Education and advisor systems related to dairy organic farming in the participating ANIPLAN countries

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Introduction

This chapter is the report of ANIPLAN's deliverable 4.1 titled: 'Evaluation report on the state of the art regarding advisor systems, education of farmers and advisors and farmer groups in the participating countries'. The seven participating countries (UK, Switzerland, Austria, The Netherlands, Norway, Germany and Denmark) had widely different approaches to advisory systems and education. This is important to consider when integrating the outcomes of the ANIPLAN project into the various systems in different countries.

In the project group, we aimed at developing principles which can be thought into every European country. We hypothesised that farmers would be stimulated by many different types of dialogue, depending on how they prefer involvement on their farms, and therefore we aimed to develop principles which can be applied to different settings, .e.g. dialogues between an advisor and an organic farmer, or in various farmer group approaches. In this report, the various approaches to and conditions for advisory services and education surrounding the organic farmers are discussed, with examples from the participating countries on how the existing structures work and what the advantages and challenges are. Hence, the aim of the report is to discuss how the principles of ANIPLAN can be applied across a range of scenario regarding advisory services and attempts to guide improvements in organic herds.

Materials and methods

Project framework

The project 'Minimising medicine use through animal health and welfare planning' (ANIPLAN) was carried through from June 2007 to November 2010 as a CORE Organic project involving 7 different countries: Austria, Switzerland, United Kingdom, Norway, The Netherlands, Germany and Denmark. All participating institutions in this project had a strong on-farm research and development background, and all project activities were carried out in private dairy herds adopting an action research approach. The project aimed at developing concepts for active animal health and welfare improvement through interactions and conscious efforts between the farmer and his/her advisors, project participants, or fellow farmers. The fundamental organic principles provide guidance for the improvements, and the farmer ensures that these were realistic to implement under specific regional conditions.

Project participant consultations and joint mapping

Understanding the structures of each country's advisory and knowledge transfer systems is an important part of analyzing the feasibility of the concepts developed in this project. In a series of workshops various group discussions and joint mapping took place. Each country was represented by 1-4 researchers, and they had the responsibility to represent their country specific environments. Insight and information from these project meetings and workshops are partly reflected in project reports (Vaarst & Roderick 2008 & 2009), and partly through tape recordings and meeting notes as a part of the data collection process.

Results: different approaches to farmer planning processes

Our framework of understanding advisory services and education

A complex pattern of services and opportunities for the organic farmers emerged during the discussions among partners and with different institutions, advisors and companies. Based on this, figure 1 was constructed and will serve as our framework for mapping the various approaches to animal health and welfare planning of organic farmers in the participating countries. In our mapping we focus on basically four different approaches: organized learning classes, one-to-one advice, learning groups and on-farm participatory research approaches.

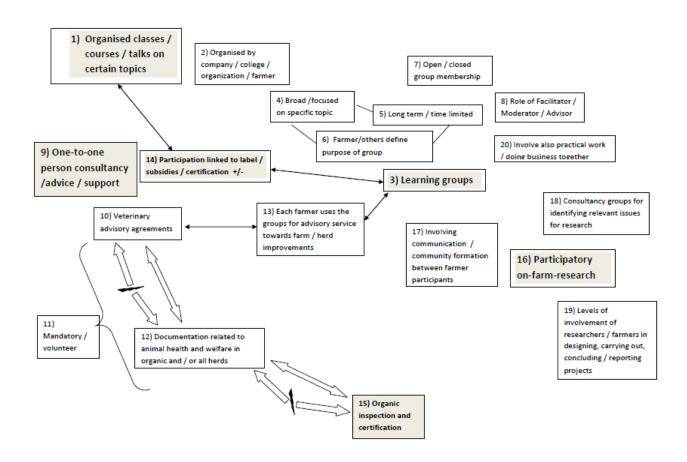


Figure 1. An overview of different approaches to learning and advice that may influence the health and welfare of organic dairy herds, drawn from the 7 countries participating in the ANIPLAN project.

Organised farmer classes

In all participating countries, different types and options exist for farmer education and inspiration (1 in Figure 1), with evidence of significant variation between countries, and in particular with regard to knowledge transfer approaches for organic farming. One example has been the way in which Elisabeth Stöger in Austria has been working in classes of organic farmers, who are stimulated to improve the health and welfare status of herds. Most classes focus on certain topics – e.g. calf health or homoeopathic treatments – and are organized by FIBL Austria and various organizations in Austria, as well as farmer groups in the different regions, as joint efforts.

An example of classes organized with the involvement of companies (2 in Figure 1) is the Dutch Caring Dairy program series of one day farmer group meetings on different topics, which can be defined as 'short term learning groups', but also as 'classes', since the group members are new to each other at every meeting (Smolders, 2009¹), as described in the Dutch case description below. Some farmers who know each other and have become 'sparring' partners in their daily practice choose sometimes to go to the same meeting and hence maintain a consistent discussion between themselves. A dairy company pays a premium for a certain level of participation in these classes or meetings. This may be a motivating factor for the farmer to attend, although it may be argued that the resulting change would only happen if the farmer is sufficiently inspired for change, and the solutions are realistic and achievable.

Learning groups

A wealth of different approaches to farmer learning group approaches (3 in Figure 1) exists. The case study of the Netherlands below demonstrates how a variety of farmer groups in combination can reach very many farmers. Interviews of farmer group facilitators pointed to how different farmers are attracted to different types of farmer groups (if they are attracted at all). Some types of farmer groups expose and very much involve the farmer and have the aim of fulfilling the farmers' aim and commitment to change and to follow advice (13 in Figure 1). Other groups leave the farmer relatively 'protected from exposure', and leave the discussions on a relatively general level. The aim of these groups seems to provide inspiration by providing a choice of knowledge options.

The attraction of many study groups is the access to 'experts' who come and discuss issues with the group members. In some cases this may involve an external person assessing farms or undertaking a benchmarking activity related to the subject, which allows the farmers to judge their own farm in comparison with others.

The British 'Healthy Feet' project is an example of a farmer group approach with a goal of reduced lameness in dairy herds, which had been identified as critical by the dairy sector. This involved a significant effort by the project group to create a common identity among the participating farmers e.g. by producing car stickers and information materials with a logo, which bound the farmers together and which were intended to stimulate their efforts in relation to the goal.

There were differences across countries with regard to the period that farmer groups operated, and whether these were intended to be for a fixed term or ongoing (5 in Figure 1). In the Netherlands, as illustrated below, several types of farmer groups and ways of bringing farmers together exist. Some of them are mostly aiming at farmers being inspired. Others aim at giving farmers, who want to change, concrete guidance, advice and ideas.

The so-called stable school approach is an example of a farmer group type which is based on commitment and active participation from all participating farmers. This type of farmer group is described in detail in Vaarst et al. (2007^2) . It is a type of facilitated farmer-to-farmer advice where a closed group of fellow farmers are asked to give the host farmer advice on two areas

¹Smolders, G. Improving animal welfare by assessing college's farms; in: Vaarst, M. & Roderick, S. 2009. The process of researching animal health and welfare planning. Workshop report from the ANIPLAN meeting in Norway in April 2008.

² Vaarst, M, Nissen, T, Østergaard, S, Klaas, I, Bennedsgaard, TW & Christensen, J 2007, 'Danish Stable Schools for Experiential Common Learning in Groups of Organic Dairy Farmers', Journal of Dairy Science, 90, 2543-2554

which the host farmer himself has selected, and the group exists for a one-year period. In these cases, the observations and experiences of everybody in the group are exchanged as an important part of the activities, whereas in groups where a farm walk occurs without discussion, the host farmer may remain unaware what criticisms, positive or negative, fellow farmers had made and, more importantly, what advice they would offer.

A contrast to this is the long-lasting groups of the private consultant, Hans Dirksen, in the Netherlands. Some of these groups have existed for up to 15 years, but with some farmers leaving and newcomers coming in. This group approach also contains a great deal of exposure among the farmers in the groups, and the farmers allow fellow-farmers to have insight into their economic figures and involve them in discussions regarding changes that may be made on the participating farms.

None of these groups can be said to form communities of importance for local decision making or entering into policy making (17) other than in the sense that some dairy companies stimulate group formation and continuous education as a part of their 'dairy company identity', and hence a part of a marketing strategy. This is different from the situation where farmer groups work with environmental management and ecosystem services, where delivery of public goods may be the aim.

One-to-one approaches

The existence and extent of one-to-one advice for farmers varies considerably across countries. In Norway an extensive cattle health advisory system exists across the whole country, providing farmers with a significant support resource (see case-study below). In other countries, such as the UK, such a system does not uniformly exist and often farmer advice relies on the strength of the relationship between individual veterinary practitioners and farmers through a commercial arrangement. A requirement for specific organic farming knowledge amongst advisors was a common response across countries.

In all countries, the role of private companies as advisory service providers appears to be evident and proliferating. Judgment cannot be made here with regard to the quality of advice, but the linking of this advice to particular commercial products e.g. animal feeds, was also a common theme, as was the very specific focus on certain husbandry aspects e.g. feed, rather than whole farm, integrated advice.

Veterinary advisory agreements and formal health plans

In some of the participating countries, more or less mandatory contracts with veterinarians exist, such as in some parts of Switzerland, in Austria (in the form as a 'check list' involving the veterinarian on yearly basis) and in Denmark, where organic farmers recently have been included in a national program where they have to have to receive advice a certain number of times every year, or participate in a so-called Stable School group. In some countries, veterinarians play a role in the certification of farmers in one way or another (e.g. in Denmark, the veterinarian now can give the farmer 'a yellow card' which means that the farmer has to receive more veterinary visits on the farm). The role of advisors who are inspectors is questionable; however it was not discussed in depth in the various interviews conducted as part of the project and therefore not elaborated upon here.

Documentation and formal animal health and welfare planning

Formal health plans have been common place in the UK for more than a decade and a legal requirement for organic farmers. This has not been the case in other countries, and this country case study prompted an early project conclusion that the emphasis must be on

planning as an active process rather than 'having a plan'. In turn, this active planning process was linked to the set of principles discussed elsewhere in various ANIPLAN documents and reports. The format of formalized health plans can be organized in several different ways, some of which are highly stimulating for the farmer and reflect actions which the farmer takes full ownership over. Conversely, many plans appear to be merely paper exercises and bear little resemblance to the actual farm health planning process.

Debio, the certification body in Norway, have included a short checklist on animal welfare in their inspection visits to Norwegian organic dairy farms, in order to get an impression of the animals' welfare on the farm. The outputs from these evaluations can be used as part of the farm health plan, as well as a means of identifying systems that are failing to reach the desired standards of welfare. The AssureWel programme in the UK is a new programme to include animal welfare assessments into organic certification, which in turn will be linked to farm advice and knowledge support.

On-farm research

Research directly involving farms and farmers at various stages from planning to conducting and evaluating research results has or is taking place in most of the research institutions which participated in or were connected to the ANIPLAN project. All partners carried out research on farms, indicating a strong connection to the farmer environment, and feeding the results back to farmers and hence directly influencing the development of each of the participating farm.

However, different approaches and levels of involving farmers in research were evident, and in many projects farmers were not directly involved in project planning although they were involved in data generation and communication about the results. The Organic Studies Initiative at Duchy College, Cornwall, UK had experience of direct involvement of farmers in designing trials based on an identified need e.g. the provision of home-grown protein crops as part of the organic diet, as well as the use of animal welfare assessments as part of the farm health planning 'toolkit'. In the Netherlands government funded facilitated networks had as a major aim to identify research topics relevant for farmers, which was organized in a manner that served as sources of inspiration for research development.

The cases of Norway and the Netherlands

Below, two cases of Norway and the Netherlands are presented to illustrate how the different approaches to learning and advisory services are combined and are discussed in relation to the practical implementation of the ANIPLAN health planning principles.

Advisory systems in Norway related to animal health and welfare improvements *Britt I.F. Henriksen*

The Norwegian Cattle Health Services

The main advisory service for dairy farmers in Norway embracing both animal health and welfare is the Norwegian Cattle Health Services. Norwegian Cattle Health Services collaborates with veterinarians trained in preventive health, and special advisors in feeding, milk quality, technology and buildings from TINE dairy company.

Norwegian Cattle Health Services offers several services. One is within health management in the herd. This service can be restricted to a specific problem, e.g. how to reduce the incidence of mastitis in the herd. It is also possible to get a general contract, with regular farm visits and continuous follow-up on the herd health situation. There can be plans for preventive strategies for farmers with new buildings or new production methods. They also offer several courses

and advise for groups of farmers.

From next year (2011) the Norwegian Cattle Health Services hope to be able to offer assistance in developing health and welfare plans, and welfare planning via stable schools. It is probably through this platform veterinarians will be involved in improving animal health and welfare in organic as well as conventional herds.

Veterinarians in private practice

Although most of the formal health services goes through the Norwegian Cattle Health Services, veterinarians in private practice (not engaged through NCHS) sometimes make agreements with farmers about regular visits to the farm for evaluation of status and advice on animal health and welfare improvements.

The Norwegian Agricultural Extension Service (Norsk Landbruksrådgiving)

The Norwegian Agricultural Extension Service is comprised of 44 extension groups and approximately 26.000 members. The primary task of the Agricultural Extension Service is giving advice based on local research regarding all kinds of crop production. They have especially trained persons giving advice for organic farmers. Earlier there were separate extension groups for organic production, but this is now more or less merged into one. The Norwegian Agricultural Extension Service offers both one to one advice and arranges group meetings on different issues. For example, in areas with many dairy producers the topic for a group meeting can be related to health and welfare.

Box 1. The Norwegian framework of advisory services for farmers who aim at improving animal health and welfare in their herds, described by the Norwegian partner from Bioforsk, Britt I.F. Henriksen.

Development of extension services in Dutch dairy farming

Gidi Smolders

Dutch (organic) dairy farming the last decade changed considerably: a decreasing number of conventional dairy farms, larger farms especially in animal numbers and a higher productivity with more animals and more milk quota per worker. Although most farms in the Netherlands still are family farms³, an increasing number employs workers outside the family. A growing part of dairy farms (10% now) uses an automatic milk system to have more freedom in working hours. Organic dairy farming is a small proportion of all dairy farms (about 1.5%) and is developing the last 25 years (see table 1). While in conventional dairy farming growth is the keyword, in organic dairy farming there is a split between those that are driven by milk quotas and others who wider ambitions that include offering space for care, nature, dairying, farm shops or even exploiting windmills.

Development of farmer's advisory systems

The old Dutch knowledge system, focussed on productivity, low cost price and international competition changed because of changes to society driven subjects such as wildlife, nature conservation areas, animal welfare and environment. Funds for research and extension from the agricultural sector decreased. Agricultural advice service was privatized and funds from the Ministry of Agriculture, Nature and Fisheries taken away. The OVO-triptych⁴, with research, advice and education was organized mainly by the Ministry of Agriculture, Nature and Fisheries abolished in the last 20 years. The OVO-system was a model in which innovation was generated in research, transferred into knowledge and disseminated to farmers and agricultural education. Beside the need to decrease the costs and make advice more effective, there was a need for farmer driven knowledge systems. One of the consequences was the dismantling of the agricultural advice service as a bracket and translator between

³ On dairy and arable farms 1-2 people are working, of with 80 -95% is family labor (source Berkhout en Bruchem, 2010). Landbouw economisch bericht 2010, LEI-rapport 2010-013,

⁴ OVO is abbreviation of Onderzoek, Voorlichting en Onderwijs (research, advice and education)

research and practical farmers. In the same period applied research was privatized and joined with scientific research under Wageningen University and Research, focussing on research and less on advice and counselling. Because researcher not always communicated clearly with farmers and since advice was not an applied researchers priority anymore, new ways were found and new players appeared in development and spreading knowledge in the agro-sector (Poppe, 2009, Klerkx, 2009). Commercial advice firms took over advice and counselling as an information product and not as a by-product by goods sold to the farmers (i.e. feed producers, veterinarians, banks, accountants, producers of farm equipment). Innovation agents try to play a roll as connecting and guiding partner in the innovation process. They sharpen the aims and questions of innovating farmers, they search, select and connect parties to close knowledge gaps and they facilitate the interactive learning process, not as experts but as a director (régisseur) of the process. Innovation agents can be portal sites (an example is Biokennis), consultants (Stimulant), network agents (Melkveeacademie), system instruments (Bioconnect) and education agencies (Groene kenniscooperatie). There is an increasing number of innovation agents/agencies for nearly all agricultural sectors to cover the needs. If they have to be paid by the farmers there is a danger of losing independency and focusing on normal consultancy services. The Dutch Ministry for Agriculture (temporary) financially supports innovation agents initiatives which connect to the policy aims of the Ministry of Agriculture, Nature and Fisheries in different ways: voucher systems for innovative farmer initiatives, network groups of conventional and also especially for organic farmers. Table 1. Development of organic and conventional dairy farms in the Netherlands in the last 25 years^5

System	Organic				Conventional			
Year	1985	1995	2005	2009	1985	1995	2005	2009
# dairy farms	15	100	321	320	38200	31400	23500	20800
# dairy cows (*1.000)	.5	4	16	20	1920	1710	1470	1490
#cows/staff	30/1.7	32/1.6	50/1.4	62/1.2	41/1.6	46/1.6	61/1.4	74/1.1
Kg milk/cow/305d	5400	6000	6300	6600	5600	7300	8270	8542

Current types of farmer groups, learning classes, advisory service and participatory onfarm research in the Netherlands

Farmer groups

- Long lasting farmer groups, some over 10 years, and no or little change of members. One example is the groups of private consultant Hans Dirksen (described in Vaarst et al. 2010 ibid.), focusing on issues the farmers plan in the beginning of a new year. Economic and environmental issues every year and important topics or topics expected to become important are include in the yearly program. Farmers provide all farm figures needed and comment on it, guided by the facilitator or an expert. Always the same facilitator with skills on main issues and specialists invited to explain and advice if needed. Group members know each other very well and know each others' farms and family. Meeting every month except in summer, on farms of the group members. Farmers are financial supported by the Ministry of Agriculture, Nature and Fisheries by getting vouchers for knowledge development and advice.

⁵ Data from different sources: Centraal Bureau voor Statistiek, Landbouwcijfers, Ecomonitor, CRVjaarstatistieken Nederland 2009 (Arnhem, maart 2010).

- **1-2 year network groups** focussing on one common issue. Individual farmers announce the formation of a group focussing a certain problem and asks other interested farmers to join the group and helping to find solutions (Wielinga et al, 2008, NN, 2009). If an application describing the problem, the way to find solutions and the expected result is approved by the organisation (Netwerken in de Veehouderij), the group gets some finances to cover organising costs and a non expert facilitator is appointed to the group to organise and guide the process, invite experts and makes reports. Members don't know each other very well and meet on each others farm. 20-25 dairy related groups where supported each year in the last 5 years. Organic farmers could reflect to this program or to a program especially for organic farmers (see below)
- 1-3 year **organic** network group focussing on set issues with members leaving and joining the group (antibiotic free, strategy, breeding, stable systems, family herd). The board of the organic dairy committee announces every year a series of possible issues to from farmers groups. The most popular groups are supported by money and a non expert facilitator to organise meetings and the process and experts if needed. Popular groups last for a longer period, while members leave and new members joining in, less popular groups are stopped after a year. Farmers determine the agenda (within the issue) of the meetings, sharing farm data and experiences and visit each others farms. Farmers don't know each other well and meet 3-4 times a year.
 - In the **melkveeacademie** program, advice could be individual and group wise. The program is supported by farmers unions and government and organized by facilitators. Individual peer farmer to farmer advice is arranged by the program to list the peers and their expertise/experience. Advice is farmer/farms based and asked for. In large group meetings (100-150 people) experts, possibly farmers, give their opinion on important and/or hot topics. Farmers are free to take part in meetings, do not know each other and don't exchange farm data.

Classes and farmer groups meeting once

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In **one time farmer groups** or series of one time farmers groups focussing on one topic guided by experts (caring dairy, animal welfare) farmers are asked to join the group of 8 - 10 farmers. The aim to join the group could be specific information about the topic to implement on the farm or a monitoring report. On host farms, experts share expertise and interact with farmers in the practical setting of the farm. The host farmer provides farm data and the group members comment on that and on the management of the farm, coming up with points to improve on the farm. Farmers do not know each other and meet only once in that setting, so trust is very important. In the Caring Dairy program series of one day farmer group meetings take place on different topics, with most if not all new group members every meeting (Calker et al, 2005).

Individual advice ('one-to-one advisory service')

- **Independent person to person advice** and a farm specific advice for organic farmers can be delivered by private advisers specialised in certain aspects of the farm. Farmers may have a durable relation with an adviser or only once on a specific aspect (e.g. nature conservation, legislation, building, community plans, expanding plans or plans cease farming). Advisers are paid by the hour.
- **Dependent person to person advice** and farm specific advice for organic farmers can be delivered by private advisers connected to feed companies, banks, accountants, veterinary services, builders and manufacturers/suppliers of machinery and equipment. Farmers ask for advice and pay sometimes direct and sometimes indirect in the price

of the goods (feed, machinery/equipment). Frequency of advice is different: advisors of feed companies and veterinarians have more frequent relations with farmers than other professionals. Especially advisers of feed companies are acknowledge as good advisers [Rotgers, 2009]

Research interaction and on-farm participatory research

In short research and advisory projects (animal welfare) farmers are asked to take part in group meetings because the farmer or the farm has specifications needed in research. Meetings are organised by experts acting also as facilitator. Farmers profit by being informed about the state of art and/or implementation of improvements on the farm. Meetings are on a host farm which provides management data and receives comments from other group members and the expert. Farmers don't know each other and groups last the project live. Another example of an advisory project is "Organic, motor for conventional" where groups of conventional farmers are joined by 1 or 2 organic farmers. Aim of the group with fixed membership, meeting 4 times a year during 2 years, is to see what aspects of organic farming could be implemented in conventional farming. A facilitator/professional advisor organises the meetings, at participating farms, and farmers determine the program and might include experts.

Box 2. The history and extent of various approaches involving farmers and farm development activities in The Netherlands, as described by the Dutch partner Gidi Smolders.

The ANIPLAN principles in the landscape of organic education and advice

The organic dairy sector has developed differently in European countries over the past decades. In most of the participating countries, the structural development of farming has led to increased farm and herd size, often with the same amount of staff or fewer (in some countries e.g. Denmark, to an increasing extent with foreign farm workers), and increased economic pressure in terms of lowering of milk and meat prices, and in some countries in combination with increased prices of farm land and feed stuff, transport and labour.

This project dealt with various approaches aiming at continuously improving and developing each herd and farm system into a system which meets the needs of the animals in as many ways as possible within the economic and other constraints. Meeting the animals' needs is the only path to creating the basis for good animal welfare. A number of approaches and issues highlighted in this report include examples of confrontation between the farmer and 'others' in a dialogue. In addition to this, there are other sources of inspiration for the farmers, in terms of farmer magazines, internet pages, demonstration farms or open-farm events and informal networks (e.g. old farmer college class mates, family networks, local community networks and others).

In some countries, there are various types of regulation and mandatory systems involving the production of a plan or going through certain types of inspection, all aiming at keeping a certain level of farm conditions which are deemed to be acceptable e.g. to society or consumers. Some of these systems also include confrontation between farmers and 'others', but this contact is in some cases experienced as intrusive, illogical and not in the farmer's interest, and in some cases it is intended that it should also add to the positive efforts on the individual farm to meet animal health and welfare needs, as well as bio-security needs. All these voluntary and mandatory systems add to the external knowledge, which interacts with the farmer's own perception and decisions.

In the ANIPLAN deliverable report 5.1, Leeb et al (2011) concluded that most farmers perceived that the 8 ANIPLAN principles could be most relevant when applied within existing advisory structures in the participating countries. Based on the above, we conclude

that many structures can provide scope for the application of these principles. However, experiences suggest that for each of these principles there are associated issues that arise, and these are summarised below.

In addition, there are other associated issues that require highlighting:

- Each farmer has to be able to choose different pathways to increase knowledge, search inspiration and become provoked, stimulated and helped in the efforts to improve the herd, the farm and the lives of the people involved in the farm. Some activities aim at inspiring the farmer with an open mind, and some activities aim at help the farmer by going closely into dialogue about the needs of identified improvements.
- There is no definitive approach to dialogue with or between farmers; it all depends on the actual situation, the persons involved and the previous experiences on the farm and it will most likely vary over time for the same farm. All types of dialogues can contribute positively and be inspiring but their success will be dependent on levels of motivation to change.

Principle	Additional considerations				
 P1: A health planning process should aim at continuous development and improvement, and should incorporate health promotion and disease handling, based on a strategy including current status + risks (animal based + resource based parameters) evaluation action review 	The farmer should lead the process and assure that it is continuous, and then drawing on different sources of knowledge and inspirations. Not all advisors will be continuously and permanently involved, and this is up to the farmer. However, the involved persons should work together with the farmer / staff / family in a process of joint evaluation, planning and reviewing the health and welfare situation in a herd.				
P2: Farm specific	The farmer is confronted with many sources of inspiration which are not particularly farm specific. In a conscious animal health and welfare planning process, the farmer must seek advice and dialogue specifically for his/her farm and focus should be on the specific context and condition of the farm.				
P3: Farmer ownership	The farmer has to be conscious about what he/she wants and needs and be explicit about this, and the dialogue should give the room for the farmer to express needs and expectations. Initiative and conclusions should be formulated by the farmer.				
P4: External person(s) should be involved	Advisors, inspectors, so-called experts and fellow farmers are all external persons, and in all countries advisory structures include dialogue with external persons.				
P5: External knowledge	Can be farm specific data and assessments created by external persons, or can be information given in farmer magazines which inspires the farmer to take initiatives. The important issue here is that the farmer constantly seeks new insight and knowledge.				
P6: Organic principles framework (systems approach)	This proved to be a challenge in many countries, where no special focus or knowledge about 'organic dairy production' seem to exist among the majority of people engaged in farmer advisory services.				
P7: Written	It is important to create a common memory and to emphasise key characteristics and prescriptions. It is also important that it is the farmer's own conclusions and commitments, and not a list of advice given by somebody else.				
P8: Acknowledge good aspects	This seems to be very rarely covered, even in the form of analysing how previous actions have been implemented and their effects.				
P9: Include all relevant people in the process	This was identified during the project as an issue to be concerned about, particularly where a farmer or manager participates in a planning process but others involved in caring for the herd are not consulted, involved or even informed.				