A participatory on-farm approach leads to the identification of farm-specific management actions and high implementation rates in organic dairy farms

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CONTEXT: Main reasons for the great variation in animal health under organic conditions are different management practices, restrictions in the availability of resources, and a lack of control mechanisms. In this study, a farm-individual approach involving the necessary expertise and taking into account system dynamics and farm-specific opportunities and constraints was applied to identify effective measures that are likely to be implemented in organic dairy farms.

CONCLUSION: A structured participatory approach to health planning involving relevant stakeholders and an analysis of the whole farm system, its opportunities and constraints, can result in action plans tailored to the farm-specific situation and likely to be implemented. The results emphasise that 1 year may be too short to assess the implementation of construction measures. Moreover, they indicate that farmers in Europe are under great economic pressure and that a lack of conviction often keeps them from taking actions to improve animal health. Future research and advisory practice should take these constraints into account.

MATERIAL & METHODS
- 149 organic dairy farms (60 in Germany, 29 in Spain, 28 in France, 32 in Sweden)
- 1st visit: assessment of general characteristics, resources, and management procedures
- 2nd visit: round-table discussion between farmer, farm veterinarian and agricultural advisor moderated by the researcher (Fig. 1)
  → Same procedure on all farms: 1. farm walk, 2. evaluation of health status, 3. system analysis with an impact matrix, 4. cost-assessment of production diseases, 5. identification of areas in need of improvement and potential management measures, 6. agreement on suitable actions, and 7. feedback session
- Written questionnaire 1 year after the last visit

RESULTS
2nd farm visits:
- No management measures were identified in 11 farms (8%)
- 1-22 measures in 138 farms (median 8)
- Least actions in France (med 2.5), most in Sweden (med 12)
- Measures ranged from very general (‘improve feeding’) to very specific (‘use dry-cow therapy in case of positive CMT’)

Questionnaire:
- Response rate 63.1% (n = 94)
- 88 farms (93.6%) had implemented at least one measure
- Implementation rate (med): 81.7%, 66.7%, 65% and 18.3% in France, Germany, Sweden and Spain, resp.
- Most frequently mentioned limitations: construction, time constraints, doubts about the effect, excessive costs, absence of the initial problem, implementation of alternative actions, lack of expertise, and doubts about the appropriateness of the measure (Fig. 2).

CONCLUSION: A structured participatory approach to health planning involving relevant stakeholders and an analysis of the whole farm system, its opportunities and constraints, can result in action plans tailored to the farm-specific situation and likely to be implemented. The results emphasise that 1 year may be too short to assess the implementation of construction measures. Moreover, they indicate that farmers in Europe are under great economic pressure and that a lack of conviction often keeps them from taking actions to improve animal health. Future research and advisory practice should take these constraints into account.

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