Organic sector in need for improvements of animal health

Prof. Dr. Albert Sundrum, Head of Department of Animal Nutrition and Animal Health at the University of Kassel highlights the need of structural amendments in the organic sector...

The organic dairy sector has developed rapidly over the last decades. Premium prices reflect (in part) the consumer expectation that animal health is better in organic than in conventional systems. An interdisciplinary EU-project (IMPRO) aimed to assess the current state and investigate options to reduce the prevalence of production diseases (PDs). Results of on-farm assessments in four different European countries (DE, FR, SE, ES) revealed that PDs varied a lot between organic farms and did not generally differ from levels reported in conventional dairy farms. It is concluded that the enhanced minimum standards approach in organic agriculture has failed to promote a reduction in PDs.

Farm centric and *equifinal* approach

While organic farms in Europe are obliged to the same standards, they differ widely in the living conditions of dairy cows and in the availability of resources required to keep animals healthy. Thus, generalised recommendations for health measures are often both ineffective and inefficient as they do not always suit the specific farm situation. They result in hindering farmers' readiness to invest in costly health measures. Farmers often do not know which measure they should prioritize in order to combat particular problems and which investments could provide an appropriate return on capital.

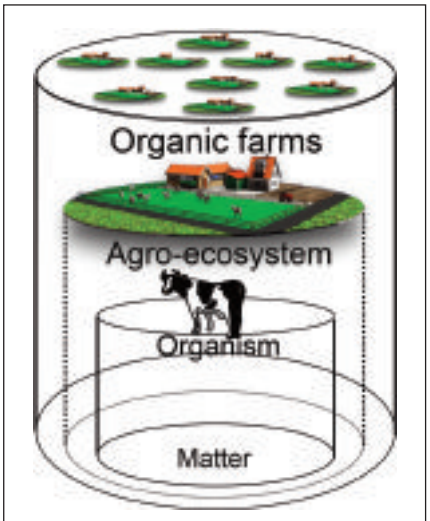

Fig. 1: Different process levels embedded within a hierarchal structure

To overcome this barrier, the heterogeneity of living systems both on the farm and the animal level and their interactions within a hierarchal structure have to be considered appropriately (Figure 1). Within the IMPRO-project, a farm centric and equifinal approach has been developed, based on the principle that the same end state (low level of PDs) can be achieved via many different paths while relying on different tools (Figure 2). The new approach is based, inter alia, on an impact matrix as a participatory concept (involving farmer, veterinarian and advisor) for diagnostic work. The approach has been created to provide ways of reducing selected PDs (mastitis, metabolic and fertility disorders, and lameness), using particularly data from monthly milk records. Results from telephone interviews regarding the uptake of the preventive measures suggested, indicated that 95% of the farmers had implemented one or more of these preventive measures recommended. The feedback from the project was encouraging and provided positive incentives for further development of a farm level diagnostic approach. Farmers would be encouraged to work towards a low level of PDs if this goal were mandatory for all organic competitors. Competition would be an effective motivator if reduced levels of PDs made an impact on farmers' market returns.

Evidenced based use of alternative remedies

Additionally, a pilot project was conducted to deal with the question whether the use of homeopathy and phytotherapy holds potential to replace the use of antibiotics in treating bacterial infectious diseases keeping negative side effects to a minimum. Literature reviews revealed that cure rates after treatment with either antibiotics, alternative treatments or a placebo varied greatly between the studies. None of the scientific studies with alternative products have been re-produced. Thus, the use of homeopathic or phytotherapeutic products cannot claim to have a reliable and repeatable effect and a prognostic validity. Evaluations on organic dairy farms in Germany, France and Spain revealed that there were no uniform procedures for homeopathic treatment in

the case of mastitis. It seemed that each farmer had developed his/her own treatment strategy; regardless of the principles of homeopathy.

Remedies are means to an end. The effectiveness of treatments in farm practice is highly context-dependent and is doubtful without the consistent implementation of lege-artis procedure, including follow-up check and documentation of the recovery progress. Thus, the employment of homeopathy or phytotherapy in favour of conventional products cannot be sanctioned unless these alternative products are administered by highly skilled people. Otherwise, alternative treatments could be blamed for increasing health and welfare problems due to lack of therapeutic success and thus extended suffering of diseased animals. Therapeutic success in the individual and on the herd level is the result of the overall effort invested, while the envisaged level of PDs determines the degree of effort required to achieve the target sets. Deciding which level of therapeutic success and what prevalence of PDs is acceptable should not be left to each farmer to decide for themselves. These values are essential to the common good and should be set using external reference values.

Exploration of policy options

The large PD variation amongst organic dairy farms goes against consumers' expectations and conflicts with the ethos of a brand label reflecting greater homogeneity. The EC should focus on farms with below-average performance. Such large variation constitutes unfair competition, as organic farmers all receive the same price for their products although the quality differs considerably in terms of PDs and product standard. Farmers who produce products at lower production costs yet risk higher prevalence of PDs are favoured above farmers who invest money, time and effort without obtaining premium prices for higher quality. Thus, unfair competition is an important impediment to any possible improvements. To reduce and prevent unfair competition, regular monitoring of health data is required. In the IMPRO project, tools have been constructed that might serve as a basis of possible monitoring approaches. Minimum standards should be supplemented by target values with respect to the prevalence of PDs. These should not be exceeded without facing significant consequences. Processors, manufacturers and retailers should be encouraged to force farmers to change their attitude to tackling PDs through a two-pronged approach e.g. by offering bonuses when a low prevalence of PDs has been achieved and penalties when a high one is present, in order to bring the milk payment system more in line with the high value expected of organic dairy products.

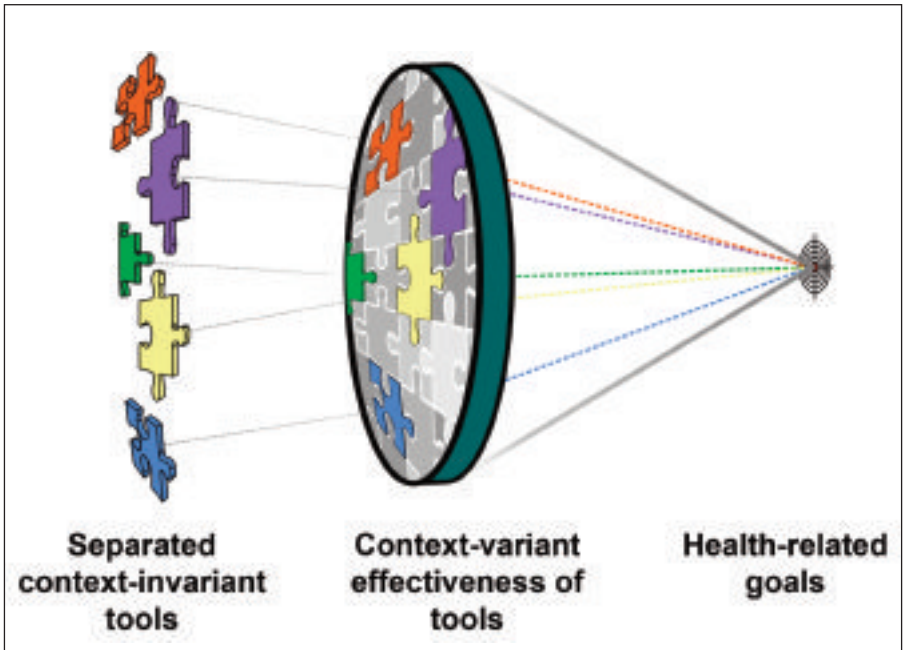

Fig. 2: Equifinal approach, considering single measures, interrelated with the farm specific context in striving for improvements by focussing on a health related goal

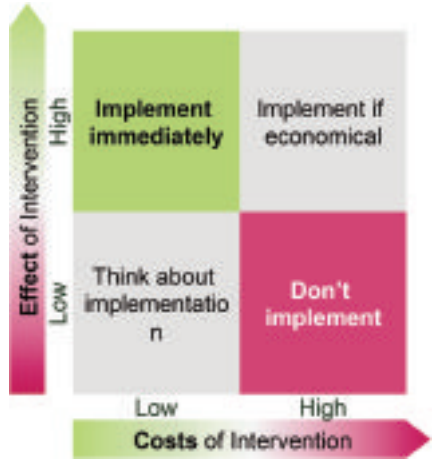

Fig. 3: Essential precondition for the implementation of expertise into practice is the knowledge about the effectiveness and the costs of measures under farm specific conditions

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