The following document summarises the content of the day including talks and the question and answer sessions.

Morning Session

The topic of the symposium was the role of livestock in global food systems, which has significant implications for climate change, resource allocation, nutrition, and sustenance of livelihoods. While livestock production contributes to global climate change, it also plays a crucial role in providing nutrition and supporting economies. The symposium was structured into three segments focusing on nutrition and health, nature and climate change mitigation, and a just transition involving livestock.

Presentations Overview:

1. **Jacqueline Tereza Da Silva:**
    - Discussed meat consumption in Brazil within the framework of food systems influencing diet, nutrition, and health.
    - Highlighted how animal-sourced foods form a significant part of the Brazilian diet and the health consequences related to processed meats.
2. **Professor Lindsay Jaacks:**
    - Talked about plant-forward diets, which focus on reducing animal-based foods without completely eliminating them.
    - Emphasized the health effects of consuming these diets, using studies to highlight limitations and nutritional needs.
3. **Professor Philip Thornton:**
    - Presented on climate and livestock in Africa emphasizing the economic and climate-related challenges and future transitions.
    - Introduced examples of innovations such as insect farming for feed and aquaponics systems.
4. **Dr Alfy Gathorne-Hardy:**
    - Discussed the relationship between livestock and biodiversity, using the example of the large blue butterfly in the UK.
    - Provided a conceptual model of how much livestock is needed to support biodiversity.
5. **Dr Masood Ghaderi Zefreh:**
    - Explored how advances in livestock science, like genomic selection, can help address the impacts of climate change.
    - Focused on the balance between technological implementation and its implications for food security and environmental effects.

Audience Questions to Speakers:

- Focused on bridging lab-developed technologies with real-world applications addressing localized food system challenges.
- Inquired about balancing individual needs against societal needs within the context of transitioning to sustainable systems.
- Addressed concerns about biodiversity in relation to selective breeding and potential power dynamics within the food system.
- Related to adapting public-private partnerships to support scaling of innovative solutions while acknowledging local contexts.
- Discussed the implications of focusing solely on the negative environmental impacts of livestock without acknowledging potential positive contributions of specific systems.

Afternoon Session

In summary, the symposium aimed to provide insights into the complex role of livestock across global food systems, highlighting diverse regional challenges and innovative solutions while engaging with questions around sustainability, health, and equitable transitions.

Presentations Overview:

1. **Professor Isobel Baltenweck** - Discussed the critical role livestock plays in livelihoods, especially in low-income countries. She highlighted the economic and resilience contributions of livestock and addressed their significance in women's empowerment and gender equality. Additionally, she emphasized the underreported aspects of livestock, such as their role in ecosystem services, and critiqued development programs that involve livestock asset transfers.
2. **Doctor Mariana Hase Ueta** - Focused on integrating Dutch dairy farmers' perspectives in the context of precision fermentation and how it might impact their traditional roles. Her work scrutinizes the technological shifts in agriculture, emphasizing the importance of involving farmers in these transitions to ensure just and inclusive development.
3. **Professor Mizeck Chagunda** - Presented on technological advancements in livestock farming to enhance livelihoods. He addressed animal welfare in breeding and genetic improvements aimed at disease resistance and environmental adaptability, including the reduction of methane emissions.

Audience Questions to Speakers:

- Questions probed into how technology uptake actually occurs on the ground and how much farmers' perspectives guide technology development.
- Several inquiries centered around ensuring farmers' voices are effectively heard and considered in decision-making processes, emphasizing a need for co-designed interventions.
- There were questions about potential power imbalances and whether new agricultural technologies could disproportionately benefit larger companies, leaving smallholders out.
- The discussion also touched on affordability and accessibility of new technologies like precision fermentation for small farmers, considering current cost constraints.

- Contributors raised concerns about intellectual property and data governance and how they might influence farmers' participation and benefit from agricultural innovations.

Additional Highlights:

- The symposium underscored the complexity in determining the impact of livestock, as different contexts yield varying outcomes for health, biodiversity, and farmers' livelihoods.
- Participants acknowledged a need for multi-stakeholder engagement and context-specific approaches in research and policy-making to foster sustainable food systems.
- A call was made to incorporate more diverse voices, including more farmers, in future events to ensure comprehensive exposure to real-world agricultural challenges and solutions.