Brief report

BroilerNet workshop 'Slow(er)-growing genetics for sustainable broiler farming systems' at EuroTier, Hanover, November 15th from 10-12.30 h

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A workshop was held to have a discussion with various stakeholders of the broiler production sector to determine the challenges of keeping broilers in systems with slower growing strains (from different points of view, i.e., the farmer, matching breed to concept, animal health, and sustainability) and to discuss possible good practices to overcome these challenges. These good practices could be innovative ones, not being applied in practice yet, or already existing good practices that could be adopted by more sector stakeholders.

Workshop program:

- Welcome and workshop aim and instructions by Stefan Gunnarsson, BroilerNet coordinator
- Defining challenges of systems with slower-growing broiler breeds: 3 introductions followed by 10 minute group sessions to add additional challenges and rank challenges to find the 3 most important ones
  Introductions:

(1) Challenges from a matching breeds to concepts of view – ***James Bentley***, Hubbard
(2) Challenges for systems with slower-growing strains from an animal health perspective – ***Wiebke Jansen*** from FVE
(3) Challenges from a farmer's perspective – ***Axel Hilckmann*** (LWK Nordrhein Westfalen, Organic Poultry)

- Break and selection of challenges to define good practices by the BroilerNet team
- Group sessions (2 x 15 minutes), where each group was asked to come up with good practices addressing 2 selected challenges, define the most important ones, and present these for all participants
- First impression of workshop outcomes by Harald Schliessnig, AVEC
- Closing by Stefan Gunnarsson

Attendants from various actors in the broiler production chain, including retail, integrations, NGO's, research, participated. Participants were divided into 4 groups with each a facilitator to discuss challenges and good practices.

<u>PART 1 defining challenges</u>

Below the challenges as suggested by the introducer are shown, followed by the top 3 as defined by each of the 4 subgroups of participants.

- **Challenges regarding matching breeds and concepts**

<u>Challenges as suggested by James Bentley:</u>

<u>Ranking of challenges per group of participants:</u>

Group 1:

1. Understanding of concepts by all stakeholders – how to explain and educate from farmers, purchasers, consumers, legislators and investors – role of farmers (covers legal side + producers + consumers). *(Number 1)*
2. Welfare outcomes for breed assessment protocols - common protocols and new traits? *(Number 3)*
3. Managing growth in concepts with maximum growth limits. Should this be assessed on farms as part of the concept and farm audit and demonstrate improvement. *(Number 6)*

Group 2

1. Welfare outcomes for breed assessment protocols- common protocols and new traits? (How to assess animal welfare?) *(Number 3)*
2. Common tools for assessing on farm assessments e.g. LCA – transparency and assessing actual field data to make balances decisions about mitigations. (Balance sustainability and welfare) *(Number 4)*
3. Understanding of concepts by all stakeholders – how to explain and educate from farmers, purchasers, consumers, legislators and investors – role of farmers. (Understanding concepts) *(Number 1)*

Group 3

1. Understanding of concepts by all stakeholders – how to explain and educate from farmers, purchasers, consumers, legislators and investors – role of farmers. *(Number 1)*
2. Which sustainability measurements to take into account when comparing systems and farm assessments (CO2, NH3, Nitrogen Cycle, Biodiversity, welfare, economics). *(Number 5)*
3. Common tools for assessing on farm assessments e.g. LCA – transparency and assessing actual field data to make balances decisions about mitigations. (Find the right definition and the tool. Lack of definition of what are the SGS of broilers, for instance in terms of average

daily growth (g/d) and develop common tools for assessing them on farm (e.g. LCA transparency, availability of actual field data to make balanced decisions about mitigations)). *(Number 4)*

Group 4

1. Understanding of concepts by all stakeholders – how to explain and educate from farmers, purchasers, consumers, legislators and investors – role of farmers. *(Number 1)*
2. Which sustainability measurements to take into account when comparing systems and farm assessments (CO2, NH3, Nitrogen Cycle, Biodiversity, welfare, economics). *(Number 5)*
3. Should farmers be part of the process (training), automated or by audit assessment. (Suitable welfare indicators) *(Number 8)*

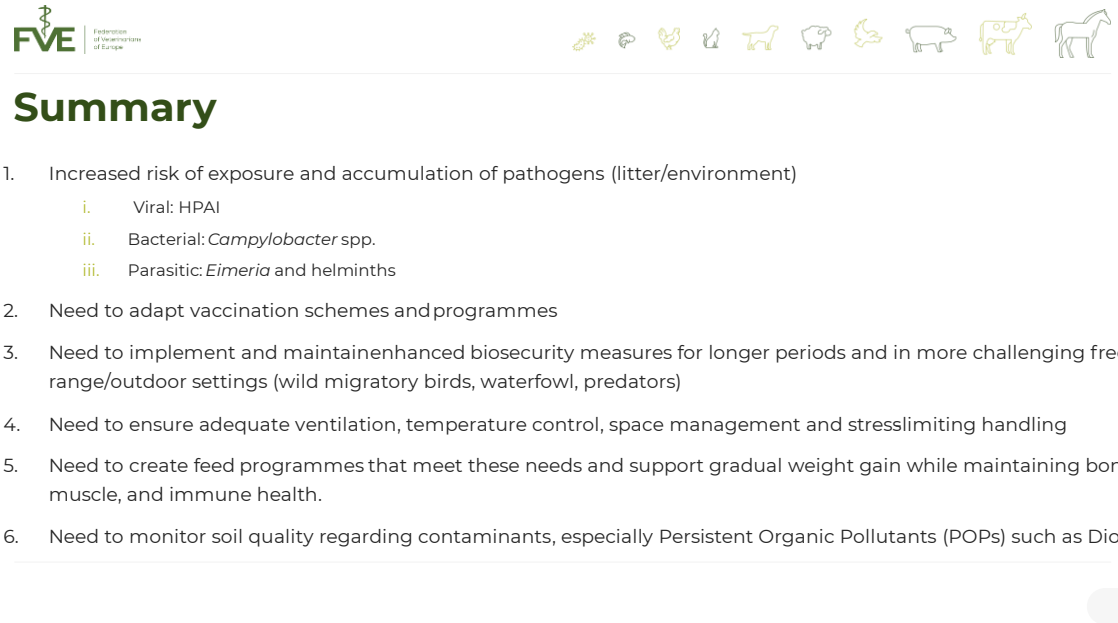
This group also selected the challenge *number 11* (Design and building winter gardens if part of the concept) as being important.

To summarise, challenges ranked as very relevant by more than one group were:

1. Understanding of concepts by all stakeholders – how to explain and educate from farmers, purchasers, consumers, legislators and investors – role of farmers. *(Number 1)*
2. Welfare outcomes for breed assessment protocols- common protocols and new traits? (How to assess animal welfare?) *(Number 3)*

- **Challenges animal health**

Challenges as suggested by Wiebke Jansen:



Ranking of challenges per group of participants:

Group 1:

1. Increased risk of exposure and accumulation of pathogens (litter/environment). *(Number 1)*

2. Need to implement and maintain enhanced biosecurity measures for longer periods and in more challenging free-range/outdoor settings (wild migratory birds, waterfowl, predators). (Biosecurity). *(Number 3)*
3. Need to create feed programmes that meet these needs and support gradual weight gain while maintaining bone, muscle, and immune health. (Nutrition). *(Number 5)*

(Challenges that have been discussed but were not ranked as most important were: planetary boundaries in relation to number of animals, outdoor access, concept of health and parent stock (health?))

Group 2

1. Education and training farmers. *(NEW)*
2. Need to implement and maintain enhanced biosecurity measures for longer periods and in more challenging free-range/outdoor settings (wild migratory birds, waterfowl, predators). (Biosecurity). *(Number 3)*
3. Need to ensure adequate ventilation, temperature control, space management, and stress limiting handling. (Climate management). *(Number 4)*

Group 3

1. Need to create feed programmes that meet these needs and support gradual weight gain while maintaining bone, muscle, and immune health. (This challenge also affect environmental and economic sustainability of s;ower-growing strains). *(Number 5)*
2. Different behaviour, different management (outdoor, windows). *(NEW)*
3. Increased risk of exposure and accumulation of pathogens (litter/environment). *(Number 1)*

Group 4

1. Increased risk of exposure and accumulation of pathogens (litter/environment). (Enhanced biosecurity measurements) *(Number 1)*
2. Need to ensure adequate ventilation, temperature control, space management, and stress limiting handling. *(Number 4)*
3. Need to create feed programmes that meet these needs and support gradual weight gain while maintaining bone, muscle, and immune health. *(Number 5)*

To summarise, challenges ranked as very relevant by more than one group were:

1. Increased risk of exposure and accumulation of pathogens, health management. *(Number 1)*
2. Need to ensure adequate ventilation, temperature control, space management, and stress limiting handling. *(Number 4)*
3. Need to create feed programmes that meet these needs and support gradual weight gain while maintaining bone, muscle, and immune health. *(Number 5)*

- **Challenges for the farmer**

<u>Challenges as suggested by Axel Hilckmann:</u>

<u>Ranking of challenges per group of participants:</u>

Group 1:

1. High production costs. *(Number 1)*
2. Financial uncertainty and investment risks. *(Number 3)*
3. Limited consumer demand and price sensitivity. *(Number 2)*

Group 2

1. Strong competition from outside the country. (Competition with products from abroad, not the same rules in each country). *(Number 6)*
2. Financial uncertainty and investment risks. *(Number 3)*
3. Strict welfare regulation could be costly for the farmer. *(Number 5)*

Group 3

1. Financial uncertainty and investment risks. *(Number 3)*
2. Farmers need training for new feeding requirements and behaviour of the birds. *(Number 4)*
3. Strong competition from outside the country. (The farmer has not much influence on the market, competition). *(Number 6)*

Group 4

1. Financial uncertainty and investment risks. *(Number 3)*
2. Limited consumer demand and price sensitivity. *(Number 2)*
3. Farmers need training for new feeding requirements and behaviour of the birds. *(Number 4)*

To summarise, challenges ranked as very relevant by more than one group were:

1. Financial uncertainty and investment risks. *(Number 3)*
2. Farmers need training for new feeding requirements and behaviour of the birds. *(Number 4)*
3. Strong competition from outside the country. *(Number 6)*

4. Limited consumer demand and price sensitivity. *(Number 2)*

From the challenges highly ranked, the BroilerNet team selected the most mentioned ones and merged some challenges into one general challenge. Participants were asked to discuss good practices to overcome the challenges. These good practices are listed below per group.

Good practices

Group 1

Challenge: animal welfare assessment

Educate producers about absence of presence of welfare

What is welfare: 5 domains of Mellor; key welfare indicators (IPWA indicator list), focus on animal-based/outcome based measures

Challenge: High costs

Alternative feed ingredients ('waste' from human consumption), additives to enhance FCR and reduce expensive ingredients

Subsidies to build/transform barns into high welfare barns such as in Austria (EU/national government to support)

Breed efficiency (FCR) and production of own feed ingredients (e.g. biodynamic, bruder hahn)

Meat tax/management GP's/ integrator to support to analyse farm economics

Group 2

Challenge: education and training of farmers

Trust into the grainer

Work together with practice and science (BroilerNet as a start)

Use all experiences

Who pays? Government, label, farmers, consumer, politics

Farmer to farmer training -> neighbours competitors but look for pairs

Training the trainer by external parties, different view

Auditing as part of training -> checklist according to issues

Challenge: Nutrition program for slower growing broiler systems

Define the right target

Nutrition research linked to concept (breed)

Not all nutrition programs for all concepts/labels (trained people to find the right one)

Networking, get references

Group 3

Challenge: Understanding of concepts by all stakeholders

Information campaign, education in schools

Open farms and collaboration with schools, simplify labelling labelling (to let consumers better perceive the value of using slow growth strains)

Focus on tastes of slow growing chickens

Focus groups and discussion initiatives between farmers, scientists, retailers, NGOs, processors and food services

Challenge: financial uncertainty

Common agreement between chain actors on concept and chain management (roles, fair income of each actor)

Long term contracts between the broiler farmers and their customers (e.g. processors, retailers)

Market orientation

Business plans for switching to boilers of SGS and investing in new suitable facilities for them (e.g. free range, organic)

Group 4

Topic: Biosecurity measures

HEDA filters for pathogens, works well in turkeys, not applied yet in broilers

Farmer training on biosecurity/peer training

AI for early detection of diseases

Nets for outdoor housing

Topic: Balance sustainability and welfare

Quality over quantity

Feeding insects

To summarise, several good practices have been suggested to overcome the most important challenges of systems with slower-growing broiler strains. The suggestions highlight the role of education and training for the various topics, such as for animal welfare assessment, biosecurity and for farmers to keep the birds in these specific systems. Another important aspects, high costs and financial uncertainty, can be tackled by agreement between actors on concept and chain management, including fair incomes, and trying to reduce high costs by alternative feed ingredients or production of own feed ingredients, which may also benefit the footprint of the systems.

The facilitators were also asked to give some insight in the topics that generated lots of discussion within the groups. These are summarised below and highlight important issues in the transition of broiler production systems to more systems with slower-growing strain:

- The need for more circular agricultural practices in general, e.g. reducing waste and promotion of local feed production
- The challenge of balancing sustainability and animal welfare. Insect feeding could benefit broiler welfare but raises concerns on insect welfare.
- Quality over quantity: more resilient systems and peer-to-peer farmer training for optimal health and welfare in systems with slower-growing breeds
- Welfare assessment should be outcome-based and include positive aspects as well as negative aspects of welfare
- What is animal health? How to define resilience/robustness? The need for common understanding of concept of health (and welfare)
- It is very useful to discuss the challenges and good practices with people from different backgrounds, which enables understanding of differences in challenges per stakeholder and helps to find solutions
- Consumer buying behaviour is often based on price and food labelling is not consistent
- Outdoor housing is a real challenge regarding animal health
- Farmer's income security is very important in transitions to other production systems
- Who pays training and education? It is very important, and essential for animal welfare and health
- Audits should inform the farmer how to improve in case of shortcomings
- Good farmers, reaching high body weights in relatively short times, are sometimes punished by the concept, as there is a minimum slaughter age. How can this be prevented?
- Communication is needed to clarify welfare benefits of slower-growing strains to consumers

Hannover, November 15th 2024.