



GLOBAL AGENDA FOR
SUSTAINABLE LIVESTOCK

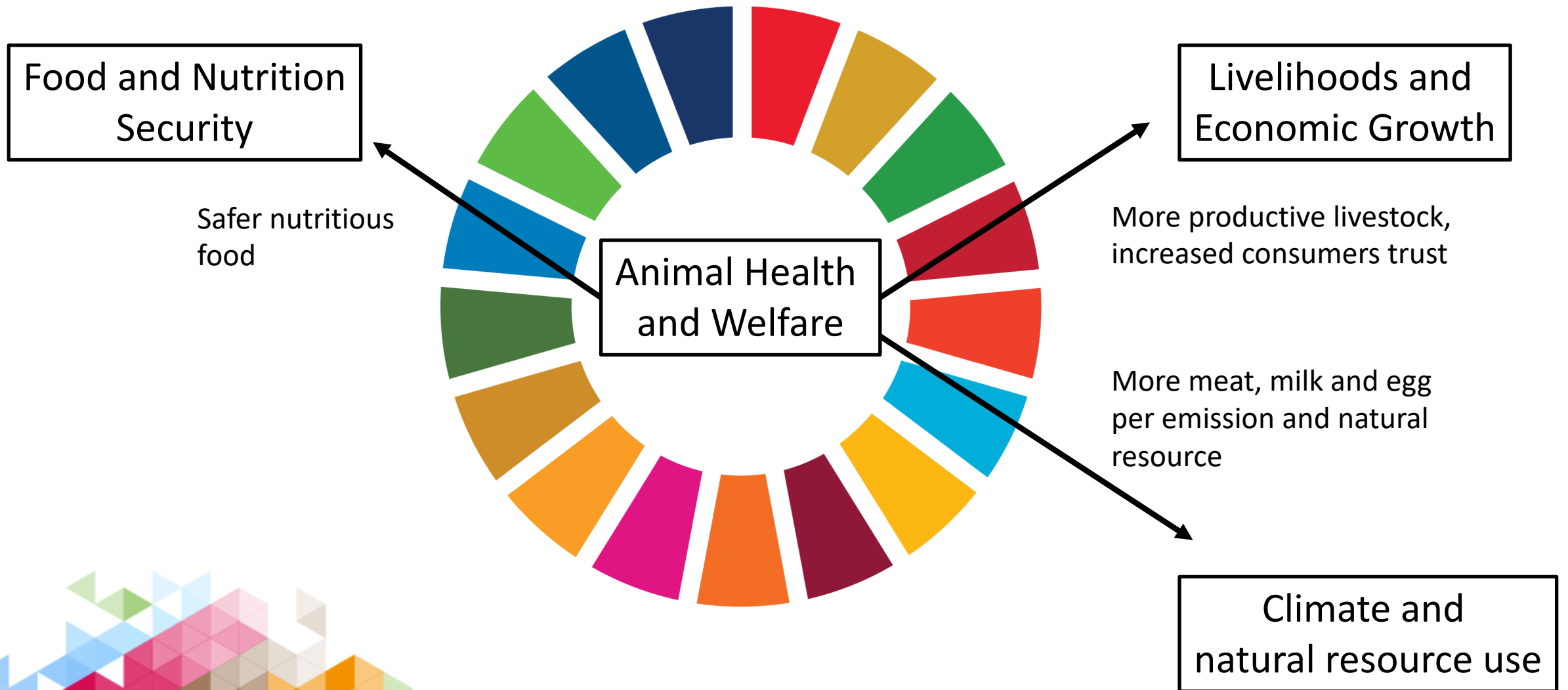
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ANIMAL HEALTH AND WELFARE FOR A SUSTAINABLE LIVESTOCK SECTOR

Animal Health and Welfare, Plenary Session 3
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BUILDING TOGETHER SUSTAINABLE LIVESTOCK
for people, for the planet

Animal health and welfare relates to the three other sustainability dimensions



Five interconnected areas are discussed...

1. Impact of animal disease

2. Zoonoses and
pandemics

Reasons for not
implementing good animal
health and welfare practices
may be due to a lack of
resources or competence
among producers or
authorities, traditions or
cultural issues, or doubts
about whether they
contribute to increased profit.

3. Foodborne diseases

4. Antimicrobial resistance

5. Animal welfare

Impact of animal disease



Transboundry animal disease may have devastating impact on

- Economic returns
- Trade
- Food security
- Animal welfare

But there are also endemic animal diseases with substantial impact for producers and others

Common themes for needed innovation throughout food animal infectious disease management are improved vaccine technology, the increased availability of accurate and robust diagnostic tests, improved knowledge of disease transmission leading to opportunities for fomite and vector control (biosecurity)

Zoonoses and pandemics



Those with pandemic potential are indeed “high profile” diseases, besides the public health risks, the impact is similar to non-zoonotic, transboundary animal diseases .

Notably, there several endemic zoonoses , especially in low- and middle-income countries, with substantial public health and economic impact

Different innovations are needed for different livestock systems, for example, how to increase biosecurity, reduce occupational health risks, and prevent and control contagious diseases. However, we cannot rely entirely on new technical innovations – it is equally critical to improve organization and governance of animal and public health including various stakeholders

Foodborne diseases



The burden of food borne diseases is at the same magnitude as the major communicable disease. The most important of food borne diseases are found in animal source foods. Children in low -income countries are at highest risk.

There is an ongoing shift from classical farm to fork food chains to more complex food webs.

To control food born diseases new innovations for more efficient monitoring and surveillance systems are needed, for example using big data and information science approaches. Efficient traceability of food is needed to enable proactive, rapid and evidence informed decisions. This is particularly true when food is widely distributed, affecting multinational food systems.

Anitmicrobial resistance



The emergence of antimicrobial resistance (AMR) is currently the greatest threat to the advances that have been made in human health and well-being as well as animal health, welfare and production over several decades.

Notably, there are large differences between states in use and accessibility of antibiotics for the livestock sector as well as in regulatory means and public/consumers awareness.

Some of the solutions to reduce the emergence of AMR are innovative in some settings and already applied in other. The overall principle is to substitute excessive, medically non-rational, use of antibiotics with medically rational use matched by effective disease preventive measures. Some are skills/management related and others need capital investment.

Animal welfare



Animal welfare acts as the umbrella term that considers the health, nutrition, housing and behavioural needs of animals, and how they are managed.

Animal welfare is becoming of increasing concern to communities, which is influencing consumer behaviour, governmental processes and international expectations. Failure to recognise and incorporate animal welfare into practice and policy therefore risks the viability and sustainability of global production systems.

The connection between animal welfare and other components of sustainability means welfare-focused innovation gains can be made at the same time as other sustainability improvements. For instance, at disease outbreaks, humane management of sick animals and humane culling for control can ease animal suffering and the psychological stress on the farming families and animal health workers .

The role of innovations in sustainable livestock systems

- Knowledge of disease epidemiology is absolutely key and is a major basis for policy development. Education and promotion of biosecurity techniques based on sound epidemiological principles is key. These biosecurity principles must be made economically viable and advantageous to producers.
- Diagnostics for surveillance, early detection of disease, and evaluation of intervention outcome are crucial. Immunological tools such as vaccines and maintenance/optimization of immune status also remain a vital defence against animal disease.
- To reduce occupational health risks and to prevent and control contagious diseases, different innovations are needed for different livestock systems and for different economic settings. “One size” doesn’t always fits all. These innovations are equally much about structures, organisation and compliance to agreed measures as well as partnership.
- To improve food safety, innovations are need for monitoring and control at pre-harvest (animal production and health) and post-harvest (i.e., at processing, retail and consumer levels)



The role of innovations in sustainable livestock systems (cont.)

- Hiding poor animal husbandry under a blanket of antimicrobials is detrimental for the emergence of AMR. There is room for technical, managerial and organisational innovations to prevent infections with regards to animal husbandry, biosecurity and vaccinations.
- Animal welfare improvements focused on both raising the minimum standard as a 'bottom line' and promoting higher welfare are both important actions for welfare in a sustainable system.
- Innovations for improved animal welfare will be demand driven, coming from industry and the supply or value chain, leading to higher welfare systems; or it will come from more traditional 'command and control' regulation from government/international regulation that will raise minimum standards.



The role of trade in sustainable livestock systems

- The OIE animal health framework for WTO member states guides the trade with animals and animal products in addition to private sector standards.
- The food systems become more complex and multinational - need to improve traceability of food products for securing safe food and for controlling food borne pathogens.
- Increasing awareness of the AMR-threat may push the retailers or regulators to demand that animal source food should come from livestock raised with low use of antibiotics, which in turn influence trade.
- Animal welfare will play an increasingly important role in trade. Animal welfare has the potential to create market differentiation, segmentation, and higher quality products, whilst also having the potential to act as a trade barrier or restriction, rather than value-adding opportunity.



Thanks for your attention!

