Simonsen, 2001).

Parallel to this greater concern for animal welfare, there has also been a strong Danish interest in organic farming. Thus, 12.5 % of Danish eggs are produced in organic systems (Det Dyreetiske Råd, 2001). Due to the combination of interests in organic farming and animal welfare, the Danish organic poultry production system is facing special demands of provisions for the birds such as loose housing, more space, daylight in the house, and access to large outdoor areas. However, in a recent evaluation of egg production systems in Denmark conducted by the Danish Ethical Council concerning animals (Det Dyreetiske Råd, 2001), the welfare status of birds in the organic system was found to be poorer than in the other production systems. One indicator of this poorer welfare status has been the mortality rate, with the organic farming system averaging 21 % mortality as compared to 5-10 % in all other systems. The causes of mortality have not been recorded, but one of the main causes is supposed to be feather pecking.

Contrary to the animal welfare situation, the acknowledgement of organic farming as an area of scientific study has been very slow in Denmark. Even slower has been the Danish acknowledgement of the need for research and education in extension. Consequently, the development in organic farming in Denmark has been to a large degree led by the farmers themselves.

Within international extension research, during recent decades, there has been a growing focus on ecological sustainability (King, 2000). Organic farming is one major development in concrete farming practice with the concern for ecological sustainability. Parallel to this development, King describes a simultaneous questioning of the transfer of technology (TOT) model of extension. During the last decade, this has turned into a call for facilitation of participatory and social learning, based on systems thinking (e.g. Ison et al., 1997; King, 2000), and this is very much in accordance with the more holistic worldview of organic farming. Nevertheless, TOT is still the dominant extension model.

This is also the situation in Denmark's extension service concerned with organic farming, although this has not been stated explicitly (Fog, 2000). Farmers' experience exchange groups and grass root research projects in Denmark represent a movement away from TOT. Within organic poultry extension, Johansen (2001) describes the role of extension officers connected to 'experience exchange groups' as primarily one of being experts. At meetings of these groups, extension officers perform the roles typically of calling the meeting, chairing it, making minutes, giving brief farm evaluations, and giving presentations on requested subjects.

The types of scheduled interests in and outcomes of (or lack of the same) extension practice and research in extension, organic farming, and feather pecking listed above might all be symptoms of the gap between research and practice. We all know examples of significant differences between espoused theory and theory in use. We probably also all know the situation of speculating for long time about how to tackle a specific situation and then when finally at the time of acting we wonder how we could have been so worried about a thing so easy to do. This is another way to say that we learn by doing, and we ask different questions about the same things when we theorise as compared to when we practise. But are we similarly aware of the extent to which research questions forwarded by scientists can differ from the research questions farmers would raise on the same topics if they were asked? If differences do exist, why so? What are the barriers between research and practice, and why are these barriers so difficult to pass? What would the primary issues of Danish organic poultry production be like if there had been better communication between the stakeholders of research, extension, and organic farming practice? What would happen if they could meet as equal members of a researching or inquiring group? What if the process of such meetings were facilitated towards a more holistic worldview? What if the work took departure in all participants' experience of the situation? In other words, how could facilitation of a participatory learning process based on systems thinking help these people collaborate on improving the situation of Danish organic poultry production?

Moving towards a participatory approach

There seem to be a tendency that researchers and extension (R&E) people think that they already have changed their research communicational practice from TOT towards participatory learning processes. This is my impression from talking to stakeholders of the Danish organic poultry production like for instance Johansen (2001). I suggest that this is a good reason for TOT to be still the dominant extension model. But what makes people think that they have already changed? Here follows a hypothetical discussion, which is based on my own experience and perhaps biased by the limited data from R&E personnel.

First of all the R&E people might not have a unified view on what participatory learning processes entail. We are constantly met by a flow of new words, which we do not always investigate the meaning of before we begin using them. If they are words, which have a broad meaning and at the same time imply a clear philosophical position, we might completely misunderstand the use of them without recognizing it. For instance, it is discussed whether the term holism should be used to describe wholes rather than the whole (e.g. Checkland, 1984).

Thus, holism is a broadly interpreted word in philosophy used more or less indiscriminately, and it might require additional clarifications in certain situations. If the user does not specify in which sense he/she uses the word, then the intended meaning might not be evident, neither to the user nor to the audience.

Another possible reason for R&E people to feel that they have already moved away from TOT could be the common pressure experienced by them, pushing them towards participatory learning processes without necessarily them believing in it. By this I mean that by having been 'brought up' in a professional tradition built on the TOT model, it can be very difficult to let that tradition go in order to get into something new. This is a known psychological phenomenon (e.g. Lerner, 1989), for which it is important to note that there are two parts to having responsibility. On one side are the R&E people claiming their necessity as 'experts' and finding it wrong to say that they 'do not know'. Roberts (1997) expressed this as a particular difficulty in his R&E practice. On the other side are, in TOT way of thinking, the receivers of the 'expert' knowledge, e.g. the farmers who keep expecting the R&E people to be 'the experts' delivering the needed knowledge. This is well exemplified in Amezah (1998). To escape from this struggle it takes patience and a strong conviction about the belief you are moving towards.

Whether it is due to lack of common understanding or lack of acceptance that R&E people think they have already changed, it can be a big challenge to convince those to further move towards participatory learning processes. How can these barriers be eliminated?

Roberts (1997) found that good communication requires more than valid information, as suggested by Argyris & Schön (1996) and Habermas (1992). Roberts describes quality of relationships as another important factor. Consequently, he calls for focus on learning about the relationships we participate in and contracting based on trust (Garratt, 1991). In line with Sriskandarajah et al. (1996) this idea demands all participants to respect each other as equal partners, thus sharing ownership, power and responsibility, and requires willingness to get to understand each other by taking departure in each other's situation. I would call it 'taking time to listen' to the situation and to each other. This might be a useful way to facilitate the process of moving further towards a participatory approach. But we probably need a better understanding of what patient and respectful listening is all about.

Some personal experiences:

On recent travel I undertook in Australia, I saw some good examples of patience and quietness, which we might learn from. First I went to Longreach in the Australian outback. There I saw the huge area of dry, cracking, and to my surprise, also very living soil, patiently and silently waiting for dead plant material to fall down the cracks in order to keep the nutrition circulation going. I had the experience of shearing a sheep, which would have been nearly impossible if the sheep was not easy to hold. That is, the sheep, as a prey animal, by instinct sits still while being held, patiently waiting for this two-legged predator to let it free again. I met some aboriginal people, who in their dance presented their special way of meeting foreigners by sitting quietly waiting for long time to see what will happen. I also touched a wombat, this little slow, ground living bear of the koala family. I expected it to run away when being approached, but it didn't even react on being touched on its ear – it just kept sitting quietly. Finally, I undertook a bush walk through the Blue Mountains, and again in these big quiet non-moving rocks I was reminded of the power of peace and quietness.

I think experiences of this nature tell us to take time to be quiet and to listen in respect of the other to be as he/she is created, and with interest to find out how or whom he/she is. That is, let the other or the situation put on the words. If we do not give patience, quietness and respect we might force through misinterpretations and misunderstandings. But I think this is a very difficult task, and I think we need to learn how to listen carefully.

It is well known that to sincerely provide interest for others, we have to show interest in ourselves first. Ochre (2001) advises us to let the 'wise one' in us to guide us, and Ventegodt (1995) exposes the possibility of listening to our deepest and purest wishes. This is what I would call deeply embedded talents (The Bible: Ephesians chapter 2 verse 10; Matthew chapter 25 verses 14-30), which I see as gifts, similar to intuition and feelings, capacities we have been given as support for our communicational skills. In other words, I think our deeply embedded talents can help us listen to the situation and thereby listen to ourselves and the other participants of our relationships.

By the latter words I say that all participants are part of the situation (Skolimowski, 1985). This implies a further movement with the participatory approach towards holism. Here, and from now on, I use the holistic concept in the sense of wholes, which are part of other wholes (Checkland, 1984).

Moving towards holism

The participatory approach also requires acknowledgment of all participants to be part of more than one situation, in other words being in an interrelated network of situations (Ison et al., 1997). This way of seeing is holistic in Checkland's (1984) sense of the word. What does that mean for the participants?

First of all, the holistic approach demands taking departure in the situation and its contexts and thereby focusing on other issues and questions than just the initially presented problem (Checkland, 1984). This means that all participants have to see the situation from different angles and in different ways, which opens up for unexpected properties to emerge. Furthermore, being a worldview rather than a method, the holistic approach might also question the participants' own values. Thus the stakeholders of the organic poultry production in Denmark might ask themselves and each other how they understand the organic approach and to which degree they identify themselves with that approach.

This leads back to my call for listening to the talents deeply embedded in ourselves, since that is where we will also find our real values and worldviews. Now, considering all participants as part of the situation (Skolimowski, 1985), the exploration of their values and worldviews would be an important contribution to analysing the situation (Checkland, 1984). Furthermore, emphasizing the idea of equal partnerships (Sriskandarajah et al., 1996) implies not just finding out about the situation, but also taking action to improve it (Sriskandarajah et al., 1993). Thus, all participants are practising the whole research process, and therefore also considered equals as practitioners.

Practitioner-oriented methodology

The holistic, participatory learning processes called for here makes up a methodology, which others would call participatory (PAR)(e.g. Maclure & Bassey, 1991) or systemic (SAR)(Bawden, 1990) action research. This categorisation brings forward yet another focus, namely action research, which is well known for its spiral of circles of planning, acting, observing and reflecting, moving from one fuzzy situation towards less fuzzy situations. Action research has been criticised for lack of rigour in the conventional sense of the researching process, one of the reasons being that it does not allow pre-planning of the research project. Nevertheless, I think the participatory approach, committing all participants to be equal partners (Sriskandarajah et al., 1996), requires an action researching methodology exactly because collaboration, as a process based on negotiation, does not allow pre-planning either. The systemic nature of PAR demands the collaborative process of asking questions about the situation (Checkland, 1984). Furthermore, the detailed PAR methodology will be

specific for each research situation. This is because the methodology itself develops by practising and reflecting over the specific project – it is praxis (Bawden, 1990).

PAR is compatible with a view of farming as a human activity system (Checkland, 1984). This has brought the human issues in focus, along with the traditional technical production parameters (Sriskandarajah et al., 1993). Based on this idea, the process of asking questions should take departure in the practitioner's experience of the situation rather than the 'expert's' knowledge about the specific type of situation (e.g. Maclure & Bassey, 1991). This is practitioner-orientation.

For the usage of scientific knowledge, practitioner-orientation means a change in priority. At least, it has to follow a proper situation analysis, the production of practical knowledge by learning about the practitioners' situation (Checkland, 1984). Similarly, the scientific knowledge should be adopted with the recognition that it being theoretical would require adaptation to the real world situation and its specific conditions and contexts (Habibie et al., 2002). Also the practitioner-orientation means that scientific research and knowledge might benefit from reformulation of research questions and new interpretation of data. But it is important to point out that traditional scientific research and knowledge are still valid (Sriskandarajah et al., 1993).

The primary goal for PAR practitioners in general is to learn how to learn to improve their own situation. This implies a set of difficult changes (e.g. Roberts, 1997; Amezah, 1998), namely changes in the roles stakeholders play. It calls for farmers to take on responsibility in the role as co-researchers and give up the expectations of deliverance of 'expert' knowledge from the R&E people. Similarly, the R&E people have to give up the 'expert' role and welcome the farmers as equal partners in the research situation. But there is a further hope to stimulate the R&E people to take on a role as external facilitators. That is, lead or rather catalyse (Habibie et al., 2002) the participatory learning process, while being aware of own inevitable influence of the processes; simultaneously keep stepping back in order to first let the co-researchers contribute with their knowledge, experiences and opinions.

A proposal

On the basis of what is described above, for the present situation of high bird mortality rate in Danish organic poultry production, I propose the following methodology: I will take on the role as an external facilitator and invite stakeholders for a collaborative learning process on how to learn to improve this situation. The stakeholders will be organic poultry producers, R&E people within the organic poultry production sector, and other possibly interested people like policy makers and industry personnel. I will introduce to them the idea and necessity of collaboration (Sriskandarajah et al., 1996), holism (Checkland, 1984) and listening. To support development of equality we will make agreements on some common working strategies (Habibie et al., 2002) with special emphasis on listening, respecting all views and sharing responsibilities. We will also discuss the problems of possible different understandings of concepts and agree on how to handle that. We will find out what interests we have in common, and the interested participants and I will establish one or more learning groups (Habibie et al., 2002). Sticking to the holistic approach, we will start learning about our interrelated network of relationships (Roberts, 1997; Ison et al., 1997) by building awareness of our individual and common values and attitudes. We will enter the action research pathway by exploring the situation and making a rich picture (Checkland, 1984) together. This process will be practitioner-oriented and will therefore take departure in a description of the practitioners' experience of the situation. In this way we will identify the real issues and needs of Danish organic poultry production, research questions might be refined, and we will develop strategies to meet the issues and needs. By doing this reflective

learning process together in a systemic way we will learn how to learn to change the specific situation of the Danish organic poultry production.

To ensure listening and disclosure come through, I will propose some methods which can help make the time and space for putting words on feelings and experiences. There are many possibilities, and as in any good praxis (Bawden, 1990) the choice of method will depend on the situation at the time of usage. Furthermore, these ideas need further exploration. However, I will mention here two methods, which I find especially interesting. These are the method of photolanguage (St. Luke's Anglicare, 2000), selecting photos according to associations like e.g. certain questions or emotions, and Folkman & Rai's (2001) method of making drawings followed by story telling. What attracts me in these methods is that I think pictures carry a possibility of enriching our language by first stepping over the act of putting words on and then asking for the words after choosing or drawing a picture.

Being an action research project, we will perform process evaluations on a regular basis allowing for monitoring the group's commitment to holism and listening.

Conclusion

The gap between research and practice within Danish organic poultry production seem not just to be a communicational problem, but also a matter of values, trust building, and respectful patience. External facilitation of a practitioner-oriented participatory learning process based on systems thinking might provide a fruitful methodology, though not free of problems. The big challenges are facilitation of the process of letting go of obsolete models, and helping respectfully to equalize the participants of the process. A methodology appropriate to the context of organic farming and poultry production in Denmark and cognizant of the issues raised above is proposed and will be discussed at this workshop.

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