

# DEVELOPMENT AND IMPLEMENTATION OF A HEALTH PLANNER FOR PIGS

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## **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. Due to the promising results of the field experiment, the Dutch Farmers Organisation (LTO-Nederland) in 1999 adopted the system and coordinates the adaptation and introduction into practice. In 2001, veterinarians, farm advisers and farmers will be educated in using the Health Planner. Some parts of the Health Planner will be automatised and linked to existing farm management information systems.*

## **INTRODUCTION**

In the last few years several dutch farmers organisations, veterinarians and research institutes, including the Research Institute for Animal Husbandry, have been working together on development of a Health Planner Pigs. The Health Planner Pigs purpose is to support planning, carrying out and evaluation of animal health care on pig farms. The planner includes 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 specific analysis and tackling 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 had to be 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 of the health situation, were collected centrally to get an impression of the new health parameters levels. 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 manually and analysed every four weeks during the experimental period. In spite of interpretation problems (the calculation method of percentage of mortality, for instance, differs from the existing parameters) 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. The time-consuming manual processing of health parameters played a role in this.

### 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

During the experimental period this part of the Health Planner was worked out for bronchial infections and postweaning diarrhoea. In the end survey, users indicated that this part should be extended to more diseases like problems with *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 can be seen 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 and profitable for farm results. 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 and if yes how the Health Planner Pigs information from farms could be used for monitoring animal diseases in region 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 (via the DGR health module). At the end of 2001, automatised products for farmers are expected. At the end of 2001, farmers will 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.

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### **Biographical Sketch**

The author is Project Manager Animal Health and Certification at the Research Institute for Animal Husbandry, both for the Pig Division and the Poultry Division. From 1986 till 1990 the author has been working at the Ministry of Agriculture in the Hague on animal health and animal welfare policies. In the period 1991 up to 1996 the author was expert in animal health at the Knowledge Centre for Pig Husbandry (Ministry of Agriculture) in Rosmalen.