

OFFICIAL FEEDBACK FORM

DIALOGUE DATE	Wednesday, 26 May 2021 06:30 GMT +10:00
DIALOGUE TITLE	The Role of the Global Meat & Livestock Sector in Future Sustainable Food Systems
CONVENED BY	Global Meat Alliance & Meat & Livestock Australia in partnership with the International Meat Secretariat (IMS)
DIALOGUE EVENT PAGE	https://summitdialogues.org/dialogue/8886/
DIALOGUE TYPE	Independent
GEOGRAPHICAL FOCUS	No borders

The outcomes from a Food Systems Summit Dialogue will be of use in developing the pathway to sustainable food systems within the locality in which they take place. They will be a valuable contribution to the national pathways and also of interest to the different workstreams preparing for the Summit: the Action Tracks, Scientific Groups and Champions as well as for other Dialogues.

1. PARTICIPATION

TOTAL NUMBER OF PARTICIPANTS

132

PARTICIPATION BY AGE RANGE

0-18

6

19-30

60

31-50

45

51-65

21

66-80

80+

PARTICIPATION BY GENDER

85 Male

47 Female

Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

6 Agriculture/crops

Fish and aquaculture

20 Livestock

Agro-forestry

3 Environment and ecology

8 Trade and commerce

22 Education

11 Communication

11 Food processing

7 Food retail, markets

26 Food industry

Financial Services

2 Health care

6 Nutrition

6 National or local government

Utilities

Industrial

4 Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

Small/medium enterprise/artisan

7 Large national business

15 Multi-national corporation

2 Small-scale farmer

4 Medium-scale farmer

10 Large-scale farmer

12 Local Non-Governmental Organization

9 International Non-Governmental Organization

Indigenous People

24 Science and academia

4 Workers and trade union

Member of Parliament

Local authority

6 Government and national institution

4 Regional economic community

United Nations

International financial institution

9 Private Foundation / Partnership / Alliance

20 Consumer group

6 Other

2. PRINCIPLES OF ENGAGEMENT

HOW DID YOU ORGANIZE THE DIALOGUE SO THAT THE PRINCIPLES WERE INCORPORATED, REINFORCED AND ENHANCED?

The convenors attended the dialogue training therefore the learnings around the Summit principles and expected structure were considered from the inception of the dialogue. The dialogue was truly globally representative and whilst the aim of the dialogue was to represent the total global meat & livestock sector in all its diversity, the convenors also encouraged the involvement of various participants from outside the industry (also located globally), bringing diverse perspective to the dialogue. These differences were looked at favourably as in the spirit of the Summit, the dialogue was seen as an opportunity to work through some of these differing perspectives. Following best practice set forward by the UN and the UNFSS leadership team, five keynote presentations were proceeded by smaller, intimate group discussions, where effort was made to ensure a diverse participant list underpinned each session. The dialogue was promoted through the UNFSS dialogue gateway and across traditional and social media using the templates made available by the UNFSS and other developed materials.

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

The following considerations were made to ensure the UNFSS Principles of Engagement were reflected throughout the dialogue: **Act with urgency:** The focus of the dialogue was to generate outcomes and pathways to creating urgent change to reach the 2030 UN Sustainable Development Goals (SDGs). To this end, two Game Changing Solutions were identified to be put forward to the UNFSS and several current initiatives were brought to light for the wider group to build upon. **Commit to the Summit:** By way of participation, attendees put aside commercial interests to share information with one another in response to achieving a common goal. **Be respectful:** The group discussion demonstrated respect for all in attendance by allowing each participant to voice their opinions in a genuine and transparent way. **Recognise complexity:** Whilst two Game Changing Solutions were identified via this dialogue, the aim was clearly to identify the role of the global meat & livestock sector by providing many individual and diverse examples and noting that these needed to be considered holistically with potential synergies and trade-offs. **Embrace multi-stakeholder inclusivity:** The convenors opened invitations to the dialogue to as many voices as possible, with the aim of capturing all perspectives. All participants were invited into the various breakout rooms to allow opportunity for participants to voice their opinions. **Complement the work of others:** The dialogue provided a platform for participants to share existing work and to connect with others to broaden relationships across the globe and support one another to build upon these initiatives. **Build trust:** The breakout sessions were held under the Chatham House Rules, which helped to build openness and trust, and enabled participants to reflect on their own lived experience.

DO YOU HAVE ADVICE FOR OTHER DIALOGUE CONVENORS ABOUT APPRECIATING THE PRINCIPLES OF ENGAGEMENT?

Short, concise presentations at the beginning of the call helped to set the scene and provide direction for conversation and desired outcomes. Emphasis was placed on the dialogue being solutions focused which meant conversation was forward-looking and productive. Facilitated breakout discussion following the presentations ensured productive conversation and it is ideal to have note-takers during this session to help summarise and capture the discussion in its entirety and to draw out key themes. Our dialogue built in a short break between the facilitated group discussion and a final report of these sessions back to the total group which allowed for facilitators and note-takers an opportunity to come together and summarise their groups findings. The others in the groups spent the break time networking and building connections.

3. METHOD

The outcomes of a Dialogue are influenced by the method that is used.

DID YOU USE THE SAME METHOD AS RECOMMENDED BY THE CONVENORS REFERENCE MANUAL?

Yes

No

4. DIALOGUE FOCUS & OUTCOMES

MAJOR FOCUS

The dialogue focused on bringing together participants from all aspects of the global meat & livestock supply chain to discuss the role of the global meat & livestock sector in future sustainable food systems. Participants ranged from smallholder farmers to processors to butchers/chefs to those who sell the final products, to scientists, nutritionists, retailers and government policy makers. This ensured the opportunity was created for a diverse range of views to be presented to reach a shared understanding of the discussion topic.

The dialogue was centred around all the UNFSS Action Tracks and the following topics were covered by both a presentation and group discussion:

1. Food security: What is the role of animal sourced protein in feeding the growing world's population?
2. What is the role of meat in the diet and what are the implications of going without?
3. How can we sustainably manage existing food production systems to the benefit of both nature and people?
4. What is the role of the global meat & livestock sector in future-proofing our food systems and protecting against shocks and stresses?
5. How do we maintain a balanced debate and inclusive narrative?

The meat & livestock sector is united in its ambition to bring high quality, nutritious and sustainable food to everyone and is continuously driving towards a carbon positive farming industry with high animal welfare and environmental standards at its heart. It was noted that this dialogue brought together a large representation of the global meat & livestock sector and that conversations of this nature, in an open forum, need to continue. The industry commits to continuing with this activity and thanks the UNFSS for providing such an important platform to do so.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- ✓ Finance
- ✓ Innovation
- ✓ Human rights
- ✓ Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- ✓ Governance
- ✓ Trade-offs
- ✓ Environment and Climate

MAIN FINDINGS

Two Game Changing Solutions were identified:

Game Changing Solution 1 - Facilitate a global capacity which enables knowledge transfer & empowers smallholder farmers in low & middle-income countries (LMICs) to obtain successful solutions & proven, context appropriate technologies.

Providing LMICs, such as those in Africa, with the means to improve efficiencies, genetics and environmental impact, would empower these farmers to finally be considered part of the global food system. For example, 20% of the world's cattle are raised in Sub-Saharan Africa however the region only contributes 2-3% of the world's beef production and the lowest milk production per cow (1). Cattle are raised by smallholder farmers who historically have been unable to commercialise. The benefits of empowering farmers would enhance the ability to feed a greater percentage of the local population without increasing the herd size, resulting in a lower carbon footprint; and lower local incidence of metabolic illness and alleviation of poverty in an area that will hold 23% of the world's population by 2050.

Game Changing Solution 2 - To holistically achieve sustainable food systems, a comprehensive & unbiased nutritional / environmental index built from high quality science is urgently required.

Smart metrics are needed to establish planetary health and human health simultaneously. Such an index should be valid for both individual foods and complete diets and applicable to diverse regional and economic situations. Currently, foods and food systems are often measured on gross rather than net environmental impact and without any consideration of contribution to human health in terms of protein and essential nutrients required for development and optimal wellbeing. If we are truly to understand what sustainable, healthy diets look like we need these metrics to simultaneously track net environmental impact and nutrient density and diversity. Foods need to be evaluated through appropriate local and regional Life Cycle Analysis (LCA) combined with comprehensive dietary contributions.

In addition, the following was strongly identified:

- Balanced healthy diets require a combination of animal and plant-based foods, adapted to regional cultures, local food availability, distribution systems and climatic constraints.
- Animal sourced proteins are a high-quality protein source that provide the full array of essential amino acids and other important nutrients, such as bioavailable iron, vitamin B12 and zinc.
- There is no consistent evidence that any one food, including meat, leads to an increased risk of death. The evidence linking red meat with cancer are based on studies that show associations between food and health, not causation. There are many diet and lifestyle factors that contribute to risk factors for chronic diseases, including obesity, sedentary lifestyles and lack of dietary fibre. The methodology of those studies are limited in their ability to accurately measure individual food types. In addition, they are limited in their ability to distinguish between any effect of red meat separately from that of other risk factors. The small size of the association reported suggests residual confounding from unhealthy diet and lifestyle risk factors is the most likely explanation. From a perception perspective, insights suggest health is personal and different for everyone. While consumers tend to filter information and gravitate to solutions that fit their personal mindsets and behaviours, most have a balanced approach to healthy eating and continue to enjoy eating a variety of protein choices.
- For livestock, the narrative is focused on gross emissions and claimed negative impact. However, this narrative is flawed in not recognising that, unlike fossil fuel emissions that accumulate, methane from ruminants is naturally cycled resulting in far lower net emissions over time, with well managed systems reducing atmospheric GHG through soil and tree carbon sequestration.
- Managed correctly livestock can have a positive impact on global warming by transferring atmospheric carbon to soils through plant photosynthesis.
- Livestock enable economic development of marginal land that is unsuitable for alternate food production systems.
 - Ruminant animals convert grass and other plants with low nutrient value to humans into high quality protein, fatty acids, vitamins and minerals that humans can digest and utilise to function for health and well-being.
 - These marginal lands have an environmental function and livestock producers for quite some years have been putting practices in place to protect biodiversity of these lands.
 - Regenerative management practices result in improved soil health, greater water holding capacity and increased plant growth, increasing human food availability in harmony with increased biodiversity and system resilience.
- Improved efficiency of livestock production will mean the total global livestock sector's contribution to temperature will not increase and likely decrease and in tandem, will produce more food to help feed additional global consumers.
- Livestock also play a key role in converting otherwise 'waste' food (e.g. crop residues and by-products of food manufacture) into high-quality, nutrient dense protein for human consumption. This cycle is a crucial part of global food production. Large volumes of crop residues, weather damaged product, vegetable wastes and food system by-products that would otherwise add to waste and GHG levels, are recycled for human consumption.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- Finance
- ✓ Innovation
- Human rights
- Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- Governance
- ✓ Trade-offs
- ✓ Environment and Climate

OUTCOMES FOR EACH DISCUSSION TOPIC - 1/5

Food security: What is the role of animal sourced protein in feeding the growing world's population?

- LMICs have been left behind in the creation and contribution of the global supply chain as their farmers have not been supported to commercialise, instead they suffer from donor dependency (charity aid).
- In addition, the population in LMICs are enduring low protein consumption with diets relying largely on highly refined carbohydrates, which means metabolic illness is on the rise. In Sub-Saharan Africa, it is estimated 25% of adults have metabolic syndrome. (2)
- In LMICs it's important to differentiate protein sources (animal sourced vs. plant) as it is animal sourced protein exclusively that delivers not only protein but bioavailable haem iron and other essential nutrients (including exclusive sources of several nutrients).
- Improved efficiency of livestock production will mean the total global sector's contribution to temperature will not increase. However, it will produce more food to help feed the world.
- In addition to food livestock provide many other human benefits including a large array of pharmaceutical ingredients, wool, pelts, leather, hides, organic fertiliser and draught power in addition to acting as a mobile source of wealth, critical to LMIC smallholder farmers.
- LMICs, such as Zimbabwe, are calling out for knowledge to deliver their own results by using their own resources and set of values.
- In Africa, many of the drivers for raising livestock are also cultural rather than commercial and the more cattle that farmers own, the wealthier they are, independent of the condition of either the cattle or the land. So just imposing "western" solutions (as has been the tradition in the past) on such smallholder farmers does not resolve the dichotomy - similarly government-imposed regulations that farmers "must" appropriately manage their rangelands has not worked hence we do need to use proven productivity improvements. But we also need to find ways to encourage the farmers to take a whole-of-farm system approach (within the local, regional and global food system) to manage their livestock in a commercially relevant way.
- The solution for Africa? "Conception to Consumption" - Build capacity (farmers need to see themselves as part of the global supply chain), train farmers, improve genetics, make inputs readily available, bring market to the farmers and focus on traceability and technology transfer.
- As a sector, we have the knowledge and practices to create positive change, but we need to improve the open sharing and utilising of this information universally.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- | | |
|---------------------------|---------------------------|
| Finance | ✓ Policy |
| ✓ Innovation | ✓ Data & Evidence |
| ✓ Human rights | Governance |
| Women & Youth Empowerment | ✓ Trade-offs |
| | ✓ Environment and Climate |

OUTCOMES FOR EACH DISCUSSION TOPIC - 2/5

What is the role of meat in the diet and what are the implications of going without?

- Animal sourced proteins are a high-quality protein source that provide the full array of essential amino acids and other important nutrients, such as bioavailable iron, vitamin B12 and zinc and therefore are a richer source of protein per gram compared to plant protein sources.
 - This is important particularly in LMICs where hunger and malnutrition are significant and, where supplements are harder to access, and the wide range of plant foods needed to deliver all nutrients would be extremely diverse and large in quantity.
 - This is critically important for at risk groups such as the very young, pregnant and lactating women, the obese and the aged.
 - Fulfilling dietary protein and amino acid requirements from red meat reduces the associated calorie consumption due to the unique high ratio of bio-available protein relative to calories. Reduced red meat intake is associated with increased carbohydrate and calorie intake relative to protein and is an important contributing factor to obesity.
- The most common nutritional deficiencies in the world are iron and vitamin B12.
 - Well-absorbed bioavailable haem iron is only found in animal foods - red meat, poultry and fish. The removal of these haem iron foods from the diet greatly reduces absorption of iron.
 - As there are limited plant-based foods that are a source of vitamin B12 (unless fortified), those following a diet with little to no animal products, particularly women who are pregnant or breastfeeding, are at greater risk of vitamin B12 deficiency and require supplementation.
- In addition to a drastic reduction in meat intake, which would see implication around adequate essential nutrients, the proposed EAT Lancet diet contains discrepancies around protein intake vs sugar intake. This will contribute negatively to worsen outcomes of malnutrition, obesity and obesity-related disease.
- There is no consistent evidence that any one food, including red meat, leads to an increased risk of death. Instead, it's known that a range of lifestyle factors have a significant impact on the risk, most notably age, genetics, lack of dietary fibre, inactivity and high alcohol consumption.

ACTION TRACKS

- | | |
|---|--|
| ✓ | Action Track 1: Ensure access to safe and nutritious food for all |
| ✓ | Action Track 2: Shift to sustainable consumption patterns |
| | Action Track 3: Boost nature-positive production |
| | Action Track 4: Advance equitable livelihoods |
| ✓ | Action Track 5: Build resilience to vulnerabilities, shocks and stress |

KEYWORDS

- | | | | |
|---|---------------------------|---|-------------------------|
| | Finance | | Policy |
| | Innovation | ✓ | Data & Evidence |
| ✓ | Human rights | | Governance |
| | Women & Youth Empowerment | ✓ | Trade-offs |
| | | | Environment and Climate |

OUTCOMES FOR EACH DISCUSSION TOPIC - 3/5

How can we sustainably manage existing food production systems to the benefit of both nature and people?

- For livestock, all the narrative is focused on gross emissions and negative impact however, this narrative needs to be balanced to account for the positive impact livestock contributes to global food systems if we are truly to define an accurate picture.
- If livestock is managed correctly, we can stop having an impact or even have a positive impact on global warming by pulling methane out of the atmosphere.
 - Methane from cattle is not only emitted but is also destroyed relatively quickly. This means it's warming impact should be measured differently than that of CO₂.
 - Methane released by livestock lasts for 10-12 years and does not continue to build up in the atmosphere like CO₂ which has a life of 1000 years. With stable livestock numbers, the amount of methane produced balances the methane that breaks down from the atmosphere.
 - If industry continue to build on innovations to reduce the amount of methane emitted, then in fact, livestock will pull more total carbon (methane/CO₂) out of the atmosphere than it emits.
 - Furthermore, this removal of methane, by livestock, is not currently identified in the accounting of methane, only that which is emitted. This needs to be urgently addressed.
- A healthy grazed grassland can create deep carbon sinks. Managing grasslands well also contributes to carbon storage in other ways: by enhancing soil health and water holding capacity to equip land to be more resilient to extreme events.
- Livestock enable economic development of marginal land (country specific) that does not lend itself to alternate food production systems.
 - In addition, ruminant animals convert grass and other plants with low nutrient value and digestibility to humans into high quality protein, fatty acids, vitamins and minerals.
 - These marginal lands have an environmental function and livestock producers for quite some years have been putting practices in place to protect and enhance biodiversity of these lands.
- 86% of the global livestock feed intake in dry matter consists of feed materials that are not currently edible for humans (3) Modest improvements in feed conversion ratios can prevent further expansion of arable land dedicated to feed production.
- The Global Roundtable for Sustainable Beef (GRSB) and other regional programmes such as the European Roundtable for Beef Sustainability (ERBS) (4) was established to set clear goals for the reduction of the environmental footprint of cattle and to improve the welfare of the animal and the farmer. Together these organisations have influence on beef produced across the globe. In the instance of the ERBS, national platforms consisting of farming groups, processors, government, retailers, and NGO's, apply to ERBS for recognition, then implement their activity plans and finally report annually against their progress. This process drives sharing of innovation and provides transparency of the progress towards the goals.

ACTION TRACKS

<input type="checkbox"/>	Action Track 1: Ensure access to safe and nutritious food for all
<input type="checkbox"/>	Action Track 2: Shift to sustainable consumption patterns
<input checked="" type="checkbox"/>	Action Track 3: Boost nature-positive production
<input type="checkbox"/>	Action Track 4: Advance equitable livelihoods
<input checked="" type="checkbox"/>	Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

<input type="checkbox"/>	Finance	<input checked="" type="checkbox"/>	Policy
<input checked="" type="checkbox"/>	Innovation	<input checked="" type="checkbox"/>	Data & Evidence
<input type="checkbox"/>	Human rights	<input type="checkbox"/>	Governance
<input type="checkbox"/>	Women & Youth Empowerment	<input checked="" type="checkbox"/>	Trade-offs
<input type="checkbox"/>		<input checked="" type="checkbox"/>	Environment and Climate

OUTCOMES FOR EACH DISCUSSION TOPIC - 4/5

What is the role of the global meat sector in future-proofing our food systems and protecting against shocks and stresses?

The farming of ruminant livestock has multiple public benefits including:

- Delivers soil improvement, fertility and health through regenerative management practices which imitate previous wild livestock systems where large herds moved across a landscape.
 - Carbon sequestration by increased plant growth and long term soil carbon storage at increasing depth.
 - Optimising biodiversity through stewardship of natural ecosystems.
 - Nutritional benefits through highly bioavailable and complete protein, macro and micro nutrients. The high protein relative to calorie ratios of red meat reduces the carbohydrate proportion of a balanced diet.
 - Contribution to the economy. Livestock contribute about 40% of agricultural GDP and provide livelihoods and incomes for at least 1.3 billion people worldwide.
 - Food security. Ruminant livestock have unique value, particularly in LMIC, as a portable wealth store able to be utilised when required to fund essential and often critical needs such as health emergencies or access to education. Local livestock supply chains are critical for food security in LMIC with over a billion small holder farmers dependant on livestock for survival.
- Smart metrics are needed to establish planetary health and human health simultaneously. Currently, foods and food systems are measured on environmental impact without any consideration on contribution to human health in terms of protein and essential nutrients required for development and optimum wellbeing.
 - If we are truly to understand what sustainable, healthy diets look like we need these metrics to track net environmental impact and nutrient density and diversity.
 - The point at which the higher carbon footprint of some nutrient-dense foods is offset by their higher nutritional value needs to be a priority area for additional research.
 - The livestock industry is the only food industry to be measured on gross annual GHG emissions, we need to be measured also on gross annual carbon sequestration to understand what the net annual GHG emissions are for the whole farm business.
 - Globally, industry need to align on this and push for net annual GHG emissions to be measured.
 - Meat and Livestock Australia analysis shows that the sheepmeat industry in Australia is nearly carbon neutral.
 - The point was made that we need to be climate neutral rather than carbon neutral. Carbon is only one element of the climate challenge, and thus focusing on carbon alone is not likely to enable climate targets to be met.
 - There needs to be recognition of the innovation that has taken place so far within industry and consideration and support needs to be given to allow for continued innovation which will be impactful in mitigating GHG emissions even further.
 - AHDB highlighted a project they are working on - Envirobench, they are using feed conversion ratio as a proxy to drive productivity in the sector, and Envirobench will enable farmers to make decisions and measure trade-offs between nitrogen and carbon.
 - Feeding livestock, a seaweed supplement called FutureFeed could simultaneously help to secure global food security and fight climate change by reducing powerful greenhouse gas emissions. (5)
 - A US example - removing animals from US agriculture would reduce gross agricultural GHG emissions by a negligible amount but would also create a food supply incapable of supporting the US population's nutritional requirements. (6)
 - Globally there is a need for industry to align on measurements and initiatives to improve environmental impacts.

ACTION TRACKS

	Action Track 1: Ensure access to safe and nutritious food for all
	Action Track 2: Shift to sustainable consumption patterns
✓	Action Track 3: Boost nature-positive production
	Action Track 4: Advance equitable livelihoods
✓	Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

	Finance	✓	Policy
✓	Innovation	✓	Data & Evidence
	Human rights		Governance
	Women & Youth Empowerment	✓	Trade-offs
		✓	Environment and Climate

OUTCOMES FOR EACH DISCUSSION TOPIC - 5/5

How do we maintain a balanced debate and inclusive narrative?

This group focused a lot on the nuances in the discussions around the role of the global meat sector in future sustainable food systems. The debate is often centred on the negative (gross) impacts of livestock on the environment however as outlined in this report, the total impacts are positive, and this is noticeably missing in a public arena.

Industry needs to take on the challenge of communicating the good work and the total benefits delivered internally to ensure everyone in the sector has the awareness and understanding, as well as communicating to the wider public.

It is industry's job to ensure the total picture is depicted but the group recognised support is needed from actors outside of industry to ensure this is heard.

There also seems to be a lack of trust by the public in the science. This could be due to the boundless information available via social channels or by the conflicting science they see governments and global institutions arguing over in public arenas.

Regardless of industry we all share the same common goal and the same values, we just have different views about how we can solve issues to get there. Perhaps it's less about attacking opposition and instead align, publicly, on these common goals and focus on how we can, collectively, achieve them.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- Finance
- ✓ Innovation
- ✓ Human rights
- Women & Youth Empowerment
- ✓ Policy
- ✓ Data & Evidence
- Governance
- ✓ Trade-offs
- ✓ Environment and Climate

AREAS OF DIVERGENCE

The dialogue also raised concerns that any sustainable, natural and low waste food production system was being focussed on at a time when so much effort is required to address hunger and food waste. It was highlighted that every hour over 1,000 people die because of hunger – and in every hour almost 150,000 tonnes of food go to waste – that is 142 tonnes of food wasted for every life lost to hunger.

The other consistent theme was around better alignment of industry in a pre-competitive space. The global livestock sector adds to the confusion around the role we play in food systems as we lack a precompetitive narrative and instead pit production systems, for example, against each other. If we require support from other actors to share our total contribution which we believe to be positive to the public, there is also a job for us to do in aligning our own work.

ACTION TRACKS

- ✓ Action Track 1: Ensure access to safe and nutritious food for all
- ✓ Action Track 2: Shift to sustainable consumption patterns
- ✓ Action Track 3: Boost nature-positive production
- ✓ Action Track 4: Advance equitable livelihoods
- ✓ Action Track 5: Build resilience to vulnerabilities, shocks and stress

KEYWORDS

- | | | | |
|--------------------------|---------------------------|--------------------------|-------------------------|
| <input type="checkbox"/> | Finance | <input type="checkbox"/> | Policy |
| <input type="checkbox"/> | Innovation | ✓ | Data & Evidence |
| ✓ | Human rights | <input type="checkbox"/> | Governance |
| <input type="checkbox"/> | Women & Youth Empowerment | ✓ | Trade-offs |
| <input type="checkbox"/> | | <input type="checkbox"/> | Environment and Climate |

ATTACHMENTS AND RELEVANT LINKS

RELEVANT LINKS

- (1)
<http://www.fao.org/publications/card/en/c/b092211c-ddc9-53e3-ab89-fb1e9a3db8d4/>
- (1)
<http://www.fao.org/3/y4176e/y4176e.pdf>
- (2)
<https://pubmed.ncbi.nlm.nih.gov/32143896/>
- (3)
<https://www.sciencedirect.com/science/article/abs/pii/S2211912416300013>
- (4)
<https://saiplatform.org/erbs/>
- (5)
<https://www.csiro.au/en/research/animals/livestock/futurefeed>
- (6)
<https://www.pnas.org/content/114/48/E10301>