

THE WAY TO MORE PRUDENT USE OF ANTIMICROBIALS IN THE CURRENT UNFAVOURABLE ECONOMICAL SITUATION IN THE BELGIAN SWINE INDUSTRY

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INTRODUCTION

More prudent use of antimicrobials is considered as a challenge in livestock and humans. After all, antimicrobial resistance takes lives at a rate of one life every 45 seconds. ROADMAP (Rethinking of Antimicrobial Decision-systems in the Management of Animal Production) is a European project which aims to diagnose the reason for antimicrobial usage (AMU) in livestock production and act to a more prudent use. Here we present the barriers to reduced AMU in the Belgian pig sector, which were identified through a participatory approach.

MATERIAL & METHODS

Between October 2020 and March 2021, one Kick-Off meeting and four (digital) Living Labs (LL) were organised for a broad range of stakeholders active in the Flemish swine industry. A Living Lab is a user-centered, open-innovation research approach, development tool or ecology of practices. During the LL, the group focussed on identifying technical, economical and socio-economical barriers that may influence swine health (drawing a problem tree). Doing so, (non-veterinarian) diagnoses were made, evaluated and transformed into possible solutions to further reduce AMU.

RESULTS

Four main reasons of AMU (Figure 1) were identified:

- economic reasons such as price of antimicrobials and vaccines
- Societal pressure (consumers knowledge of farming)
- Intestinal health of weaned piglets and secundary infectious diseases
- Management and biosecurity.

During the sessions, possible solutions were given of which several will be evaluated during coaching sessions of individual farms (green lamps in Figure 1). For those Action Labs, focus will be laid on more prudent use of antibiotics in the nursery. Farmers will be advised on feasible management measures and vets will be coached to assist the farmers in this process.

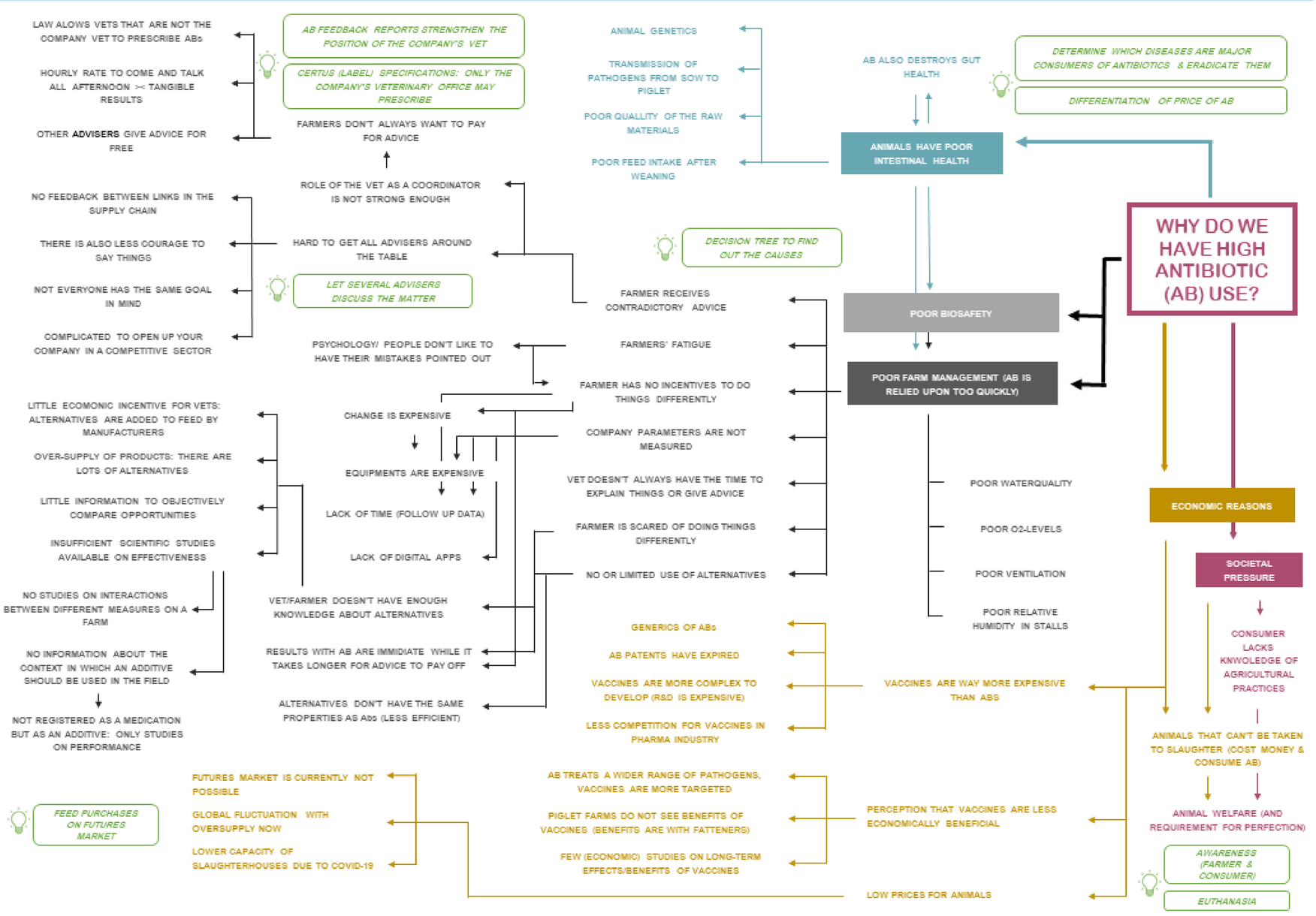

Figure 1: Problem Tree as a result of the Living Labs

CONCLUSION

The participation of many stakeholders enabled a better understanding of underlying reasons for AMU in the Belgian pig industry. The "Problem Tree" made during the Living Labs involves four branches and identified barriers that may impede the transition to a more sustainable AMU. Next step is the creation of Action Labs in which proposed solutions will be evaluated in weaned piglets on Flemish pig farms.