

HEALTH PLANNER PIGS AS AN INSTRUMENT FOR MONITORING AND EVALUATION OF ANIMAL HEALTH CARE ON PIG FARMS

M.H. Bokma-Bakker and A. van Buiten

Research Institute for Animal Husbandry
Lelystad
The Netherlands

ABSTRACT

In order to support animal health care on pig farms a Health Planner Pigs has been developed. In 1998 the practical value of the system was tested under field condition on pig farms. The Health Planner proved to be a valuable instrument for monitoring and evaluating animal health on pig farms. Due to the promising results of the field experiment, the Dutch Farmers Organisation (LTO-Nederland) in 1999 adopted the system and coordinates its adaptation and introduction into practice. In 2001, veterinarians and farm advisers has been educated in using the Health Planner. Some parts of the Health Planner will be automatised and linked to existing farm management information systems. In 2002, farmers will be educated in the use of it.

INTRODUCTION

A health planner for pigs was developed by a collaboration of the industry, government, several dutch farmers organisations, veterinarians and research institutes, including the Research Institute for Animal Husbandry. The Health Planner Pigs purpose is to support planning, managing and evaluation of animal health care on pig farms. The planner consists of three parts, a) a periodical evaluation of the health situation based on health and production parameters in combination with target figures, b) a systematical check on farm risk factors and c) a division for signalling and solving specific health problems on the farm.

In 1998 the practical value of the Health Planner Pigs was tested under field conditions (Bokma-Bakker, Geudeke, Schilder and Binnendijk (2000)). In addition, implementation into practice was worked out.

METHODS

In total 54 pig farms participated in the experiment: 18 farms with sows, 8 farms with growing-finishing pigs and 28 farms with both sows and growing-finishing pigs. Each farm was supported in using the Health Planner Pigs by its own veterinarian and farm adviser. The practical value of the Health Planner Pigs for health management in particular was judged on the appreciation by the user (postal survey at beginning and end of the experiment). Several production and health parameters, used by the farmers in the periodical evaluation, were collected centrally to get an impression of the current levels of the new health parameters. Insight was gained in preconditions of farmers and advisers for using the Health Planner Pigs in the future. After the field test a path for implementation into practice has been set up.

RESULTS

Monitoring health parameters

At the beginning of the experiment (start survey) 63% of the farmers thought their insight into the development of chronic diseases on the farm to be moderate to insufficient. 79% of the farmers found that signals they received of latent diseases were not in time. To improve this insight, the health parameters such as percentage of mortality due to diarrhoea, percentage of treated animals due to respiratory disease et cetera were calculated and analysed every four weeks during the experimental period. In spite of interpretation problems between this new method and the existing method of calculation the farmers and advisers in general positively appreciated the periodical analysis of the health parameters and other parameters (table 1)

Table 1 Farmers and advisers appreciation of the value of using parameters in the Health Planner Pigs (end survey)

	farmer (n=33)	veterinarian (n=20)	farm adviser (n=16)
sooner insight into when problems arise	71%	84%	67%
better insight into health situation	73%	70%	73%

About one quarter of the farmers and advisers found that using health parameters on the farm contributed little or nothing to the insight into farm health situation. Time-consuming manual processing of health parameters can be mentioned as a cause of this finding.

Analysis of farm risk factors

The Health Planner comprises several risk factor checklists, such as for climate, hygiene and vaccination. At the start of the experiment 58% of the farms stated that their insight into weak points in management was moderate to insufficient. This situation has improved using the Health Planner checklists and a systematically review of potential risk factors: 71% of the farmers who responded tot the end survey stated that they had gained a better insight into strong and weak management aspects.

Analysis of specific diseases

For the experimental period the part of the Health Planner that signals and helps to solve problems by specific analysis was only developed for bronchial infections and postweaning diarrhoea. In the end survey, users indicated that this part should be extended to more diseases such as *streptococcus* and reproduction and fertility problems.

CONCLUSIONS AND RECOMMENDATIONS

Most of the farmers and advisers stated that, because of the strong systematic approach of the Health Planner, health problems are identified more quickly and less information is overlooked.

A good cooperation between farmer, veterinarian and adviser however is necessary for a good use of the Health Planner in order to improve farm management and profitability. Several recommendations for adapting and introducing the system into practice have been given. One of them is realising a once-only and clear registration

of treatments and mortality in the pig house, which is suitable for more purposes (Integrated Quality Control (IKB), medicin registration, Health Planner Pigs et cetera). An other recommendation is to examine whether information about farms, as part of the health planner for pigs, could be used for monitoring animal diseases in regions and/or country.

IMPLEMENTATION INTO PRACTICE

In 1999, due to the promising results of the field experiment, the Dutch Farmers Organisation (LTO-Nederland) has adopted the system and coordinates the adaptation and introduction into practice. In the winter of 2000/2001 veterinarians and other farm advisers (private, feed industry) are educated in the use of the Health Planner Pigs in advising pig farms. At the same time, parts of the Health Planner Pigs will be automatised and linked to the existing farm management information systems. In 2002, automatised products for farmers are expected. Then, farmers will also be educated in using the Health Planner and its automatised products.

References

Bokma-Bakker, M.H., Geudeke, Th, Schilder E.A.M. and Binnendijk G.P. (2000), *The practical value of the Health Planner Pigs* (P1.239), Research Institute for Pig Husbandry, Rosmalen.

M.H.Bokma-Bakker MSc
Project Manager Animal Health and Certification
Research Institute for Animal Husbandry
Pig and Poultry Division
P.O. Box 2176
8203 AD Lelystad
tel. +31 320 293 379
mobile 06- 53 58 51 33
fax. +31 320 241 584
e-mail M.H.Bokma-Bakker@pv.agro.nl

Ab van Buiten MSc
researcher Agricultural Telematics
Research Institute for Animal Husbandry
Pig and Poultry Division
P.O. Box 2176
8203 AD Lelystad
tel.: +31 320 293 369
fax. +31 320 241 584
e-mail: A.vanBuiten@pv.agro.nl