

**FOOD SYSTEMS  
SUMMIT 2021**



# **DIALOGUES**

**APR 2021**

## **SYNTHESIS OF INDEPENDENT DIALOGUES**

**INTERIM REPORT 1**



**UNITED NATIONS  
FOOD SYSTEMS  
SUMMIT 2021**

# Table of Contents

<b>EXECUTIVE OVERVIEW AND SUMMARY .....</b>	<b>2</b>
<b>AGENDA-SETTING THEMES.....</b>	<b>7</b>
<b>TEN AGENDA-SETTING THEMES .....</b>	<b>7</b>
<b>AGENDA-SETTING THEMES BY KEY GROUPS .....</b>	<b>11</b>
<b>PART 2.....</b>	<b>13</b>
<b>IDENTIFYING AND ADDRESSING KEY ISSUES.....</b>	<b>13</b>
<b>WHAT ISSUES NEED TO BE ADDRESSED AT THE SUMMIT? .....</b>	<b>13</b>
<b>PART 3.....</b>	<b>23</b>
<b>MAJOR FOCUS AREAS AND AREAS OF DIVERGENCE.....</b>	<b>23</b>
<b>MAJOR FOCUS AREAS .....</b>	<b>23</b>
<b>AREAS OF DIVERGENCE.....</b>	<b>29</b>
<b>PART 4.....</b>	<b>32</b>
<b>EMERGENT THEMES .....</b>	<b>32</b>
<b>PART 5.....</b>	<b>59</b>
<b>SYNTHESIS METHODOLOGY &amp; SYNTHESIS TEAM.....</b>	<b>59</b>
<b>APPROACH TO THE SYNTHESIS.....</b>	<b>59</b>
<b>BLUE MARBLE EVALUTATION TEAM.....</b>	<b>66</b>
<b>ANNEX A: LIST OF DOCUMENTS CODED.....</b>	<b>63</b>
<b>ANNEX B: DETAILED SYNTHESIS REPORT: DOCUMENTATION AND EVIDENCE .....</b>	<b>64</b>
<b>ANNEX C: FEEDBACK FORM .....</b>	<b>69</b>
<b>ANNEX D: REFERENCES .....</b>	<b>71</b>

# Executive Overview and Summary

**To prepare for the 2021 Food Systems Summit (hereafter referred to simply as “the Summit”), Independent Dialogues are taking place around the world.** Independent Dialogues are one of three main components of the Food Systems Summit Dialogues (FSSD), the other two being Member State Dialogues and Global Dialogues. Independent Dialogues can be convened by any interested group. The Independent Dialogues aim to offer a seat at the table to a plethora of stakeholders who have an opportunity to “debate, collaborate, and take action towards a better future” ([Food System Dialogue](#)). This first interim report spotlights the key themes and ideas identified in 17 FSSD Independent Dialogue feedback form reports submitted to an online database from early November 2020 through mid-March 2021.

## DIALOGUE FEEDBACK FORMS

The *Manual for the Dialogues* requests that convenors use a standardized Food Systems Summit 2021 Dialogue Feedback Form to share the dialogue’s outcomes. The feedback form is organized as follows:

**1. Participation.** Background information on participants in the dialogue.

**2. Principles of Engagement.** How Summit principles were incorporated, reinforced, and included.

**3. Method.** Did you use the method as recommended by the Convenors Manual?

**4. Dialogue focus and outcomes<sup>1</sup>**

- Major Focus
- Main findings
- Outcomes for each discussion topic
- Areas of divergence
- Attachments and relevant links

Once submitted, the reports are publicly available and accessible through the Food Systems Summit Dialogues Gateway (<https://summitdialogues.org/explore-feedback/>).

---

<sup>1</sup> The Feedback Forms format changed slightly in March 2021.

## THEME ANALYSIS & SYNTHESIS

The Summit aspires to hold thousands of Independent Dialogues aimed at building momentum for the Summit. While the individual feedback forms are posted and accessible, the question arose as to how to synthesize dialogue feedback reports to capture major themes and ideas emanating across the dialogues. To address that, the FSSD designers formed a strategic partnership with the Blue Marble Evaluation Network to undertake a synthesis of Independent Dialogue feedback forms. The synthesis is not an evaluation of the Dialogues, rather, the synthesis is a straightforward, non-judgmental summary and synthesis of cross-cutting themes.

The Blue Marble Team coded each dialogue feedback form to capture outcomes from each Independent Dialogue, then synthesized the information. The analysis involves multiple steps to analyse the data which was done through the development of a Code Book for coding feedback forms. Details about the coding process and Blue Marble Evaluation analysis team are provided in the methodology section of the full report.

This first synthesis report is meant to be generative and illustrative. The first set of dialogue feedback forms have been used to develop the coding categories and content analysis process. This report is generative in that we are reporting the results in some depth and detail to illustrate the diversity and

range of dialogue perspectives, issues, and areas of priority concern. Thus, following this executive overview and summary, the report provides detailed supporting documentation and direct quotations to communicate the substance and tone of dialogue reports.

A second interim synthesis in June will report results of dialogues with Independent Dialogue feedback forms that are submitted through the end of May. A final synthesis report will be submitted in August. That report will include a narrative that connects and interrelates the major themes, issues, and proposals that emanate from the dialogues.

## PARTICIPATION DATA

A total of 1,864 people participated<sup>2</sup> in the 17 dialogues held from 5 November 2020 to 13 March 2021. Attendance rates for the different dialogues varied from 10 (*Food Systems, Climate Change & Youth Power*) to 886 (*Advancing equitable livelihoods in food systems*).

Slightly more males (53%) than females (47%) attended the dialogues. Both genders were represented in all dialogues for which data were reported. (Three of the 17 dialogues did not report participation details.)

## TEN AGENDA-SETTING THEMES

The Independent Dialogues typically lasted 1 ½ hours. In that format, what tends to emerge are issues and concerns that participants believe the Summit should address. Specific solutions and concrete proposals are not clearly identified in most feedback reports, rather, the Dialogues more often yield system insights and priority concerns that participants hope the Summit will address leading to solutions. For this executive overview and summary, we are

---

<sup>2</sup> Each Dialogue report provided participation rates. However, it is not clear if these are participation or registration numbers.

presenting 10 of the most prominent cross-cutting and overarching themes that emerged from the analysis, which we present as *agenda-setting themes*.<sup>3</sup>

### 1. Food Systems and climate change are interconnected

Dialogue discussions link sustainable food systems, sustainable agriculture, environmental sustainability, global climate change, and the need for nutritional, accessible, and environmentally friendly diets.

### 2. Equity

Dialogues discussed supporting equity as a framework for increasing access to affordable, nutritious food. Equity also concerns fair remuneration to farmers and strategies to address the needs of women, youth, and minorities in order for them to fully participate in all elements of a sustainable food system.

### 3. Education about food and food systems

Education was discussed as critical at all levels of food systems, from schools to consumers, including farmers, distributors, and producers, and engaging the very young to the not so young. Myriad educational topics were identified from planting, harvesting, and cooking, to pre-production, processing and marketing with a focus on nutrition, health, and other critical information. Education included formal and informal approaches using various kinds of traditional or innovative communication, teaching, and capacity building activities.

### 4. Economic and finance issues

Economic and finance concerns were wide-ranging, from issues of inclusion and job creation to a focus on strengthening rural economies.

---

<sup>3</sup> Part 1 of the full report cites direct quotations from the feedback forms that illustrate how the team identified these themes.

Strategies that deserve attention and deeper analysis include: financial incentives for food systems transformations; the effects of subsidies; policy and finance approaches that better reach farmers, women, and small and medium-sized enterprises (SMEs); accelerating, de-risking, and promoting public and private finance and investment; and the need for collaboration, alliances, partnerships, and innovation in investment and finance.

## **5. Engagement with science and scientists**

Understanding food systems and the implications of change requires active engagement with science and scientists, especially making scientific knowledge accessible to farmers and producers, and using science to inform government policies. Ideas ranged from ensuring that scientists' work is translated into lay terms, to ensuring that science is used to inform policy and farming decisions. The need for partnerships with scientists was often stressed.

## **6. Partnerships, synergies, and alliances**

Dialogues often included discussion of the need for partnerships, synergies, and alliances to change food systems collaboratively and strategically. Such collaborative engagements need to be transparent, action-oriented, and attentive to building trust among all the participating actors.

## **7. Platforms and networks**

Closely related to partnerships, synergies, and alliances, was the discussion of platforms and networks as implementation strategies that should be used to generate solutions, share ideas, build alliances, educate members, and strengthen partnerships.

## **8. Policy and regulatory reform**

Reformed policies, regulations, and new frameworks were identified as essential to influence changes

needed to support a sustainable, equitable, and environmentally friendly food system. While governments play a key role, multiple actors are needed to help bring about and implement policy and regulatory reforms including both consumers and producers of food, and both private sector and nongovernmental groups.

## **9. Technology**

Better use of existing technologies and development of new technologies to support food systems transformations was discussed. Technology was viewed as critical to improve adaptation and mitigate various problems identified such as greater access to food, climate change, scaling education initiatives, achieving more equity, reducing food waste, and supporting health and nutrition.

## **10. Managing trade-offs**

Most reports mentioned some kind of trade-offs with regards to the complexities and negotiations involved in shaping, informing, or otherwise shifting food systems, and the need to be able to assess these trade-offs. An example is where conservation of natural resources could be in conflict with livelihoods or banning deforestation could mean loss of employment and economic losses. Other trade-offs included: production for local consumption versus export, affordable food for consumers versus increasing small farmers' income.

## **THEMES BY KEY GROUPS**

Four key groups consistently attracted attention in the dialogues: farmers, women, youth, and indigenous communities.

### **Farmers**

Concern for farmers, particularly smallholder farmers, emerged in nearly all dialogues as a critical part of any sustainable food system. Multiple kinds and level of strategies for supporting farmers were identified.

## Women

The importance of supporting women as occupying central roles in food systems was a prominent theme in dialogues.

Suggestions included supporting women to be more active in food system initiatives and working to ensure they benefit from both new initiatives and more from existing structures. The need to change policies, such as those around child brides and restrictions on land ownership, were also discussed.

## Youth

Concern about the future consistently focused on the importance of addressing youth. Engaging youth through formal schooling and social media platforms; educating youth in farming, business, technology, nutrition, and health; and teaching them about the complexities in the food system, were all raised.

## Indigenous Groups

Indigenous peoples have distinct livelihood strategies that need to be valued and recognized. The value of indigenous and traditional approaches to growing and consuming food was identified as offering insights about how to address both global climate change and nutrition.

## IDENTIFYING & ADDRESSING ISSUES

Part 2 of this synthesis report is organized and presented as a narrative in three sections: issues that need to be addressed; who should address those issues (key actors); and guidance on engagement processes to address issues.

### Issues that Need to be Addressed

The most commonly identified issues focused on finance, distribution of resources, equity, food supply, consumer trends, impact on the environment and climate change, and the lack of useful, effective, and/or appropriate policy. Reports also mentioned lack of poor nutrition, access to food, COVID-19, poor governance, lack of innovation, lack of education, and the lack of specific research as additional problem areas.

While not mentioned as frequently, some reports noted the problem of lack of coordination amongst different actors, the lack of focus or ability to ensure sustainability, food wastage, plastic, poor or inadequate infrastructure, poor treatment of livestock, and the inability to scale up innovations or other interventions. Also mentioned a few times were issues surrounding corruption, lack of capacity of various actors, the inability to manage change, migration, no or low political will, technology, and the challenge of transforming socio-economic systems. Lack of access to resources and not ensuring inclusion were infrequently mentioned.

### Who Should Address Issues: Key Actors

To address issues, dialogues identified actors who need to be engaged:

- **Government.** Government was the actor most often identified as the key actor needing to shift public policies, create incentives, and/or providing subsidies to bring about sustainable food systems changes. Governments were called on to lead on environment, waste, health and nutrition, equity, finance, and engaging the private sector.
- **Academia/Scientists.** The focus on scientists emphasized ensuring that their work was practical and applicable to farmers, particularly with regards to innovation, technology, and seed availability, or other agricultural-focused improvements.
- **Private sector.** The private sector was identified as an important partner in transformation and innovation like, as an example, developing youth-focused finance packages.
- **Community groups/NGOs.** Community groups and non-governmental organizations (NGOs) were discussed as particularly important to address education needs and priorities in communities.
- **Youth.** While often mentioned as recipients of others' actions, a few calls for action placed responsibility squarely on youth's shoulders.

These were mostly focused on innovation and participating in the Summit.

- **Multiple actors through a partnership approach.** To transform food systems to address education, equity, environment, and employment dialogue participants discussed the need to engage multiple actors across silos. Health and nutrition were identified as interrelated issues for “everyone” to address.
- **Everyone.** One report stood out as asserting that *sometimes everyone is responsible*.

### Guidance on How to Address Issues and Take Action

Common across dialogues was advocacy of multi-stakeholder inclusivity and promoting equity. Acting with transparency was also often cited. Other guidance included focusing on resilience, building trust, complementing the work of others (e.g. working collaboratively) and recognizing complexity. Additionally, the feedback form asks explicitly about commitment to the Summit Principles of Engagement and all dialogues affirmed that commitment.

There was also reference to resources needed to support engagement processes. Often discussed was need for some kind of platform for knowledge sharing or promoting alliances or partnerships. Need for facilitating multi-stakeholder collaboration emerged as a theme.

### MAJOR FOCUS AREAS

Each feedback form summarized the primary topic of the Independent Dialogue through a section entitled “Major Focus.” The most prevalent overarching theme was transforming food systems in general. Within this theme we identified two key sub-themes: the relationship between the environment and health, and a focus on diet and nutrition. Other notable and often overlapping themes included equity, the need for partnerships, finance, and specific food related topics (i.e. food waste, food security, and livestock).

Transforming food systems, including their fragility, was discussed broadly in terms of production, transformation, and distribution systems, to specific focus on regional food systems (i.e. Ethiopia) and the need for food finance interventions in both the public and private sector. Addressing nutrition patterns, tackling food loss and waste, and supporting sustainable livelihoods through adaptive approaches rounded out the food system emphasis. Other thematic areas addressed included agricultural practices and supporting nature-positive production. Engaging with various aspects of finance was often mentioned, from providing market incentives to farmers to advancing sustainable agriculture to financing measures that shift capital at the scale and speed necessary.

Finally, dialogues emphasized the need for innovation, technology, monitoring and evaluation (M&E), grassroots and community level involvement, supporting policies and partnerships, and scaling up successful innovations and interventions as necessary for encouraging a sustainable, resilient, and equitable food system.



“  
The success of the Summit hinges on the actions of people all over the world... We need all of your stories, ideas and solutions to transform food systems for the better and to feed the world without starving the planet.

UN Special Envoy Dr. Agnes Kalibata



# Part 1

## AGENDA-SETTING THEMES

This part of the report provides the supporting quotes that illuminate and elaborate the ten agenda-setting themes identified in the executive overview and summary. As noted, the Independent Dialogues typically lasted 1 ½ hours. In that format, what tends to emerge are issues and concerns that participants believe the Summit should address. Specific solutions and concrete proposals are not clearly identified in most feedback reports, rather, the dialogues more often yield system insights and priority concerns that participants hope the Summit will address leading to solutions. Thus, we present these as *agenda-setting themes*.

### TEN AGENDA-SETTING THEMES

1. Food Systems and Climate Change are Interconnected
2. Equity
3. Education about food and food systems
4. Economic and finance issues
5. Engagement with science and scientists
6. Partnerships, synergies, and alliances
7. Platforms and networks
8. Policy and regulatory reform
9. Technology
10. Managing trade-offs

In what follows are the major cross-cutting and overarching themes that emerged from the analysis with direct quotations from the feedback forms, linked to citations that locate the quotes in the submitted reports which can be found in Annex A of this report.

#### 1. Food systems and climate change are interconnected

Dialogue discussions link sustainable food systems, sustainable agriculture, environmental sustainability, global climate

change, and the need for nutritional, accessible, and environmentally friendly diets. Numerous dialogues discussed the need to address the environment and global climate change at different levels, with and through different actors in the system, and with various kinds of investments.

- *Climate change and crisis's ahead, will influence agriculture capabilities that must be taken into account in our strategy to assure food and nutrition security for all. (5)*
- *Transform food systems to address climate and biodiversity crises. Conservation measures including pollinators and nutrient management. Incentivize farmers. Who: Businesses, government agencies, and schools. (2)*
- *Investors and donors should prioritize climate-smart investments across food systems and value chains. Green bond issues, carbon credits, and sequestration should create income for farmers to cover the cost of transition to more sustainable agriculture. (2)*
- *Challenges to securing adequate nutrition for all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating climate change, stand to become even more daunting. (12)*
- *Challenge: Pricing carbon. (11)*
- *Food systems in their current form contribute considerably to green-house gas emissions, environmental degradation and biodiversity loss. Today, food production accounts for about a quarter of global greenhouse*

gas emissions. Half of the world's habitable land is used for agriculture and about a quarter of the world's productive lands are degraded. (12)

- Address the adverse impacts of agricultural production on critical ecosystems including tropical forests, peatlands, savannas, and grasslands. (11)
- To stop agriculture from impacting critical ecosystems we should no longer convert lands, use water resources unsustainably or modify the natural ecosystem to produce food. (10)

## 2. Equity

Dialogues discussed the importance of engaging with and supporting equity and/or equality, whether that be for farmers with regards to fair pay, or women, youth, and other minorities who need strategies to address their unique needs (e.g., childcare, equal pay) so they can fully participate in any part of a sustainable food system. The dialogues also discussed equity with regards to accessing affordable, nutritional food.

- Equality and dignity should be integral part of the nutrition security policies. (5)
- Additionally, there must be special attention paid to gender equality in food systems, including the need to provide more opportunities for women in agricultural value chains, such as access to land, markets and decisions. (12)
- Ensure that high nutrient foods are accessible and affordable to underserved communities. (11)

## 3. Education about food and food systems

Education was discussed as critical at all levels of food systems, from schools to consumers, including farmers, distributors, and producers, and engaging the very young to the not so young. Myriad educational topics were identified from planting, harvesting, and cooking, to pre-production, processing, and marketing with a focus on nutrition, health, and other critical information. Education included formal and informal approaches using various kinds of

traditional or innovative communication, teaching, and capacity building activities.

- Empowering consumers to make informed, healthy, safe and sustainable food choices can start with product branding, to create healthy food, especially sustainable local production, it is necessary to educate producers who are adapted to the local socio-culture about the importance of transparency and low emission food production. (13)
- In order for all levels of society to be involved for a diet that takes into account health and is environmentally friendly, education is needed starting from the pre-production, processing, to marketing stages. Education is carried out to producers, distributors, and consumers. (13)
- It is important to provide education and information to consumers regarding local food products, the health benefits, the processing methods and food safety of local food products, through an attractive and easy-to-understand physical and digital display. (13)

## 4. Economic and finance issues

Economic and finance concerns were wide-ranging, from issues of inclusion and job creation to a focus on strengthening rural economies. Discussions identified strategies that deserve attention and deeper analysis including financial incentives for food systems transformations, and reviewing the effects of subsidies, and accelerating, de-risking, and promoting public and private finance and investment. Economic and finance discussions also touched on the need for collaboration, alliances, partnerships and innovation.

- Encourage digital payment options such as mobile banking to reduce information asymmetry and link warehouse receipts to financial system to support farmers' access to credit. (2)
- Blending of public and private finance can lead to new financial instruments that increase the size and tenor of loans for transformational (as opposed

*to incremental or otherwise insufficiently large) investments. (2)*

- *Government needs to play the role of catalyst and specifically focus on risk reduction. Banks typically operate with a financial regulatory framework, but this framework prevents them from engaging in business activities that may have significant early-stage risk as is the case in agriculture. To overcome regulatory hurdles to supporting early-stage companies and start-ups banks sometimes participate in higher risk financings by forming arms-length investment arms or by attracting other financial institutions to provide financing. Creating a financial structuring vehicle through partnerships which are geared at establishing a pool of individual loans can de-risk them and will attract investment. (2)*

## 5. Engage with science and scientists

Understanding food systems and the implications of change requires active engagement with science and scientists, especially making scientific knowledge accessible to farmers and producers. Ideas ranged from ensuring that scientists' work is translated into lay terms, to ensuring that science is used to inform policy and farming decisions. The need for partnerships with scientists was often stressed.

- *Hereby, science should take the role of translating and bringing science-based solutions to farmers through technical assistance. (10)*
- *The most important factor brought up multiple times is the strong need for alliances between science, the private and public sectors. (10)*
- *Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (2)*

## 6. Partnerships, synergies, and alliances

Dialogues often included discussion of the need for partnerships, synergies, and alliances to change food systems collaboratively and strategically. Such collaborative engagements need to be

transparent, action-oriented, and attentive to building trust among all the participating actors. At times the suggested engagement involved two actors at one level in the system, and at other times multiple levels and various system actors. Innovation, financial strategies, and system change initiatives were connected to partnerships as constituting a key component of implementation legitimacy and success.

- *Strong partnerships require transparency and interdisciplinary communication. (10)*
- *Additionally, especially the link and partnership between science, the public- and the private sector should be prioritized, as well as the link between producers and consumers. (10)*
- *Governments, financial institutions, research centers and investors as a whole need to partner to accelerate growth in the nutritious food production sector by facilitating access to funding. (2)*

## 7. Platforms and networks

Closely related to partnerships, synergies, and alliances was discussion of platforms and networks as implementation strategies that should be used to generate solutions, share ideas, build alliances, educate members, and strengthen partnerships. Platforms and networks tended to be viewed as both a communication strategy and infrastructure for building and strengthening alliances.

- *Creating platforms for the exchanges of methodologies and experiences between different sectors and countries can contribute to the alignment of these programs and to the strengthening of the alliances. Sharing experiences will help in bringing actions and innovations to scale and generate economic incentives through innovation systems. (10)*
- *A platform targeting agri-SME users with information about the universe of potential investors in their markets, their product and services offering, their bankability requirements, and their*

*potential suitability to each company's growth stage. (14)*

- *Providers of facilities / platforms are needed to enable local communities to access healthy and sustainable food items, such as bulk stores, recycling stores, and ugly food. Also important to provide facilities for communities to purchase as well as self-educate about environmentally friendly products. (13)*

## 8. Policy and regulation reform

Policies and regulations are identified in dialogues as needed to influence and support changes needed to support a sustainable, equitable, and environmentally friendly food system. It is not only governments that need to make these policy changes, but multiple actors are needed to bring about these needed changes.

- *Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (2)*
- *The right to food should be engrained in all policies. All governments (department of agriculture, trade, health, urban development, rural affairs, etc.) should ensure policy coherence, synergy and compatibility, and have common aims when it comes to food. (6)*
- *Promotion of agricultural law and legislative infrastructure, supporting farmers' needs for local production such as stable customs on import, affordable water prices, foreign workers, and R&D, including workforce saving technology. (5)*

## 9. Technology

The dialogue feedback report writers identified the need for better use of existing technologies and development of new technologies to support food systems transformations. Technology was often discussed as critical for various actors in the food system to improve adaptation and engage in mitigating the various problems identified such as greater access to food, addressing climate change, scaling education initiatives, achieving more equity,

reducing food waste, and supporting health and nutrition. Technology was also mentioned as key for supporting certain groups such as women, youth, rural farmers, and other marginalized people, and at the same time as key assets for supporting financing interventions and small-business owners. The need for innovation in adopting or adapting newer technologies was a common theme in dialogues.

- *Climate Smart Agriculture, incorporation of Geographic Information System and other technologies into the Food System etc have been said to be adaptive. (15)*
- *Rural and marginalised areas should have access to new technologies. (3)*
- *Technology is key to overcoming informational challenges leveraging also financial innovations and improved warehouse receipt systems, improved regulations and standards also help overcome information gaps. (2)*
- *There is a need to harness assets and technologies that were not available 5 or 10 years ago to develop out of the-ordinary solution thinking: use of satellites/drones to monitor progress across multiple small holding reserves; and cheap monitoring sensors that were not previously available to help with issues like fertilizer, water, soil carbon etc. (2)*

## 10. Managing trade-offs

Most reports mentioned some kind of trade-offs with regards to the complexities and negotiations involved in shaping, informing, or otherwise shifting food systems, and the need to be able to assess these trade-offs. An example is where conservation of natural resources could be in conflict with livelihoods. Some participants suggested that certain products that drive deforestation and greenhouse gas emissions could be banned. But there are trade-offs to doing this, such as potential loss of employment in certain sectors and resulting economic losses. Some further examples of areas of trade-offs included production for local consumption versus export, competing distribution practices, and access to affordable food for consumers versus increasing small farmers' income. The trade-

offs discussed in the reports often surfaced and reflected different values. Some reports emphasized the need for data and evidence to better assess trade-offs.

- *The trade-offs between production and export need to be re-examined, as Irish agriculture is focused on dairy and meat exports, very little land is used for crops (human consumption) and most grain (60%) is grown to feed animals. (6)*
- *Data and evidence, evaluating trade-offs. (11)*



## AGENDA-SETTING THEMES BY KEY GROUPS

**Four key groups consistently attracted attention in the dialogues: farmers, women, youth, and indigenous communities.**

### Farmers

Concern for farmers, particularly smallholder farmers, emerged in nearly all dialogues as they are a critical part of any sustainable food system (or any food system in general). Multiple kinds and levels of strategies for supporting farmers were identified. These included shifting farmers towards more sustainable agriculture practices and diversifying their income streams. Agriculture-focused strategies included providing access to technology and seeds to improve productivity. Attention was paid to financial practices including those that support sustainable agriculture (e.g., green bond issues), and policies and frameworks that are more supportive towards farmers' realities. Tailor-made solutions that are

context dependent, and specific strategies around technology (e.g. digital skills related to drones and satellite data), innovation (e.g. backyard vegetable farming and home irrigation farming), and organic and other nature positive farming practices were mentioned. Particular attention was placed on accessible finance, market incentives, innovative solutions and technology.

- *Stakeholders whose interests should be prioritized according to some participants, youth must be the first prioritized while others made cases for farmers as the first to be considered as without farmers, no food production. (1)*
- *Green bond issues, carbon credits, and sequestration should create income for farmers to cover the cost of transition to more sustainable agriculture. (2)*
- *Promotion of agricultural law and legislative infrastructure, supporting farmers' needs for local production such as stable customs on import, affordable water prices, foreign workers, and R&D, including workforce saving technology. (5)*
- *Provide equal access to capital, technology, and land tenure to smallholder farmers, women, and underserved groups. (11)*

### Women

The importance of supporting women as occupying central roles in food systems was a prominent theme in dialogues. Suggestions included supporting women to be more active in food system initiatives and working to ensure they benefit from both new initiatives and more from existing structures. Concerns were sometimes broad such as prioritizing equality or equity, or ensuring access to and control of resources. More specific foci included financial inclusion, support for farming, accessing technological solutions, capacity building in multiple domains, and efforts to reduce women's time constraints. The need to change policies, such as those around child brides and restrictions on land ownership, were also identified.

- *Review existing relevant policies and ensure that youth and women roles/challenges in food systems are mainstreamed, which should the strengthening of youth and women groups and the deliberate provision of income earning opportunities for them. (12)*
- *Need for changes to policy, legislation and planning in order to: - protect girl children from teen marriages and pregnancies – safeguard and increase women’s access to, and control over, incomes and other resources – enhancing women’s and youth and women’s participation in microfinance facilities – explore creative approaches to reduce women’s time constraints e.g. provision of improved water supply – increase women’s involvement in decision making at all levels. (8)*
- *Additionally, there must be special attention paid to gender equality in food systems, including the need to provide more opportunities for women in agricultural value chains, such as access to land, markets and decisions. (12)*

## Youth

Concern about the future consistently targeted the importance of addressing youth. Though many dialogues targeted youth and women together as under-represented and deserving priority attention, some discussions specifically tasked youth with taking action (e.g. develop solutions) to bring about needed changes, particularly in addressing climate change. Engaging youth through formal schooling and social media platforms, educating youth in farming, business and technology, nutrition and health, and teaching them about the complexities in the food system, were all raised.

- *Youth inclusion and intervention in the food systems will bring about a change*

*in the trajectory because of their creativity. Collections and implementation of individual solutions from the youths will help meet our food sufficiency and sustainability needs. Youths were implored to connect and engage with Agriculture Movements to explore the possibilities of adaptive Food Systems in Nigeria. (15)*

- *Actions to engage young people in science-based social movements include raising awareness by visualizing the potential future of food systems through education and exposure on social media platforms. (10)*
- *Engage youth climate action leaders to incorporate food security, health, access, and systems innovation. (11)*

## Indigenous Groups

This theme also includes “traditional” approaches and food. Strategies recognize that indigenous peoples have distinct livelihood strategies that need to be valued and recognized, and limitations due to their physical location (such as no access to shops). The value of indigenous and traditional approaches to growing and consuming traditional and/or indigenous food to address both global climate change and nutrition, as well as indigenous knowledge, should be made more mainstream. While “indigenous” was often ticked as a group addressed, there was little identified that spoke specifically to, about or for indigenous groups.

- *We have to preserve local traditional foods and drinks and encourage sustainable consumption of such foods. They are healthier, local, and more environmental friendly, have low carbon foot prints, and provide livelihood for producers and distributors. (13)*

# Part 2

## IDENTIFYING AND ADDRESSING KEY ISSUES

**Part 2 of this synthesis report is organized and presented as a narrative in three sections: issues that need to be addressed, who should address those issues (key actors), and guidance on engagement processes to address issues.** This way of presenting themes offers a story framework by answering three questions that we found running through the dialogues: What issues need to be addressed at the Summit? Who needs to act on the issues identified? How should they engage (guidance for engagement)?

Answers to these questions are found in different parts of various dialogue feedback forms. We have taken reported results from Major Focus and Main Findings sections of the Feedback Forms and organized these as a narrative. In essence, in synthesizing the report themes we have pulled together the diverse answers found in different parts of reports into what we hope is a coherent way of understanding and engaging with the issues and concerns identified.

### WHAT ISSUES NEED TO BE ADDRESSED AT THE SUMMIT?

#### Financial and Market Risk

Various kinds of financial and market risk were raised as concerns, at various levels.

- *Market level challenges affecting the capacity of nutritious foods that are not fully “up to standards” in terms of size or appearance to reach the markets where consumers who need these foods are located, with resulting losses in terms of nutrition but also of incomes for farmers/aggregators/transporters etc. (4)*
- *Slow access to financing and technological innovation (7)*
- *Vulnerability of the export market. In response to a question by the audience regarding the vulnerability of export-based food systems—an element exposed during the pandemic. (12)*
- *Economics - more than half of the grain imports to Israel are for the livestock industry. Animal based diets in Israel set dependence on imports at times of global hazards. Israel is small and populated with high consumption of meats that are not aligned with health and sustainable recommendations. (5)*
- *The supply, demand and distribution of local food”, the lack of adequate spaces in quantity and characteristics to sell local agricultural products was identified as the main problem, this is because globalization benefits large global supply chains and it excludes local food systems, also because there is little political will, in addition to unequal quota charges to sell and a few knowledge about food systems; therefore, the main effects of this problem are two, producers waste their local products, lack of spaces that make local production visible, which ending up in of a food dependency. (7)*
- *Finally lack of innovation adapted to the specific local needs of the towns and regions of Mexico, which translate into the absence of nutritious and quality local food and the increase in the consumption of ultra-processed products from global markets*
- *Little political will to support markets for local products and their consumption, low prices for local products. (7)*
- *A culture of production for profit in food processing that leaves out other segments of the most vulnerable population. (7)*
- *Lack of innovation adapted to the specific local needs of the towns and regions of Mexico, increasing the consumption of ultra-processed products from global markets, problems of malnutrition (malnutrition, overweight*

*and obesity) and food desert and outskirts populations. (7)*

## Research

The lack of research, the ownership of data, and how data is used, are identified as concerns in various areas of the food sector.

- *Access to data and data ownership (we need a global framework, maybe the FSS can provide guidance): how can we boost data collection and ensure data design with smallholders' interest at heart? (4)*
- *There are many different types of metrics -- metrics for donor-driven nutrition measurement -- anthropometry, mortality outcomes, height for age, development outcomes • There is a lag in terms of metrics that have evidence-based that have been invested in and where programs and projects have been defined to test those metrics • There is no silver bullet to incentivize or a single indicator to measure • We need enough data to make linkages between dietary quality and health outcomes - it then becomes easier to identify indicators for success • Healthy, unhealthy - green, yellow, red measurement systems are not effective because who defines this? (4)*
- *Lack of data: How many nutrition insecure people as a permanent screening process, what kind of food baskets do they get, etc. There is lack of crucial data on how many NGOs supply food for the insecure population. What is the total budget of the all the NGOs together? What is the percentage of the food which is donated by the food industry? And how much of it complies with the ministry of health foods recommendation to be included and how much of it complies with the list of foods to be excluded from such food baskets to the nutrition insecure. (5)*
- *The challenges: the government does not take responsibility on the issue: there is no permanent budget or legislation to frame solution, there is no inclusive body that integrates the multidimension of the problem, data solutions, thru the different government ministries. (5)*

## Quality

Quality of food production was an issue in some dialogues.

- *Lack of regulation in food production. (7)*

## Lack of Policy and Regulations

Different kinds of issues with policies, or lack therefore, are mentioned in the dialogue reports.

- *Lack of regulation in the production of food. (7)*
- *Lack of public policies on local agriculture or small producers, inappropriate policies to address local problems in food and nutrition and strengthening of local production, the broken, individualized and non-collective peasant social fabric and a generation gap and gender for access to land. (7)*
- *The main effects of this problem are inappropriate current public policies on local agriculture or poor small producers as well as generational and gender gap for access to land. (7)*

## Environment

Various kinds of environmental issues were mentioned, from climate change to pricing carbon, to general land deterioration.

- *Environmental deterioration. (7)*
- *Lack of knowledge about the comprehensive and multifactorial vision of food systems, the lack of accessibility to holistic knowledge, the disconnection of education about food, the decontextualization of health and nutrition, generate public health problems (overweight, obesity, hypertension, diabetes, among others), this overconsumption of unsustainable products also generates serious environmental damage. (7)*
- *These challenges to securing adequate nutrition to all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating climate change stand to become even more daunting. (12)*
- *Challenge: Pricing carbon. (11)*

- *At the same time, food systems in their current form contribute considerably to green-house gas emissions, environmental degradation and biodiversity loss. Today, food production accounts for about a quarter of global greenhouse gas emissions. Half of the world's habitable land is used for agriculture and about a quarter of the world's productive lands are degraded. (12)*
- *Addressing the adverse impacts of agricultural production on critical ecosystems including tropical forests, peatlands, savannas, and grasslands. (11)*
- *To stop agriculture from impacting critical ecosystems we should no longer convert lands, use water resources unsustainably or modify the natural ecosystem to produce food. (10)*

## COVID-19

The influences of COVID-19 were noted with regards to food, hunger, and shifting norms.

- *The immediate impact of the pandemic was felt through the weakening of national food demands and the closure of many businesses such as caterers and hotels, which led to excess of food production by local farmers. (12)*
- *There are nearly 690 million people in the world who are hungry, or 8.9 per cent of the world population – up 10 million people in one year and nearly 60 million in five years and the COVID-19 pandemic has only exacerbated the problem. (12)*
- *Business as usual is no longer sustainable, particularly in the light of the pressures of Covid-19. (10)*

## Change in Socio-Economic Context

Changes in food systems production and innovation were mentioned in relation to changes in socio-economic contexts.

- *The abandonment of farming practices or regional practices, caused mainly by the transformation of socioeconomic systems. (7)*
- *Innovation processes in food production. it was identified as the main problem that innovation in food*

*has an economic objective, so it is not proposed as an objective to meet the needs of the entire population. (7)*

## Lack of Education, Knowledge and/or Identifying the Problem

Somewhat linked to research, feedback reports identified a lack of knowledge.

- *Ignorance about the comprehensive and multifactorial vision of food systems was identified as a central problem. (7)*
- *The lack of accessibility to holistic knowledge. (7)*
- *Lack of knowledge about the comprehensive and multifactorial vision of food systems, the lack of accessibility to holistic knowledge, the disconnection of education about food, the decontextualization of health and nutrition, generate public health problems (overweight, obesity, hypertension, diabetes, among others), this overconsumption of unsustainable products also generates serious environmental damage. (7)*

## Poor Communication

Poor communication was connected to education and knowledge.

- *Furthermore, education and communication campaigns are emphasized as important pathways to raise awareness among youth. (1).*

## Nutrition and Food Security

Topics ranged from eradicating hunger to obesity.

- *These challenges to securing adequate nutrition to all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating climate change stand to become even more daunting. (12)*
- *Eradicating hunger and achieving food security remain major challenges to humanity and to sustainability. At the global level, hunger and food insecurity were on the rise in 2019. (12)*
- *Challenge: Shaping demand for healthier consumption. (11)*

- *Food security, including underserved communities having access to affordable and nutritious food. (11)*
- *Lack of innovation adapted to the specific local needs of the towns and regions of Mexico, increasing the consumption of ultra-processed products from global markets, problems of malnutrition (malnutrition, overweight and obesity) and food desert and outskirts populations. (7)*
- *Ongoing assessments to balance food security, public health, the environment and climate change, farmer livelihoods, and the needs of women, youth, and underserved groups. (11)*
- *To address malnutrition and obesity, a standard should be created to inform consumers about nutrition and establish social protection policies to secure nutrition levels. Besides, policies need to address food costs, as this is a huge barrier to nutritious food access for all members of society in Latin America. (10)*

## Infrastructure

While few details were provided, infrastructure was mentioned.

- *Lack of adequate spaces in quantity and characteristics to sell local agricultural products. (7)*
- *Lack of spaces that make local production visible. (7)*
- *Challenge: Scaling solutions. (11)*

## Equity

Various kinds of problems, with different actors, were identified as problems in the food system.

- *The first is the invisibility and devaluation of the role of peasants in the value, production and education chains. (7)*
- *These challenges to securing adequate nutrition to all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating climate change stand to become even more daunting. (11)*
- *Both food producers and consumers carry responsibility to create a more*

*equitable food system and further noted that food producers also suffer from poverty and hunger, arising from inequalities and injustices. (12)*

- *A culture of production for profit in the preparation of food that leaves out other segments of the most vulnerable population. (7)*
- *Challenges: Historic inequalities. (11)*
- *It remains unclear what is expected from the younger generation, what is specifically meant by the younger generation (current or future) and what their potential jobs will include in the future. (10)*
- *Women having access to resources, including capital, technology, and land tenure. (11)*



## WHO NEEDS TO ACT ON THE ISSUES IDENTIFIED?

### Government

Government was the actor most identified that needed to take action. Most often that action was around improving, changing, or otherwise shifting public policy to bring about intended changes, or creating incentives and/or providing subsidies. Key thematic areas for change where the government should lead mainly included environment, waste, health and nutrition, equity, finance, and engaging the private sector.

- **Environment and waste**
  - *Governments need to invest in developing tools and methods that create a level playing field globally and that can be used to valorize nature-based solutions. (7)*
  - *Municipalities are the main actor in changing post-harvest food waste: In retail chains, in restaurants,*

*institutional kitchens, and households. For example, waste tax, "pay as you throw," at all these levels. An interdisciplinary council that will include all parts of the local food system is needed. How: Identifying "hot spot" for wasting (for example, specific sectors, specific ethnicities) and targeted interventions, requiring the education system to teach children about food waste, media campaigns, Local Food Council (Food Security Administration), and solutions tailored to different populations and different sectors (emphasis on the essential part that municipalities have). (13)*

- Health and nutrition.

- *Public policies to promote healthier foods. Access to affordable, nutritious food. (2)*
- *Increasing consumer access to healthy and sustainable traditional foods. The state can promote healthy and sustainable traditional foods through policies, programs, promotion, building relevant infrastructure, and to reduce the distance traveled during the distribution of traditional foods to minimize carbon footprint In a micro approach. (5)*
- *The municipality should lead processes of assimilating a healthy and sustainable food system. Moreover, those who need to lead this issue are the high-rank officials committed to creating in-depth changes. It is mandatory to appoint a nutritional safety and security committee in each city and publish a municipal nutrition appendix. The idea of a nutrition appendix is to form the urban specification for all aspects of nutrition – from purchasing food for feeding programs for schools, the elderly and other centers to urban community's kitchens and cooperation between authorities. (13)*
- *Healthy and sustainable nutrition security: The challenges: the government does not take responsibility on the issue: there is no permanent budget or legislation to frame solution, there is no inclusive body that integrates the multidimension of the problem, data solutions, thru the different government ministries. Lack of data: How many nutrition insecure people as a permanent screening process, what kind of food baskets do they get, etc. (13)*

- *The state should be responsible for its food prices, which should be tailored to the poor rather than the wealthy consumer. (13)*

- Equity

- *Government should make deliberate efforts to incentivize women and youth to participate in the food system. This can be done in various way: - Legal frameworks should have a special focus on women and youth smallholder farmers for example in Malawi this can mean enforcement of the Cooperative Act to ensure the effective engagement of women and youth - Government should set up institutions to govern the marketing of agricultural products - Ensure the financial inclusion of women and youth - Promote the engagement of women and youth in seemingly simplistic innovations such as backyard vegetable farming and home Irrigation farming, which for the poorest members of society can be very empowering. (17)*

- Involve the private sector in solutions for finance, business roles, and environment.

- *Government can and needs to play the role of catalyst and specifically focused on risk reduction, not just investment risk but also government stability within and across regions as the agriculture sector is highly fragmented, with diverse and context specific production, financial and investment costs. Incentives are needed to encourage banks to provide faster and context special financing to SMEs. Government needs to play the role of catalyst and specifically focus on risk reduction. (7)*
- *The proposed "game-changing" actions that the Summit could help launch or amplify/scale were: 1. A clear recognition by governments of the key roles of agri-SMEs in delivering against various public goods related to food systems and commitment to reward the positive development externalities generated by agri-SMEs through their business models. (2)*
- *Governments have a key role to play to provide the right environment to promote new financing modalities as even successful start-ups and high-*

*growth opportunities must often be self-funded because the financial industry shows no interest until a threshold of EBITDA is attained. (2)*

- Environment, health, and nutrition
  - *Further explore food systems by drawing on data and evidence to guide: 1. Public policy—including subsidies, taxing, and food labelling—with regard to food security, public health, climate change and the environment, farmer livelihoods, and the needs of women, youth, and underserved groups. (2)*

### Academia/Scientists

The second actor identified who should take action, though to a much lesser extent than government, was that of academia/scientists. Here, the focus was on scientists ensuring that their work was practical and applicable to farmers, particularly with regards to innovation, technology, and seed or other agricultural-focused improvement.

- Technology.
  - *Hereby, science should take the role of translating and bringing science-based solutions to farmers through technical assistance. Farmers will be empowered by providing access to new simple technologies that include scientific and traditional information to ensure food and nutritional security while maintaining cultural diversity. (1)*

### Private Sector

The private sector was not often identified as taking action, though some mention was made with regards to developing youth-focused finance packages.

- Finance.
  - *Financial institutions to develop youth focused finance packages, such as those with lower interest rates, non-traditional collateral and re-payment terms that are contextualized to the type business that women and youth are engaged in the food system. (17)*

### Community Groups/NGOs

The role of the community groups or NGOs was only mentioned a few times. Their role mainly aimed to address education.

- Education.
  - *Local organisations (such as YES Malawi) need to work with community groups, traditional leaders and families to make information available and to create tools that families can tap into, tools should be relevant and in the vernacular to allow understanding. (17)*

### Youth

While often mentioned as recipients, a few actions were placed squarely on youth's shoulders. These were mostly focused on innovation and participating in the summit.

- Innovation.
  - *Young people should be encouraged to develop innovative approaches to shaping future food systems. Collaborative approaches such as social entrepreneurship initiatives have the potential to create a high level of engagement. (9)*
  - *Active participation of the youths was said will proffer solutions to the developing constraints in the food system and encourage innovation in the Food Systems. (9)*
- Engage in the summit.
  - *Young people need to understand the complexities and trade-offs involved in shaping food systems. By making the language more accessible to young people, they can be included in this dialogue. They should be actively involved in discussions and decisions around shaping future sustainable food systems. (9)*

### Multiple Actors through a Partnership Approach

At times reports identified multiple actors for action to transform food systems to address education, equity, environment, and employment. Most often that partnership or grouping was science/academia and government, though sometimes other actors (such as business or private sector) were identified as part of larger partnerships.

Health and nutrition was identified as an area for “everyone” to address.

- Education.
  - *Practitioners, government and private sector stakeholders should provide information to women and youth to build their knowledge and capacity to enable them to better engage in the food system. This should be with the aim of changing mindsets and equipping them with knowledge and skills to effectively participate in the food system. (17)*
- Equity.
  - *Gender gap in agriculture and food systems is closed; women have equal access to resources and opportunities. Actions: Provide women and people of color with equal access to capital, technology, and land tenure. Align policies with the needs of smallholder farmers, solutions to climate change, and entrepreneurial opportunities. Who: Government, businesses. (2)*
- Environment.
  - *Transform food systems to address climate and biodiversity crises. Conservation measures including pollinators and nutrient management. Incentivize farmers. Who: Businesses, government agencies, and schools (2)*
  - *Investors and donors should prioritize climate-smart investments across food systems and value chains. (2)*
- Health and nutrition.
  - *Deliver good quality of food in order to meet consumer and cultural aspirations. Action to be taken by Government and agencies in the food sector. (7)*
- Employment.
  - *Provide decently rewarded employment across the supply chain, with skills and training. Action to be taken by Business owners, and Government. (3)*

## Everyone

And as one report noted, sometimes everyone is responsible.

- Health and nutrition.
  - *Contribute to human health by preventing food-related diseases due to either malnutrition or overconsumption. Action to be taken by each and every one of us. No one is left out of this action point. (3)*

## GUIDANCE ON ENGAGEMENT PROCESSES TO ADDRESS ISSUES

Section 2 of the feedback form asks explicitly about commitment to the Summit Principles of Engagement and all dialogues affirmed that commitment. Within section 4 of the feedback form, Dialogue Outcomes and Focus, the writers included guidance on how to engage with the issues raised. In this section we identified several themes, some of which overlapped with the Summit Principles of Engagement. Common across dialogues was advocacy of multi-stakeholder inclusivity and promoting equity. Acting with transparency was also often cited. Other guidance included focusing on resilience, building trust, complementing the work of others (e.g. working collaboratively) and recognizing complexity.

There was reference to resources needed to support engagement processes. Often discussed was need for some kind of platform for knowledge sharing or promoting alliances or partnerships.

### Embrace Multi-Stakeholder Inclusivity

- *Government/private sector/ Academia and Research/ private entities (such as YES Malawi): Work collaboratively to develop, market and make available low cost technologies or the mechanization of agriculture and other processes within the food system. this will make engagement in food systems attractive for youth and less tedious for all including women (involved in the primary production stage). (17)*
- *The diverse perspectives of all involved need to be taken into*

consideration when approaching the complexity of sustainable food systems. A need for cross-departmental cooperation has also been identified as important in creating holistic and meaningful policies. (14)

- The most important factor brought up multiple times is the strong need for alliances between science, the private- and public sectors, farmers and other key actors to create a sustainable and resilient food system. (1)
- Additionally, especially the link and partnership between science, the public- and the private sector should be prioritized, as well as the link between producers and consumers. (1)
- The proposed "game-changing" actions that the Summit could help launch or amplify/scale were: 1. A clear recognition by governments of the key roles of agri-SMEs in delivering against various public goods related to food systems and commitment to reward the positive development externalities generated by agri-SMEs through their business models. 2. A multi-actor initiative to bring more transparency into the business development service market for agri-SMEs, including an evidence-based benchmarking of effective models against impact on access to finance, an effort to standardize BDS curricula on the basis of such benchmarking, and value-for-money metrics for funders of such services. (6)
- Local organisations (such as YES Malawi) need to work with community groups, traditional leaders and families to make information available and to create tools that families can tap into, tools should be relevant and in the vernacular to allow understanding. 5. Government/private sector/ Academia and Research/ private entities (such as YES Malawi): Work collaboratively to develop, market and make available low cost technologies or the mechanization of agriculture and other processes within the food system. this will make engagement in food systems attractive for youth and less tedious for all including women (involved in the primary production stage). (Also addresses

complementing the work of others). (17)

### Promote Equity

- To unlock sustainable finance, a distribution mechanism is needed to ensure equitable value distribution all the way down to the farmers. (1)
- Advance equitable livelihoods. Closing the gender gap in agriculture and food systems that make it difficult for women to have access to resources and opportunities, including capital, technology, and land tenure. (2)
- Ensure equitable livelihoods for farmers, including smallholder farmers, women, youth, and underserved groups. 7. Provide equal access to capital, technology, and land tenure to smallholder farmers, women, and underserved groups. (2)
- Advance equitable livelihoods. Outcome: Gender gap in agriculture and food systems is closed; women have equal access to resources and opportunities. Actions: Provide women and people of color with equal access to capital, technology, and land tenure. Align policies with the needs of smallholder farmers, solutions to climate change, and entrepreneurial opportunities. Who: Government, businesses. Measure: Access to resources. Challenges: Historic inequalities. (2)
- Equality and dignity should be integral part of the nutrition security policies. (4)

### Act with Transparency

- To improve trust and create strong partnerships, transparency is stressed as essential. (13)
- Alliances should be promoted along the whole food chain supported by transparency, interdisciplinary communication and promoting the use of scientific information in regulation. (1)
- Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-

harvest advances when the need for advance is at its peak. Creating more traceability/transparency throughout the value chain. (12)

- To devise efficient interventions to reduce food waste at critical points in the cycle (which admittedly significantly differ between Global North & South), a data driven approach should be taken. (15)

### Commit to the Summit

- The diverse region should [have a] unified voice by doing these kinds of dialogues. The Food Systems Summit is a key opportunity to articulate the regional vision, innovations, actions and partnerships on the global stage. (1)
- With regard to the upcoming Food Systems Summit, the stakeholders look forward to working together to transform a wealth of ideas, evidences and recommendations into concrete and practical solutions to advance equitable livelihoods in the food system. (40)

### Build Resilience

- Build resilience to vulnerabilities. Outcome: 200 million farmers are empowered through the development of markets and implementation of climate-smart practices for resilience and profitability. Actions: Assist smallholder farmers—provide access to technology and seeds to improve productivity and diversify income streams. Address gender gap. Who: Farmers, government, businesses. Assess: Measure greenhouse gas emissions and diversity of farmers' revenues. Challenge: De-risking farmer livelihoods. (2)

### Build Trust

- Manufacturers also need to increase honesty and responsibility in the production, sales and promotion processes. It is also important to have Informative and interactive smart food packaging that is easy to understand, to provide information on nutritional value, product processing ow, and the

quality of food ingredients contained in packages such as level of maturity, and product freshness. (5)

### Complement the Work of Others

- Multi-sectoral partnerships are needed for storage and food preservation, re-insurance, innovation, and technology transfer. (7)

### Recognize Complexity

- The complexity of the food systems must be acknowledged: by taking a stepwise, cross-sectoral approach, to: avoid resistance that a “big bang” approach could trigger; allow working in a complementary fashion. facilitate (re)building trust in the food systems; by aligning on a definition of sustainability, as: we must be clear on where we are heading, if we are to develop successful solutions; the existing divisions could lead to further confusion & loss of trust among food systems actors. Citizens are recognised as central to the success of food systems. (15)

### Platforms for Sharing Information

- Creating platforms for the exchanges of methodologies and experiences between different sectors and countries can contribute to the alignment of these programs and to the strengthening of the alliances. Sharing experiences will help in bringing actions and innovations to scale and generate economic incentives through innovation systems. (1)
- Alliances should be promoted along the whole food chain supported by transparency, interdisciplinary communication and promoting the use of scientific information in regulation. (1)

### Promote Alliances

- An international platform or programme to: a) support innovation in digital technology and in business models applying digital solutions to agri-SME finance, b) address barriers to scale for business models with scale potential, c) roll out digital solutions among a broad

- community of financial institutions serving agri-SMEs, focusing on solutions that reduce the costs of acquiring smaller clients, managing risk, and achieving positive environmental/climate impact. (6)*
- *After all, the interconnectivity, the access to know-how, the change of the perception of reality introduced by the digitalization era is showing that, while an acceleration in terms of classic scaling up is occurring, at the same time a tissue of new forms of interconnected local economies blending new traditions, social proximity, sustainability and affordability is growing fast. To have an inclusive conversation and truly embrace diversity, thus avoiding a Eurocentric (or romantic?) vision of the future, we must discuss and dive deeper into the topics of inequality, power concentration and accessibility. (8)*
  - *An interdisciplinary council that will include all parts of the local food system is needed. (6)*
  - *Learn from successful initiatives in food sourcing, processing and reformulation; Bring cities together to learn from each other's successes & failures, to improve capacity building & good practice sharing. Bring policymakers together to learn from each other. (8)*
  - *Citizens should be involved in the co-design of research and policy. (13)*
  - *Hold multi-stakeholder dialogues to facilitate the exchange between science, policy and "real-life", by: to carefully putting the science at the heart; to translating, but not banalizing,*

*scientific messages into policy and broader communication; to addressing systemic barriers to translation and implementation of science. (15)*

- *Foster dialogue and exchange, improve representation of the key food chain actors due to the complexity of the challenge, and to address the needs of different people and environments, we need to ensure all stakeholders are represented in defining solutions. (15)*
- *Government/private sector/ Academia and Research/ private entities (such as YES Malawi): Work collaboratively to develop, market and make available low cost technologies or the mechanization of agriculture and other processes within the food system. This will make engagement in food systems attractive for youth and less tedious for all including women (involved in the primary production stage). (15)*

#### **Involve or Otherwise Support the Private Sector**

- *An international platform or programme to: a) support innovation in digital technology and in business models applying digital solutions to agri-SME finance, b) address barriers to scale for business models with scale potential, c) roll out digital solutions among a broad community of financial institutions serving agri-SMEs, focusing on solutions that reduce the costs of acquiring smaller clients, managing risk, and achieving positive. (6)*
- *Creating networks to link SMEs to investors, including pathways for NGOs to support. (7)*

## Part 3

### MAJOR FOCUS AREAS AND AREAS OF DIVERGENCE

**In keeping with the generative and inclusive nature of this first interim report, this section provides another way of capturing and reporting themes.** What follows reiterates what has gone before but is systematically based on two sections of the dialogue feedback forms: *Major Focus* and *Areas of Divergence*. For reference, a copy of the dialogue feedback form is provided in Annex C.

#### MAJOR FOCUS AREAS

Each report summarises the primary topic of the Independent Dialogue through a section entitled “Major Focus.” These summaries suggest that the most prevalent themes in the Independent Dialogues are the food systems in general, the environment and health, and diet and nutrition. Other notable and often overlapping themes included equity, the need for partnerships, finance, and specific food related topics (i.e. food waste, food security, and health and nutrition).

##### Food systems

Food systems, including their fragility, were discussed broadly in terms of production, transformation, and distribution systems, to specific focus on regional food systems (i.e. African food systems, Ethiopia) and the need for food finance interventions in both the public and private sector. The dialogues explored consumption patterns that engaged in the inequities that surround access to nutritious and affordable food. The recognition for resource appropriate infrastructure to produce and transport food, and the requisite to support SMEs through finance and supporting policies, as well as addressing more sustainable and resilient food systems, were touched upon. Addressing healthy nutrition patterns, tackling food loss and waste, and supporting sustainable livelihoods through adaptive approaches rounded out the food system emphasis.

##### Environment

Environmental themes ranged from greenhouse gas emissions to addressing the adverse impacts of agriculture production on critical ecosystems, to recognizing that the world’s productive lands are being degraded. These environmental challenges are documented along with the recognition for the need to secure adequate nutrition, shift to sustainable eating patterns that explore indigenous approaches, and support sustainable agriculture and livelihoods. These dialogues further acknowledged climate change and the need for climate smart approaches and other adaptive technologies to be used in agriculture and the food system as a whole.

##### Health, Diet, and Nutrition

Nutritious food, beneficial nutrition patterns, and adequate nutrition for everyone are identified as aspiring goals. Achieving these goals are considered within the construct of reducing inequities to access to food, addressing wasteful patterns of food consumption, obesity, malnutrition, the need for sustainable consumption patterns, and the recognition of reducing greenhouse gas emissions (e.g. environmentally friendly approaches).

Other thematic areas addressed included agricultural practices and supporting nature positive production. Engaging with various aspects of finance was often mentioned, from providing market incentives to farmers to advancing sustainable agriculture to financing measures that shift capital at the scale and speed necessary. Specific topics

for financial discussions also included looking at public and private capital, and focusing on finance that addresses acceleration, de-risking, inclusion, value chain finance and that is nature positive.

Finally, dialogues emphasized the need for innovation, technology, M&E, grassroots and community level involvement, supporting policies and partnerships, and scaling up successful innovations and interventions as necessary for encouraging a sustainable, resilient, and equitable food system.

**The supporting quotes from the Major Focus part of dialogue reports are provided below. These themes are listed alphabetically by coding category.**

### Access to affordable food

- *Access to affordable, nutritious food. (11)*

### Action track

- *Our dialogue is for Action Track 2. (13)*

### Agriculture

- *The focus of the dialogue was food Security, Nutrition Security, Agriculture, and Climate Crisis. (5)*
- *Agriculture should be visualized as an opportunity for young people to create their own pathway. (10)*
- *Market incentives for farmers to advance sustainable agriculture (11)*
- *Boost nature-positive production • Addressing the adverse impacts of agricultural production on critical ecosystems including tropical forests, peatlands, savannas, and grasslands. (11)*

### Communication

- *Furthermore, education and communication campaigns are emphasized as important pathways to raise awareness among youth. (10)*

### Economics and finance

- *Environmental and economic shocks on African Food Systems caused by global pandemic. (1)*
- *Market incentives for farmers to advance sustainable agriculture (11)*
- *Top challenges in agri-SME finance that should be addressed in order to transform food systems in line with the FSS Action Tracks, and the top "game-changing actions" that could be launched around the Summit to address these challenges at scale. (14)*

### Education

- *Furthermore, education and communication campaigns are emphasized as important pathways to raise awareness among youth. (10)*
- *Empowering consumers to make informed, healthy, safe and sustainable food choices (13).*

### Environment

- *Environmental and economic shocks on African Food Systems caused by global pandemic. (1)*
- *Ensure access to safe and nutritious food for all. Addressing food loss and waste in supply chains, food security, and greenhouse gas emissions. Multi-stakeholder research and development. (11)*
- *Shift to sustainable consumption patterns. Transforming diets to address pressing issues of malnutrition and obesity, while also reducing greenhouse gas emissions. (11)*
- *Systems in their current form contribute considerably to green-house gas emissions, environmental degradation and biodiversity loss. Today, food production accounts for quarter of global greenhouse gas emissions. Half of the world's habitable land is used for agriculture and about a quarter of the world's productive lands are degraded. (12)*
- *These challenges to securing adequate nutrition to all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating*

*climate change stand to become even more daunting. (12)*

- *Eating patterns that pay attention to health and are also environmentally friendly (13).*
- *Identifying this will help promote plant-based meals which are lower in carbon emission compared to animal-based meals (13).*
- *Climate Smart Agriculture, incorporation of Geographic Information System and other technologies into the Food System etc have been said to be adaptive. (15)*
- *The focus of the dialogue was food Security, Nutrition Security, Agriculture, and Climate Crisis. (5)*
- *Food production activities / practices in dialogue participants' areas (urban or rural), both traditional and modern traditional practices, wisdoms are sometimes more environmental friendly compared to modern practices.*

## Equality/Equity

- *Reducing inequality between men and women is of major importance which can be achieved by ensuring equal payment. (10)*
- *Advance equitable livelihoods. Closing the gender gap in agriculture and food systems that make it difficult for women to have access to resources and opportunities, including capital, technology, and land tenure. (11)*
- *These challenges to securing adequate nutrition to all of the world's people, generating equitable livelihoods and adapting to, as well as mitigating climate change stand to become even more daunting. (12)*

## Finance

- *Food finance interventions in both the public and private sector do not yet add up to a coherent and commensurate response that will lead to a thriving, sustainable global food system. We need to tackle inefficiencies in the way food systems are financed, rapidly shift capital out of the old economy and into more sustainable food assets. We need*

*to clarify additional capital requirements to transform food systems, disaggregated for different geographies and Action Tracks. While many measures are individually constructive, they are not shifting capital at the scale and speed that is necessary and we need targeted interventions to unlock/redirect public and private capital. This dialogue has allowed for guests to exchange on the below five topics. Acceleration. De-risking. Inclusion. Nature positive. Value chain finance. (2)*

## Food chains

- *Additionally, local value chains should be strengthened together with relations between producers and consumers to enhance healthy and nutritious diets. (10)*
- *Food Systems was defined to be a complex web of different food section components and not same as Food Supply Chain. (15)*

## Food security

- *The focus of the dialogue was food Security, Nutrition Security, Agriculture, and Climate Crisis. (5)*
- *Ensure access to safe and nutritious food for all. Addressing food loss and waste in supply chains, food security, and greenhouse gas emissions. Multi-stakeholder research and development. (11)*
- *Eradicating hunger and achieving food security remain major challenges to humanity and to sustainability. (12)*
- *The major focus of the dialogue was to deliberate on the measures that are needed to be implemented to make Nigeria a food sufficient country. (15)*
- *The rationale for a food security was stressed given the implication on citizens and the socio-economic effects in the country. (15)*

## Food waste

- *The Independent Dialogue "Good Food for All" focused on Ireland's role in sustainable food systems. To do this*

*the dialogue session looked at how to increase the availability of nutritious food, making food more affordable and reducing inequities in access to food; how to eliminate wasteful patterns of food consumption; and how diets can transition towards more nutritious foods that require fewer resources to produce and transport. Action Track 1 and Action Track 2 were the basis of this Independent Dialogue. (6)*

- *This dialogue examined pathways to a more sustainable and resilient food system. The Discussion Topics were 1. Sustainable Consumption and Production 2. Food Waste 3. Sustainable Nutrition and Diets 4. Sustainable City and Community development 5. Sustaining Sustainable Livelihoods and resilient community development (9)*
- *Ensure access to safe and nutritious food for all. Addressing food loss and waste in supply chains, food security, and greenhouse gas emissions. Multi-stakeholder research and development. (11)*

## Food systems

- *Examining gaps and functionalities of African Food Systems. (1)*
- *The major focus of the Dialogue was to discuss the future of production, transformation and distribution systems keeping the evolution of consumption patterns as an entry point. (3)*
- *The Independent Dialogue “Good Food for All” focused on Ireland’s role in sustainable food systems. To do this the dialogue session looked at how to increase the availability of nutritious food, making food more affordable and reducing inequities in access to food; how to eliminate wasteful patterns of food consumption; and how diets can transition towards more nutritious foods that require fewer resources to produce and transport. Action Track 1 and Action Track 2 were the basis of this Independent Dialogue. (6)*
- *The event was organized as a multi-stakeholder dialogue focused on identifying barriers to entry for financiers and developing innovative solutions to address the needs of SMEs at all phases of development seeking to impact health and wellness by increasing access to healthy, affordable food will require engagement from different sectors and stakeholders. (4)*
- *This dialogue examined pathways to a more sustainable and resilient food system. The Discussion Topics were 1. Sustainable Consumption and Production 2. Food Waste 3. Sustainable Nutrition and Diets 4. Sustainable City and Community development 5. Sustaining Sustainable Livelihoods and resilient community development. (9)*
- *Building sustainable food systems and healthy nutrition patterns have been identified by the Global Sustainable Development Report 2019, as one of six entry points to achieve transformational change toward sustainable development in ways that capitalize on synergies while minimizing trade-offs. (12)*
- *The dialogue was aimed to focus on the factors affecting food systems, what adaptive approaches can be done to mitigate their effects and how. (15)*
- *Food Systems was defined to be a complex web of different food section components and not same as Food Supply Chain. (15)*
- *Fragility of non-functional Food System The fragility in the food system and the underlying factors were discussed. The resultant effects of the factors were practically analyzed with possible adaptive measures. Adaptive approaches and youth inclusion The factors affecting food sustainability are ever-available so, adaptive measures to respond to their incidence must be adopted. (15)*
- *Purposeful collaborations with the government on approaches advancement will help better the Food System. Active participation of the youths was said will proffer solutions to the developing constraints in the food system and encourage innovation in the Food Systems. (15)*
- *The major focus was on discussing current Food system in Ethiopia, challenges opportunities and game changing solutions for future actions. (16)*

## Health, diet, nutrition

- *The Independent Dialogue “Good Food for All” focused on Ireland’s role in sustainable food systems. To do this the dialogue session looked at how to increase the availability of nutritious food, making food more affordable and reducing inequities in access to food; how to eliminate wasteful patterns of food consumption; and how diets can transition towards more nutritious foods that require fewer resources to produce and transport. Action Track 1 and Action Track 2 were the basis of this Independent Dialogue. (6)*
- *Shift to sustainable consumption patterns. Transforming diets to address pressing issues of malnutrition and obesity, while also reducing greenhouse gas emissions. (11)*
- *These challenges to securing adequate nutrition to all of the world’s people, generating equitable livelihoods and adapting to, as well as mitigating climate change stand to become even more daunting. (12)*
- *Non-rice carbohydrates in participants area, as well as the types of dishes available, and the ingredients used. As in most Asian countries Indonesia is too dependent on rice, where in many cases people eat rice 3 times a day. Shortage of rice can create social unrest. Whereas there are a number of non-rice carbohydrates available in the country. (13)*
- *Eating patterns that pay attention to health and are also environmentally friendly. (13)*

## Innovation

- *Innovation is essential in order to stop converting natural lands, limit the use of water resources to produce food and minimize the loss of natural ecosystems. To accelerate sustainable innovation, investments are key to provide farmers access to new technologies and assistances, for which funding pathways should be established. (10)*
- *Innovating to advance the SDGs. (11)*

- *Purposeful collaborations with the government on approaches advancement will help better the Food System. Active participation of the youths was said will proffer solutions to the developing constraints in the food system and encourage innovation in the Food Systems. (15)*

## Livestock

Various dialogues discussed livestock, from how animals are treated (placing the animals well-being at the core) to how they are fed, medicated, and slaughtered (placing human consumption at the core). Various dialogues discussed issues with livestock production and the need to transform it.

- *The livestock industry must transform on the whole process how it is being grown, density, food, antibiotic and medication use etc., as major factor in assuring healthy and sustainable food system. (5)*
- *There is a need to include animals’ welfare in the general policy. (13)*
- *The hazards of livestock systems endanger public health on a high level, from different pathogens such as Salmonella and Campylobacter thru Zoonosis as Tuberculosis, Anti-microbial Resistance, and pandemics such as aviation flu, the Spanish flu, and the covid-19. (5)*

## Local/grassroots/community

- *We discussed problems and solutions specifically grassroots solutions and what support is needed for these solutions to scale up. (17)*

## M&E

- *Measuring progress is still hard and therefore indicators or monitoring and evaluation systems should be implemented or improved to measure progress and success. (10)*

## Partnerships

- *The most important factor brought up multiple times is the strong need for alliances between science, the private and public sectors, farmers and other key actors to create a sustainable and resilient food system. To improve trust and create strong partnerships, transparency is stressed as essential. With the use of these alliances, stakeholders can align their programs, initiatives and experiences. Creating platforms for the exchanges of methodologies and experiences between different sectors and countries can contribute to the alignment of these programs and to the strengthening of the alliances. Sharing experiences will help in bringing actions and innovations to scale and generate economic incentives through innovation systems. (10)*
- *Multi-stakeholder research and development. (11)*
- *Purposeful collaborations with the government on approaches advancement will help better the Food System. Active participation of the youths was said will proffer solutions to the developing constraints in the food system and encourage innovation in the Food Systems. (15)*

### Prepare for the Summit

- *On 11 January 2021, SAFIN partners held a "Food Systems Dialogue," as the first contribution of the network to the preparatory process for the UN Food Systems Summit (FSS) to be held in September. The objectives of the dialogue were to: Allow SAFIN partners to be well informed about the FSS, so they can reflect on what opportunities and expectations this brings for the network; Reach clarity about why and how agri-SME finance most fits into the FSS agenda, so that the network can focus its engagement and develop a compelling narrative around it; Identify 2-3 priority issues or challenges in agri-SME finance that are critical to address in order to achieve impact in the FSS Action Tracks; Brainstorm about 2-3 potential "game-changing" actions around these issues or challenges. (14)*

### Policy

- *Public policies to promote healthier foods. (11)*

### Research

- *Multi-stakeholder research and development. (11)*

### Resilience

- *Build resilience to vulnerabilities • Empowering 200 million farmers through the development of markets and implementation of climate-smart practices for resilience and profitability. (11)*

### Scaling up

- *We discussed problems and solutions specifically grassroots solutions and what support is needed for these solutions to scale up. (17)*

### Sustainability and resilience

- *This dialogue examined pathways to a more sustainable and resilient food system. The Discussion Topics were 1. Sustainable Consumption and Production 2. Food Waste 3. Sustainable Nutrition and Diets 4. Sustainable City and Community development 5. Sustaining Sustainable Livelihoods and resilient community development (9)*
- *The summit addressed the importance of a sustainable Food System, the implications from an erred system, the precautionary and correctional measures, and the roles of the youths to the development of sustainable Food System in Nigeria. (15)*
- *Sustainable Food Systems The discussants were able to make clear the need for a functional and quite sustainable food system in Nigeria. (15)*

## Systems

- *The major focus of the Dialogue was to discuss the future of production, transformation and distribution systems keeping the evolution of consumption patterns as an entry point. The discussion was focused around four main questions/discussion topics: a) How can we link the need to rethink our urbanized habitats to evolving production systems? Will be proximity and diversification of production a way to unite consumers and producers? b) Speaking about true costs, is food waste prevention and reduction a way to create awareness and commitment by both citizens and authorities? c) In the evolution towards sustainable urban life habits, how will key components of x like empowerment and rights based approaches be affected by traditions and innovations in the food chains? d) Will reduction of inequalities in terms of food consumption depend on a total reshuffle of the transformation and distribution chains (3).*
- *For this, our dialogue aims to discuss local food systems; What are the problems? What are the causes of these problems? And what effects do they have? In order to promote actions, mechanisms and public policies in Mexico that improve local food systems for the benefit of the most vulnerable population in our country (7)*

## Technology

- *Leveraging technology to coordinate food distribution. (11)*
- *Climate Smart Agriculture, incorporation of Geographic Information System and other technologies into the Food System etc have been said to be adaptive. (15)*

## Trade-offs

- *It was found that trade-offs are important and should be addressed more. (10)*

## Traditional

- *Food production activities / practices in dialogue participants' areas (urban or rural), both traditional and modern Traditional practices, wisdoms are sometimes more environmental friendly compared to modern practices. (13)*

## Waste

Dialogue participants discussed food waste as a major problem that undermines sustainability goals and perpetuates environmental degradation. The challenge of food waste throughout the whole food system (e.g. agriculture to household waste) was discussed. Some dialogues focused on the need to reduce plastic packaging at the community, local, national, and global levels though no concrete strategies for doing so came forth. Discussions identified research, technology and education as general ways to mitigate food waste.

- *Collecting data and researching food loss and food waste through the whole food system – from agriculture to households. (5)*
- *Proposal: use of technologies (special apps) to reduce food loss and food waste –including on retails, catering services, restaurants, and neighbourhoods. (5)*
- *Educate consumers about waste. (11)*

## Women and youth

- *Participants then engaged in discussing game changing solutions focus on a key question: How can the youth and women, in Malawi, be empowered today to ensure access to safe and nutritious food for all in the future? (8)*
- *The inclusion and empowerment of women and youth in Latin America food systems is key to address the generational change issue. (10)*

## AREAS OF DIVERGENCE

**At the end of the Independent Dialogue feedback reports, there is a section that**

asks the reporters to summarize divergences identified during the dialogue. The feedback report writers identified the following 21 divergences. Each divergence code is followed by substantiating quotes.

#### **Governance versus policies**

- *Many were of the view that the vulnerabilities in food systems is due to bad governance whereas others also stated otherwise it is due to non-existent policies of what actually a food systems is. (1)*

#### **Food versus broader systems**

- *More participants had the notion that Food Systems was all about food. With experts in the dialogue, they were able to grasp few understanding of the general scope of food systems. This means more explorations needs to be done to further educate and highlight the importance of a robust food systems to productivity and efficiency. (1)*

#### **Youth versus farmers priority**

- *Practices that are needed for food system sustainability. Some of the submitted different answers were good governance, youth inclusion, realistic policies, technology and education. Stakeholders whose interests should be prioritized According to some participants, youth must be the first prioritized whiles others made cases for farmers as the first to be considered as without farmers, no food production. (1)*

#### **Small versus mid-size enterprise**

- *On the topic of de-risking, there was debate whether the fund would be better directed toward small enterprises, which clearly have need, but lack the resources and know-how to become an engine of transformative change. A strong case was made for investing in mid-sized firms that have the capacity and demonstrated staying power to lead transformative change now. These firms have the best chance of*

*driving and catalysing transformative change. (2)*

#### **Trade versus summit topics**

- *Trade was emphasized as highly important, but there is a sense that the Summit process is not paying adequate attention to this topic. (2)*

#### **Locality versus affordability**

- *The tension between locality/resiliency and affordability in order to scale virtuous food systems especially in light of population growth. (3)*

#### **Tech versus nature**

- *The tension between the efficiency of highly technological food systems vs. going back to nature and the multiple benefits in terms of health and environmental of diversification. (3)*

#### **Low cost imports versus local produce**

- *The trade-offs in terms of what are most important issues to tackle in terms of distribution practices: the competitiveness of low-cost imports versus local production versus the need to ensure efficient and nutritious food distribution. (3)*

#### **Consumer access versus producers' income**

- *The trade-offs between consumers' access (buying capability) and producers' income. (3)*

#### **Demand versus absorption**

- *Issues around the demand side are also important – progress requires also developing more absorptive demand for the capital that blending can mobilize among local Financial institutions and investors. It also requires more capacity to absorb finance among agri-SMEs – who very often need a lot of TA investment not only to be bankable but also to deliver fully the positive food system impact they can potentially deliver- and more demand for nutritious foods. (4)*

### **Nutrition versus finance solutions**

- *Decisions about nutrition happen in complex environments at the household and individual level; we should not assume that finance is going to solve that. (4)*

### **Technology versus competence**

- *Technology is critical to reducing costs, but adoption by businesses and by consumer base is challenging need to create proof points around adoption/test hybrid solutions that respond to all levels of technological competency. (4)*

### **Meat versus alternatives**

- *Divergence related to meat consumption reduction, focused on respectfully manage the topic. There was an opinion that today there is a tendency to "shaming" of meat consumption. Representatives of the meat alternative industry expressed this opinion. On the other hand, the necessity to reduce meat consumption, especially in Israel, one of the world leaders in meat consumption per person, was expressed as an urgent and robust solution that must be adapted for the population's health and the globe. This solution was based on the epidemiological, public health, and environmental sciences. (5)*

### **Agriculture versus natural land**

- *Another divergence reflected the tension between the agricultural and environmental issues. Israel is a small and very populated country with scarce natural resources, especially land. The struggle to grow the major healthy and sustainable food basket and at the same time to reserve natural land creates conflict of interest that must be addressed. (5)*

### **Simplicity versus complexity**

- *The need for simplifying the language around food systems has been highlighted. However, at the*

*same time it has been emphasized that there is a danger in not recognizing the complexity of the issue. The challenge remains in simplifying the language without simplifying the issue. (6)*

### **Cost of food versus affordability**

- *The true cost of food has to be recognized and rewarded, while making food available and affordable to all. (6)*

### **Specific versus system**

- *How to address problems specifically or view the problem in a systemic way. (7)*

### **Inclusion versus policies**

- *How the heterogeneity of the territory and the conditions of the peasants complicate the design of actions and policies for their attention. (7)*

### **Inclusion versus standards**

- *Track 1, Nutrition. One solution provided for youth and women to better engage in the food system was the lowering of standards or the contextualization of standards for food products / agricultural produce. Some felt this would limit the ability of agribusinesses from the country to effectively engage in regional and global food systems that have set standards that all must adhere to in order to have their goods enter those markets. (8)*

### **Quotas versus local content**

- *The need for Quotas and Local Content regulations. (9)*

### **Regions versus processes**

- *Indonesia is such a large country, there are so many options to choose from in terms of processes and products, and potential resources to support the Summit's Objectives. Different regions prefer different processes to be pursued. (13)*

# Part 4

## EMERGENT THEMES

**This section reports emergent categories and concerns that emerged inductively from the coding across dialogue feedback report categories.** These are included here to be generative and inclusive. Furthermore, some of these additional quotes are provided to elaborate and further illuminate themes discussed earlier in this report where only a few supporting quotes were provided. In essence, what follows is meant to provide a comprehensive cataloguing and reporting of the diverse substantive issues discussed in the independent dialogues.

### Agroecology/farming/agriculture

- *Intentional promotion of framework around agro-ecology as the help to preserve the soil. (15)*
- *For Food System Sustainability: Pests and Diseases effects should be adequately controlled. (15)*
- *Starting from raw materials with low emissions, the production process from upstream to downstream also needs attention to implement an environmentally friendly process. Transparent production processes are used as one approach towards consumers so that consumers can choose healthy, safe, halal, and sustainable food (13)*
- *In addition, it is necessary to carry out pophohan plant conservation activities so that the utilization can be maintained in a sustainable manner. (13)*
- *Support organic farming without the use of fertilizers and pesticides (5)*
- *Furthermore, panellists highlighted how the three components of the “livelihood-nutrition-environment triangle” are key to eradicating both hunger and poverty and said that moving agricultural production from input-intensive to knowledge-intensive systems and expanding employment efficiency and diversity into value chains are the two priority actions to ensure a positive and harmonious triangle. (12)*
- *Conserve natural ecosystems. (11)*
- *Improve soil management and crop protection. (11)*
- *Furthermore, critical ecosystems should be maintained, restored and further*

*protected from the possible impacts of agriculture. (10)*

- *To stop agriculture from impacting critical ecosystems we should no longer convert lands, use water resources unsustainably or modify the natural ecosystem to produce food. Hereby, science should take the role of translating and bringing science-based solutions to farmers through technical assistance. Farmers will be empowered by providing access to new simple technologies that include scientific and traditional information to ensure food and nutritional security while maintaining cultural diversity. (10)*

### Capacity building and training

- *Educate consumers about waste. (11)*
- *Education for adults as well and not just for young people - move from mostly discussing quantity and price to a holistic vision that also includes quality. Education from an early age to consume healthy foods, especially fruits and vegetables. (5)*
- *Engagement in education on all levels has been identified as one of the main findings of the Dialogue. Education on food systems needs to be introduced much earlier in school curricula and it needs to continue far into adulthood, with a greater understanding of the true cost of food. Education about food systems needs to go beyond formal education and should reach into implementation. (6)*

- *Education programs for consuming healthy food, saving food, and reducing consumption of unplanned food. (5)*
- *Simultaneously, it is important to regulate unhealthy and processed food advertisements and educate for better consumption patterns. (5)*
- *Education – to include again, healthy and sustainable nutrition education as core subject at the education system: from the early age thru graduations as it is crucial to their development and health thru their lives. As well education for the nutrition insecure adults as part of any program for nutrition security. (5)*
- *There is a need for professional guidance to the farmers. (5)*
- *It is important to provide education and information to consumers regarding local food products, the health benefits, the processing methods and food safety of local food products, through an attractive and easy-to-understand physical and digital display (social media). Food gardens should be encouraged in communities, government, schools and university campuses along with education about local food through planting, harvesting, and cooking together. (13)*
- *In addition, education is also needed for food producers to maintain food hygiene and sanitation during food processing to ensure health. (13)*
- *In order for all levels of society to be involved for a diet that takes into account health and is environmentally friendly, education is needed starting from the pre-production, processing, to marketing stages. Education is carried out to producers, distributors, and consumers. (13)*
- *Education and trust should be the entry points to create new important supply opportunities and consequently a higher quality of life for all. (3)*
- *In order to achieve this transition, we need to give education and access to all communities, not just those with status, power, and wealth. (3)*
- *Sustainable nutrition should be part of the educational programs within the educational system from the early ages until graduation. (5)*
- *Education for all ages, promoting closer contacts between farmers and consumers, and changing nutritional habits that will increase local agriculture base in food security. These will be in congruence with the national dietary recommendation. (5)*
- *As for households – the solutions should focus on education and changing the culture around food storage. Urban community centers, changing agents like teachers, parents, health practitioners, and NGO's campaigns could be trained to educate for reducing consumption in all its forms. (5)*
- *Education program for a healthy and sustainable diet: returning nutrition classes to the education system. (5)*
- *There should be capacity building for Agricultural Extension services. (15)*
- *Empowering consumers to make informed, healthy, safe and sustainable food choices can start with product branding, to create healthy food, especially sustainable local production, it is necessary to educate producers who are adapted to the local socio-culture about the importance of transparency and low emission food production. (13)*

## Communication

- *Establish local information hubs that provide up to date and emerging information, in the relevant vernacular language for communities, practitioners, and traditional authorities on all various aspects of food systems and for various players (farmers, agri-SMEs, consumers, field practitioners). 3. Need for more tailored finance that is responsive to the unique needs of youth and women in developing context food systems. (8)*
- *Empowering consumers to make informed, healthy, safe and sustainable food choices can start with product branding, to create healthy food, especially sustainable local production, it is necessary to educate producers who are adapted to the local socio-culture about the importance of transparency and low emission food production. (13)*
- *Campaign to create awareness and encouraging consumption of healthy*

- food. This is likely to create demand and increase capacity utilization. (4)
- An international platform or programme to: a) support innovation in digital technology and in business models applying digital solutions to agri-SME finance, b) address barriers to scale for business models with scale potential, c) roll out digital solutions among a broad community of financial institutions serving agri-SMEs, focusing on solutions that reduce the costs of acquiring smaller clients, managing risk, and achieving positive environmental/climate impact. (14)
  - Creating platforms for the exchanges of methodologies and experiences between different sectors and countries can contribute to the alignment of these programs and to the strengthening of the alliances. Sharing experiences will help in bringing actions and innovations to scale and generate economic incentives through innovation systems. (10)
  - A platform targeting agri-SME users with information about the universe of potential investors in their markets, their product and services offering, their bankability requirements, and their potential suitability to each company's growth stage. (14)
  - Providers of facilities / platforms are needed to enable local communities to access healthy and sustainable food items, such as bulk stores, recycling stores, and ugly food. Also important to provide facilities for communities to purchase as well as self-educate about environmentally friendly products. (13)
  - They should be actively involved in discussions and decisions around shaping future sustainable food systems. More dialogues and forums for discussion are needed in general, with systems and processes put in place to ensure the voice of young people is heard at these. Consideration must also be taken of how young people tend to communicate, with a focus on digital communications. (6)
  - Manufacturers also need to increase honesty and responsibility in the production, sales and promotion processes. It is also important to have informative and interactive smart food packaging that is easy to understand, to

provide information on nutritional value, product processing (word removed), and the quality of food ingredients contained in packages such as level of maturity, and product freshness. (13)

## Community/local solutions

- Simultaneously, it is important to regulate unhealthy and processed food advertisements and educate for better consumption patterns. (5)
- Fresh food must continue to be produced locally. (5)
- Besides, promoting local markets can enhance greenhouse gas emission reductions. To achieve 50% reductions in food loss, improving and increasing technologies, logistics and innovation are found essential. (10)
- The need for community initiatives to be supported but not to be scaled up too much as they have to stay local and not be taken over. (17)
- Food needs to be linked more widely to health and wellness - Community gardens are a great solution to food insecurity and education around food. This gave the community a voice in what they wanted on their plates during the week and it gave them more choices for meals as they didn't have to pay for the food. - When food banks had to close due to underfunding the community ensured that the gardens stayed open. (17)
- To maintain food sustainability, it is necessary to pay attention to locality. We need to explore food ingredients that are widely developed in our area and diversify food sources. (13)
- Encouraging traditional home self-production, encouraging children to produce healthy nutrition in the household backyards and other lands. (5)
- Furthermore, these alternative sources of carbohydrates must be promoted and intensified strategically through several effective steps, from providing training and knowledge for local food producers to providing a special place for the sale of local processed food as a substitute for rice. (13)

- *As distribution and production will obviously produce a lot of carbon, what we can do is try to grow food in our areas. (13)*
- *In a micro approach, the community as an agent of information dissemination can disseminate the positive impact of healthy and sustainable traditional food. (13)*
- *We have to preserve local traditional foods and drinks and encourage sustainable consumption of such foods. They are healthier, local, and more environmental friendly, have low carbon foot prints, and provide livelihood for producers and distributors. (13)*

## Environment and global climate change

- *Climate action and change require us as individuals in Ireland to change our food choices and habits as it is developing countries who are feeling the worst impact. (6)*
- *The presence and importance of ecosystems services (carbon market) need to be clarified and emphasised more in food systems. Considering ecosystem services is crucial in Latin America due to its vast diversity of ecosystems. (10)*
- *We need to strengthen the connection between people and their environment and the ability of citizens to know the sources of the food they consume. (5)*
- *Promotion of a holistic view, focusing on local eco-friendly agriculture as a primary provider of food. (5)*
- *The food waste including the livestock industry which partly thrown in the nature feeds the wild animals with destructive effect on ecological systems. Climate change and crisis's ahead, will influence agriculture capabilities that must be taken into account in our strategy to assure food and nutrition security for all. (5)*
- *Educate consumers about waste. (11)*
- *Food loss and waste reduced by 50% in supply chains, thereby improving food security and reducing greenhouse gas emissions. (11)*
- *An environmentally friendly diet is one that does not have a large carbon footprint. This diet can be achieved by:*
  - a. *Paying attention to locality, naturalness, and type of product (reduce consumption of animal products, prioritize more carbon-friendly vegetable products). (13)*
- *Starting from raw materials with low emissions, the production process from upstream to downstream also needs attention to implement an environmentally friendly process. Transparent production processes are used as one approach towards consumers so that consumers can choose healthy, safe, halal, and sustainable food. (13)*
- *Roll out digital solutions among a broad community of financial institutions serving agri-SMEs, focusing on solutions that reduce the costs of acquiring smaller clients, managing risk, and achieving positive environmental/climate impact. (14)*
- *It was concluded that adoption of Climate-Smart Agriculture, Geographic Information System, Technology, Crop selection etc will enhance an adaptive and sustainable Food System in Nigeria. (15)*
- *We need to reconsider the status of consumers as queens and kings and accept what natural resources can give us without compromising their ability to do so for next generations. (3)*
- *NATURE POSITIVE A move to Nature based solutions will require the following: efforts to achieve Zero emissions; regenerative agriculture; and emphasis on a circular bioeconomy while maintaining economic viability. Therefore, its necessary find ways to valorize nature based solutions – such as attributing value to biodiversity, carbon sequestration (carbon trading systems exist but the methods to reliably measure are not yet available). Other options include green bond issues, carbon credits and sequestration which could all create income for farmers to cover costs of transition – for ex. planting cover trees and using their carbon sequestration capacity to generate income while other crops grow to maturity underneath. There is a need to harness assets and technologies that were not available 5 or 10 years ago to develop out-of-the-*

- ordinary solution thinking: use of satellites/drones to monitor progress across multiple small holding reserves; and cheap monitoring sensors that were not previously available to help with issues like fertilizer, water, soil carbon etc. Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (2)*
- *Governments need to invest in developing tools and methods that create a level playing field globally and that can be used to valorize nature-based solutions. (2)*
  - *Public sector needs to provide standards and framework to define the prices of food by focusing on water, nutrition, and emissions. Investment in big data informatics and analytics can help with true pricing on natural capital/natural resources to quantify better the value of nature positive approaches, inclusiveness, or positive nutritional outcomes designed to position the primary producer. (2)*
  - *Investors and donors should prioritize climate-smart investments across food systems and value chains. Green bond issues, carbon credits, and sequestration should create income for farmers to cover the cost of transition to more sustainable agriculture. (2)*
  - *Aligning metrics to make new investment products for food system capital (e.g. for nutrition and other areas of impact) both impact-meaningful and investor-meaningful, and not too complex. (4)*

## Economic

- *Africa's rural areas and food systems will have to play a bigger role in absorbing young job seekers than they did in other regions, given the continued growth of rural populations. 2. There are more opportunities in food systems for youth but very little is seen across board. (1)*
- *Focus on broad-based growth, not just on youth, to create an economic environment in which food system businesses can thrive and generate jobs for both young and old. (1)*
- *Create more vibrant rural economies. (1)*
- *The discussions focused on sustainable rural development as a pathway to ensuring better food system livelihoods. (12)*
- *Producers need to be paid and supported in such a way that they can have a higher financial gain for their labor and work. This will also give them more autonomy in selling their products to a greater majority of people at an affordable price. (3)*
- *Disaggregating the investors' market and the areas of investment needs/recipients of finance in food systems and develop a clear mapping of what types of needs or investments are best suited to specific investors or types of capital. (4)*
- *Micro-loans. Smallholder financing through coops. (4)*
- *VALUE CHAIN FINANCE. The shift to long-term sustainable financing requires focus on inclusion and integration across the entire value chain while creating new financial services. (2)*
- *VALUE CHAIN FINANCE. Value chain finance is obstructed by high transactions costs arising from lack of information, lack of understanding and trust between participants, lack of standards and regulations, and simple logistical challenges, all of which make it hard to measure and manage risks (as required to allow financing to grow). The responses mainly focus on different ways of reducing these transaction costs. (2)*
- *ACCELERATION. Governments, financial institutions, research centers and investors as a whole need to partner to accelerate growth in the nutritious food production sector by facilitating access to funding. (2)*
- *DERISKING A strong political signal/leadership is needed to draw attention to opportunities in the middle of the value chain that can help to link changing consumer demand with the need for market-based incentives for farmers to take on risk and adopt new practices, inputs, food products, and processes. The environment farmers work in is full of risk and high borrowing rates compound the risks to farmers,*

and lenders in any case are unwilling to take on risk and prefer highly liquid or marketable collateral. There are various sources of risk in the natural as well as institutional environments and these need to be addressed. Technology can play an important role by providing specialized instruments that redistribute risk or directly cover against important specific sources of risk. It can also help by reducing transactions costs and hence the cost of borrowing, and by improving transparency in market functioning and reducing information asymmetries among borrowers, lenders, and other market intermediaries. It is important to take a larger perspective, embracing the whole value chain from production, transformation, distribution, and consumption. (2)

- Government needs to play the role of catalyst and specifically focus on risk reduction. Banks typically operate with a financial regulatory framework, but this framework prevents them from engaging in business activities that may have significant early-stage risk as is the case in agriculture. To overcome regulatory hurdles to supporting early-stage companies and start-ups banks sometimes participate in higher risk financings by forming arms-length investment arms or by attracting other financial institutions to provide financing. Creating a financial structuring vehicle through partnerships which are geared at establishing a pool of individual loans can de-risk them and will attract investment. (2)
- To get the world's small farmers to drive a food systems transformation, their situation, characterized by high risk and extreme consequences of failure, needs a strong political signal to draw attention to opportunities to link changing consumer demand with the need for market-based incentives for farmers to take on risk. There needs provision of greater incentives for financial institutions that understand farming to provide new instruments that support new practices, inputs, food products, and processes. (2)
- Blending of public and private finance can lead to new financial instruments

that increase the size and tenor of loans for transformational (as opposed to incremental or otherwise insufficiently large) investments. (2)

- Financial needs assessments are required for funding programs to ascertain if they match needs of farmers as well as tailor-made solutions, recognizing local context. (2)
- Encourage digital payment options such as mobile banking to reduce information asymmetry and link warehouse receipts to financial system to support farmers' access to credit. (2)
- Investment in 'nutritional food' is likely to have a significant positive impact on government health spending globally. For instance, US federal spending on health is expected to be over 20% of the GDP. A study carried out by Cleveland Clinic suggests it can drop down to 7% with healthy habits and healthy eating. (4)
- There is also a need for: Bundling finance with inputs, knowledge, marketing partnerships. (4)
- Designing blended structures with a deliberate agenda of data generation, financing innovation, learning, and informing policy, rather than just with an agenda of mobilizing capital on a time-bound basis. (4)
- The Profit we need with business models and business cases, and the need to address this ECOSYSTEM with technology, leapfrog smallholders to the innovation potential with digitization and new financial solutions such as carbon credits as the new currency. (4)
- Generating investable asset classes around nutritious foods, investing in nutritional food must be one of the new investment themes for the next decade. The ageing population, increasing urbanization, excessive build-up debts, fiscal deficits, climate change commitments, and innovation all make a compelling case for governments globally to create a separate line asset class for Sovereign Wealth Funds and Development Funds. (4)
- Financing: Creating an asset class for 'nutritional food' will attract significant capital from institutional investors and funding agencies. Investment in 'nutritional food' is likely to have a significant positive impact on

government health spending globally. For instance, US federal spending on health is expected to be over 20% of the GDP. A study carried out by Cleveland Clinic suggests it can drop down to 7% with healthy habits and healthy eating. (4)

- Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (2)
- Incentives are needed to encourage banks to provide faster and context specific financing to SMEs. (2)
- Capacity-building especially among women and youth through training to resolve the lack of human resources and technical skills for easier access to finance is critical. Such education usually takes place at the tertiary level, but this is considered too late. (2)
- Pick a few investments to spend a lot of money on. (4)
- To get private sector engaged Government can and needs to play the role of catalyst and specifically focused on risk reduction, not just investment risk but also government stability within and across regions as the agriculture sector is highly fragmented, with diverse and context specific production, financial and investment costs. (2)
- Investors and donors should prioritize climate-smart investments across food systems and value chains. Green bond issues, carbon credits, and sequestration should create income for farmers to cover the cost of transition to more sustainable agriculture. (2)
- Tax exemption for foreign investments and capital investments on Education for SMEs on policies and how to deal with government bureaucracies. There is a need to build good credible investment pipelines: establishing and funding of independent platforms with the required industry-specific know-

how, finance, legal, investment, and policy-specific expertise along the entire value chain of investing in the nutritional food asset class to identify, structure, and match attractive sustainable and scalable investment opportunities with potential investors. (4)

- Building Good Credible Investment, Pipelines, Establishing and funding of independent platforms with the required industry-specific know-how, finance, legal, investment, and policy-specific expertise along the entire value chain of investing in the nutritional food asset class to identify, structure, and match attractive sustainable and scalable investment opportunities with potential investors. (4)
- Global theory of change for investing in nutrition SMEs to identify pathways to impact: along the lines of Lancet series that sets out best practices/ pathways across contexts (which will require very rigorous pilot level M&E), which would then allow us to use more process level/ intermediary indicators for larger-scale ongoing investments that are made according to that evidence-based roadmap. (4)

## Equality

- Reducing inequality between men and women is of major importance which can be achieved by ensuring equal payment. It was found that trade-offs are important and should be addressed more. (10)
- Equality and dignity should be integral part of the nutrition security policies. (5)
- Reducing inequality between men and women is of major importance which can be achieved by ensuring equal payment. It was found that trade-offs are important and should be addressed more. (10)
- Panellists agreed that inclusivity and equity, based on a people-centered approach, is key to ensuring better food livelihoods in rural areas for vulnerable groups including women, youth, indigenous peoples and other communities with distinct livelihood systems. (12)
- Additionally, there must be special attention paid to gender equality in food

systems, including the need to provide more opportunities for women in agricultural value chains, such as access to land, markets and decisions. (12)

- In order for food systems to be more inclusive, sustainable and healthy, further efforts are needed to 1) create jobs, 2) raise incomes across food value chains, 3) reduce risks for those most marginalized within the system, and 4) increase value distribution. (12)
- Ensure that high nutrient foods are accessible and affordable to underserved communities. (11)

### Food gardens

- Community gardens - this is a type of outdoor community center, a place for physical activity, a meeting for the elderly, etc. if we could turn these areas to be more productive and produce local agriculture, it can help reduce nutritional insecurity especially in low-income neighborhoods. This should happen without taking on the community nature of the garden. (5)
- The refugees and status less usually come from places that live mainly from agriculture. A high percentage of them were farmers. Giving them land to grow food on it is an idea worth more exploration. (5)
- Community gardens are a great solution to food insecurity and education around food. This gave the community a voice in what they wanted on their plates during the week and it gave them more choices for meals as they didn't have to pay for the food. (17)
- Food gardens should be encouraged in communities, government offices, schools and university campuses along with education about local food through planting, harvesting, and cooking together. (13)

### Farmers

- Stakeholders whose interests should be prioritized According to some participants, youth must be the first prioritized while others made cases for

farmers as the first to be considered as without farmers, no food production. (1)

- This directly affects the economic returns from agriculture, the livelihood of farmers, and in the long run, the capacity of farmers to invest and innovate. (2)
- NATURE POSITIVE. Supporting farmer transition in adopting more sustainable agricultural practices through attributing real value to the stewardship of nature will be paramount if food systems are to respond to the Action Track work streams of protect, manage, and restore. (2)
- DERISKING. A strong political signal/leadership is needed to draw attention to opportunities in the middle of the value chain that can help to link changing consumer demand with the need for market-based incentives for farmers to take on risk and adopt new practices, inputs, food products, and processes. (2)
- The environment farmers work in is full of risk and high borrowing rates compound the risks to farmers, and lenders in any case are unwilling to take on risk and prefer highly liquid or marketable collateral. (2)
- Other options include green bond issues, carbon credits and sequestration which could all create income for farmers to cover costs of transition – for ex. planting cover trees and using their carbon sequestration capacity to generate income while other crops grow to maturity underneath. (2)
- Green bond issues, carbon credits, and sequestration should create income for farmers to cover the cost of transition to more sustainable agriculture. (2)
- Financial needs assessments are required for funding programs to ascertain if they match needs of farmers as well as tailor-made solutions, recognizing local context. (2)
- Encourage digital payment options such as mobile banking to reduce information asymmetry and link warehouse receipts to financial system to support farmers' access to credit. (2)
- Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on

- smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (2)
- If smallholder farmers can organize themselves (more cooperatives, producer organizations): enables financing that is usually hardly possible -> increases rural livelihood enables cooperation to improve market position -> increases equitable livelihoods. If farmers have a voice themselves: where are they in the FSS dialogues? (4)
  - Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (4)
  - Market level challenges affecting the capacity of nutritious foods that are not fully "up to standards" in terms of size or appearance to reach the markets where consumers who need these foods are located, with resulting losses in terms of nutrition but also of incomes for farmers/aggregators/transporters etc. (4)
  - We invited stakeholders from most food systems stakeholders in Israel, from farmers to academics and activists. (5)
  - Proposal: Promotion of a holistic view, focusing on local agriculture as a primary provider of food security, with emphasis on quality and not only quantity and eco-friendly agriculture  
Proposal: Promotion of agricultural law and legislative infrastructure, supporting farmers' needs for local production such as stable customs on import, affordable water prices, foreign workers, and R&D, including workforce saving technology  
Proposal: substantial budgeting for research as a permanent part of the masterplan. (5)
  - Theme 3: Regulation and policies:  
Proposal: create incentives and penalties throughout the food system: To reduce food waste, a different waste stream system, such as households paying per weight waste, incentives for farmers to reduce agriculture waste and for consumers to buy "ugly" fruits and vegetables. (5)
  - Proposal: Allocation of resources and land in cities, especially to the underprivileged, to grow food  
Proposal: Education for all ages, promoting closer contacts between farmers and consumers, and changing nutritional habits that will increase local agriculture base in food security. (5)
  - A high percentage of them were farmers. (5)
  - Weakness: Our farmer's average age is around 60. (5)
  - Where are the future farmers? (5)
  - There is a need for professional guidance to the farmers. (5)
  - It is there for crucial to build a national food and nutrition strategy and plan, that will map all its needs and a roadmap to support our farmers to grow the heart of the plant based national recommended Mediterranean diet, assure the prices of the basic healthy and sustainable food basket is affordable to all. (5)
  - Lowering the import taxes on meats harms the local farmers and does not calculate health, sustainability, and welfare. (5)
  - Promotion of legislative infrastructure, supporting farmers' needs for local production such as stable customs on import, water prices, workers, and workforce saving technologies. (5)
  - Promoting contacts between farmers and consumers and increasing the share of local agriculture in food security  
General approach: Food security - Fresh food must continue to be produced locally. Promote Sustainable intensification. Support organic farming without the use of fertilizers and pesticides. Waste separation and organic waste should be sent to a designated site to be composted in each region. Good enough is not enough in food- the emphasis should be placed on quality beyond appearance. (5)
  - Smart logistics systems need to be built to support also direct agricultural marketing  
Legislation. Agriculture is a strategic resource - an Agriculture Law needs to be enacted, water subsidized for farmers, and direct support to farmers. (5)

- *The state has set goals of local production and self-sufficiency - farmers have met targets and have not been compensated. Ensure the next generation of farmers - the number of farmers has been decreased local production is not guaranteed. Agricultural land and available water must be ensured. (5)*
- *Participation of those who are further down the food chain, such as farmers and consumers, must be ensured in decision making processes, and the general public needs to be included in this discourse. (6)*
- *The topics we addressed in the dialogue such as food education, innovation, farmers, supply and demand for local products and women, are aligned with the principles of the summit on food systems. (7)*
- *Establish local information hubs that provide up to date and emerging information, in the relevant vernacular language for communities, practitioners, and traditional authorities on all various aspects of food systems and for various players (farmers, agri-SMEs, consumers, field practitioners). (8)*
- *This can be done in various way: - Legal frameworks should have a special focus on women and youth smallholder farmers for example in Malawi this can mean enforcement of the Cooperative Act to ensure the effective engagement of women and youth - Government should set up institutions to govern the marketing of agricultural products - Ensure the financial inclusion of women and youth - Government should monitor integration of the operating framework of state and non-state actors as disintegration leads to contradicting [agricultural advisory] messages at grassroots level - Promote the engagement of women and youth in seemingly simplistic innovations such as backyard vegetable farming and home Irrigation farming, which for the poorest members of society can be very empowering. (8)*
- *There is a need to give preference to sourcing healthy nutritious and affordable food There is need for improved support systems to regional farmers to create an improved market and a sustainable reduction of price of locally produced food. There is a need for innovative and circular economy strategies to reduce food waste and to use models to create economy for informal sectors Need to turn waste to value. (9)*
- *Composting, bio gas, bioenergy and so on Need to listen and learn from each other, the farmer, the community and to create fora for ongoing engagement, interaction, cooperation and collective action.(9)*
- *It was felt that government bureaucracy was a barrier in accelerating improvement in standards, engagement and innovation. it was also felt Government and multilateral financing provided through government was (unclear word) way not to reach the smallholder farmers and better representation can be made by civil society There is need to find innovative ways to manage the supply, add value and extend the shelf life. (9)*
- *Greater investments into the processing capability, capacity and competence would go a long way in improving supply. There is also Need for added value and providing support for sustainable manufacturing. Need systems to promote small farmers. Wider use of food safety standards. Quotas for fresh food and vegetables in supermarkets. Greater local content Improve awareness of the nutrition value. Reduce volumes of food with little nutritional value. Consider the total cost of food with low nutritional value on the system....government system. Promoting and marketing. Increasing access to financing and support to assist small holder farmers to mitigate climate impacts and provide health foods to market. Partnerships and collaboration across value chain. Wider use of permaculture. Design for sustainability and resilience Improve engagement and support infrastructure. Transport and logistics.(9)*
- *To unlock sustainable finance, a distribution mechanism is needed to ensure equitable value distribution all the way down to the farmers.(10)*
- *The multi-lingual approach contributed to multi- stakeholder inclusivity across the region from different sectors*

- (academia, research, business, NGO, farmers and youth). (10)
- To accelerate sustainable innovation, investments are key to provide farmers access to new technologies and assistances, for which funding pathways should be established. (10)
  - Innovative solutions and technical assistance should be able to reach farmers and be delivered in partnership with the private sector. (10)
  - Additionally, a distribution mechanism is needed to ensure equitable value distribution all the way down to the farmers. (10)
  - Hereby, science should take the role of translating and bringing science-based solutions to farmers through technical assistance. (10)
  - Farmers will be empowered by providing access to new simple technologies that include scientific and traditional information to ensure food and nutritional security while maintaining cultural diversity. (10)
  - Besides, the transformation of the food system should deliver healthy and nutritious diets for everybody in Latin America. d) Policies and incentives need to be tailored to the different types of farmers that we find in the region in order to enable the transition towards a more sustainable food system. (10)
  - Align policies with the needs of smallholder farmers, solutions to climate change, and entrepreneurial opportunities. (10)
  - Ensure equitable livelihoods for farmers, including smallholder farmers, women, youth, and underserved groups. (10)
  - Assess: Trade-offs between farmer incomes, nutrient quality, food prices, and sustainability. (10)
  - Market incentives for farmers to advance sustainable agriculture. (10)
  - Empowering 200 million farmers through the development of markets and implementing climate-smart agricultural practices to support resilience and profitability. (10)
  - **BUILD RESILIENCE TO VULNERABILITIES.** Empowering 200 million farmers through the development of markets and implementation of climate-smart practices for resilience and profitability. (10)
  - **Actions:** To achieve success, stakeholders will need to collaborate to align public policies, subsidies, and financial investments that incentivize businesses and farmers to 1. (11)
  - Provide equal access to capital, technology, and land tenure to smallholder farmers, women, and underserved groups. (11)
  - Strengthen capacity to provide actionable and real-time information and advisory services to farmers. (11)
  - This will include ongoing assessments to balance food security, public health, the environment and climate change, farmer livelihoods, and the needs of women, youth, and underserved groups. (11)
  - Public policy—including subsidies, taxing, and food labelling—with regard to food security, public health, climate change and the environment, farmer livelihoods, and the needs of women, youth, and underserved groups. (11)
  - **Actions:** Benefit farmers. (11)
  - **Who:** Farmers, scientists, businesses. (11)
  - Market incentives for farmers. (11)
  - Incentivize farmers. (11)
  - **BUILD RESILIENCE TO VULNERABILITIES.** Outcome: 200 million farmers are empowered through the development of markets and implementation of climate-smart practices for resilience and profitability. (11)
  - **Actions:** Assist smallholder farmers—provide access to technology and seeds to improve productivity and diversify income streams. (11)
  - **Who:** Farmers, government, businesses. (11)
  - **Assess:** Measure greenhouse gas emissions and diversity of farmers' revenues. (11)
  - **Challenge:** De-risking farmer livelihoods. (11)
  - **Stakeholders** whose interests should be prioritized: There was a great deal of concern about: Prioritizing farmers, including small holder farmers and including women. (11)

- *Participants see farmers as valuable resources with regard to their experience and expertise. (11)*
- *In fact, participants recommended that farmer-to-farmer networks be strengthened and empowered, and provided with technology that will enable them to share information in real time. (11)*
- *Participants stressed the importance of capacity building to enable small holder farmers, women, youth, and people of color. (11)*
- *This includes access to technology, financial capital, and land tenure, as well as information-sharing, networks among farmers, training and education. (11)*
- *The importance of partnerships was also underscored, which would enable multidisciplinary collaboration among farmers, NGOs, governments and international organizations to design projects that can connect small farmers with international markets. (11)*
- *Local farmers were part of the panel as well as the interactive audience. (11)*
- *Our Dialogue embraced multi-stakeholder inclusivity by including in the panel representatives of the UN system, academia, the private sector, civil society and, especially, farmers. (11)*
- *Endah Murniningtyas, the former Deputy Minister for National Resources and Environment at the Ministry of National Development Planning of the Republic of Indonesia, and co-chair of the Independent Group of Scientists that produced the 2019 Global Sustainable Development Report, noted that the immediate impact of the pandemic was felt through the weakening of national food demands and the closure of many businesses such as caterers and hotels, which led to excess of food production by local farmers. (11)*
- *However, people remained resilient by utilizing IT tools to enable “direct selling” by small agricultural producers to local consumers, which ensured many women farmers to continue their businesses and promoted youth participation as digital mediators of food value chains. (12)*
- *Izabella Teixeira, former Minister of Environment of Brazil and member of the UN High-level Advisory Board for Economic and Social Affairs, noted that in Brazil, digital tools and e-commerce were utilized as part of national food value chains to connect small and organic farmers with consumers across the country. (12)*
- *Several panellists noted that skill development, including digital skills related to drones and satellite data, as well as access to finance, are important enablers for transforming farmers into competitive entrepreneurs. (12)*
- *This includes: a. limited capacity (particularly in terms of business management) of individual entrepreneurs and companies b. market-level factors that affect agri-SME bankability (e.g. fragmentation of farmers, high transaction costs of doing business in rural areas, value chain malfunctioning, lack of business development service models that work well at scale). (14)*
- *Strategic plans were made on the choice of speakers so as to achieve the purpose of having the dialogue, for this an academia, an entrepreneur, a change agent with experience with farmers’ challenges and cravings among others were involved in the discussion. (15)*
- *Farmers in Lagos and Benue States received supportive interventions from private sectors. (15)*
- *Pests & Diseases, drought and flooding are pressing challenges affecting farmers and need urgent attention. (15)*
- *Among the challenges farmers encounter after harvest is bribery to Forces for transportation of their produce to the market. (15)*

## Frameworks and plans

- *It is there for crucial to build a national food and nutrition strategy and plan, that will map all its needs and a roadmap to support our farmers to grow the heart of the plant based national recommended Mediterranean diet, assure the prices of the basic healthy and sustainable food basket is affordable to all. (5)*

- *Establish a national food and nutrition masterplan to assure national and nutritional food security in the present and future. (5)*
- *A shared international reference framework on the use of blended finance for agri-SME investments in a “food system transformation” context, allowing evidence-based decisions about where to focus “subsidy” to leverage private capital for agri-SMEs, how to phase it out and how to assess additionality in agri-SME finance from a holistic food system standpoint. (14)*
- *Government needs to play the role of catalyst and specifically focus on risk reduction. Banks typically operate with a financial regulatory framework, but this framework prevents them from engaging in business activities that may have significant early-stage risk as is the case in agriculture. To overcome regulatory hurdles to supporting early-stage companies and start-ups banks sometimes participate in higher risk financings by forming arms-length investment arms or by attracting other financial institutions to provide financing. Creating a financial structuring vehicle through partnerships which are geared at establishing a pool of individual loans can de-risk them and will attract investment. (2)*
- *Intentional promotion of framework around agro-ecology as the help to preserve the soil. (15)*
- *Public sector needs to provide standards and framework to define the prices of food by focusing on water, nutrition, and emissions. Investment in big data informatics and analytics can help with true pricing on natural capital/natural resources to quantify better the value of nature positive approaches, inclusiveness, or positive nutritional outcomes designed to position the primary producer. (2)*

## **Government/governance**

- *The establishment of an inclusive regulatory authority for national food and nutrition. (5)*
- *Promoting sustainable local food systems and the role of the municipal*

*authority: At the national level, processes are moving very slowly. On the municipal authority, the macro and the micro can be addressed. The municipality should lead processes of assimilating a healthy and sustainable food system. Moreover, those who need to lead this issue are the high-rank officials committed to creating in-depth changes. It is mandatory to appoint a nutritional safety and security committee in each city and publish a municipal nutrition appendix. The idea of a nutrition appendix is to form the urban specification for all aspects of nutrition – from purchasing food for feeding programs for schools, the elderly and other centers to urban community's kitchens and cooperation between authorities. (5)*

- *A clear recognition by governments of the key roles of agri- SMEs in delivering against various public goods related to food systems and commitment to reward the positive development externalities generated by agri-SMEs through their business models. (14)*
- *Reinforce social protection including school feeding programs. (16)*
- *The government today is working detached from the NGOs. The complexity is big. The government should guide but also establish pronouncement budget to solve the problem. There is the dilemma between supporting Nutrition insecurity by food boxes or by credit card enabling independent procurement. (5)*
- *The right to food should be engrained in all policies. All governments (department of agriculture, trade, health, urban development, rural affairs, etc.) should ensure policy coherence, synergy and compatibility, and have common aims when it comes to food. (6)*
- *Policies and partnerships to help consumers choose healthier foods (labelling, taxation, advertising). (11)*
- *Agriculture is a strategic resource - an Agriculture Law needs to be enacted, water subsidized for farmers, and direct support to farmers. (5)*
- *We have to solve the conflicting policies which on one side encourages meat and animal-based food consumption by*

- incentives to the livestock agriculture and even for marketing and tax-lowering on meat and even processed meat imports, which distorts the consumer decision as the prices do not respect the real cost of these food products. Moreover, this while the ministry of health recommends reducing - avoid ultra-processed meats as they are carcinogenic on high-level evidence base. (5)*
- *In a macro approach, the state/government is important in increasing consumer access to healthy and sustainable traditional foods. The state can promote healthy and sustainable traditional foods through policies, programs, promotion, building relevant infrastructure, and to reduce the distance travelled during the distribution of traditional foods to minimize carbon footprint. (13)*
  - *Policies should be adaptive and inclusive and specific to suit different communities and regions across the country. Policies should help to address issues around our local food security sustainability before exporting to the international market. (15)*
  - *Urgent attention by the policy makers around policy that drives small scale farmers' productivity. (15)*
  - *Policy reviews, to ensure actions are coherent, not only nutrition and diet, but also water management, education, and other policy agenda. Example, the successful initiative- the Sequota Declaration. (16)*
  - *Differential pricing, active policies, and actions inside specific target populations to reduce food waste. (5)*
  - *At the policy level, we tend to set long-term goals, while in this issue, we need much more short-term goals. (5)*
  - *Municipalities can take part in all SDG's Proposal: since food systems are so complicated, each municipality or region must have an inclusive food and sustainability council led by the mayor and lead the region's healthy and sustainable policies. Proposal: connecting the municipals' private sector to be part of the solutions to changing the local food systems to healthier and sustainable ones. (5)*
- *Reducing food waste – promoting better consumption and purchasing through policies. (5)*
  - *Solutions such as taxes on ultra-processed food and differential VAT on healthy food create incentives to consume healthy diets on the production and consumption. (5)*
  - *The healthy and sustainable food basket recommendation of the Israeli ministry of health for nutrition insecurity population should be the compass for policies and implementation – fields dedicated for certain plantation (allocations of agricultural land to specific yields, guidance to which food can be donated and which food cannot be donated for the nutrition insecure population and more. (5)*
  - *Promotion of agricultural law and legislative infrastructure, supporting farmers' needs for local production such as stable customs on import, affordable water prices, foreign workers, and R&D, including workforce saving technology. (5)*
  - *Legislation of coerced treatment of food loss and food waste throughout the food systems – from livestock and plant agriculture to industrial and municipal food waste. (5)*
  - *Clearer investment policies and tools – including subsidies. (4)*
  - *Support policies and initiatives aimed at enhancing youth's long-term economic prospects, which in turn will cultivate trust in government among young people to build resilient food systems. (1)*
  - *Banks typically must operate with a financial regulatory framework which, effectively, prevents banks from engaging in business activities that may have significant risk. Many 'acceleration' initiatives would not pass these regulatory hurdles and risk is the critical factor preventing 'accelerated' financial participation. Governments have a key role to play to provide the right environment to promote new financing modalities as even successful start-ups and high-growth opportunities must often be self-funded because the financial industry shows no interest until a threshold of EBITDA is attained. The need for acceleration will require the clarification of the costs*

of reforming food subsidies (both implementation and compensation costs) towards subsidy/taxation mechanism that offer positive incentives for sustainable food systems (payment for environmental services of food systems, better pricing of land and water; taxes for environmental degradation; and polluter pays principle for greenhouse gases) and financing for income support to poor households to increase the affordability of nutritious diets. (2)

- Inclusion Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (2)
- This includes a focus on CFS Voluntary Guidelines on land tenure which could guide country policies on land governance and land tenure. (2)
- Public sector needs to provide standards and framework to define the prices of food by focusing on water, nutrition, and emissions. Investment in big data informatics and analytics can help with true pricing on natural capital/natural resources to quantify better the value of nature positive approaches, inclusiveness, or positive nutritional outcomes designed to position the primary producer. (2)
- We need transparency and trust, accompanied by a change in regulations in a way that waste and losses are considered either as expensive or as a resource to close a loop. (3)
- Subsidies for finance cost for SMEs (government). (4)

## Health and nutrition

- Indigenous participants talked about the community not having access to shops as they are just too far away so they have no choice but to eat food that lasts

the longest which are the unhealthy foods. A lot of young people only get their food meals from school so not having access to school has hindered their food security. (17)

- Support nutritious foods supply at workplaces, industrial parks, canteens. (16)
- To address malnutrition and obesity, a standard should be created to inform consumers about nutrition and establish social protection policies to secure nutrition levels. Besides, policies need to address food costs, as this is a huge barrier to nutritious food access for all members of society in Latin America. (10)
- It is recommended to develop an Arab nutrition model and promote it within the Arab sector. (5)
- We have to identify edible vegetables and dishes that can be created from those vegetables, and promote them through education, policies and programs, to encourage healthy plant-based food consumption. (5)
- Contribute to human health by preventing food-related diseases due to either malnutrition or overconsumption. (3)
- Investment in 'nutritional food' is likely to have a significant positive impact on government health spending globally. For instance, US federal spending on health is expected to be over 20% of the GDP. A study carried out by Cleveland Clinic suggests it can drop down to 7% with healthy habits and healthy eating. (1)
- The healthy and sustainable food basket recommendation of the Israeli ministry of health for nutrition insecurity population should be the compass for policies and implementation – fields dedicated for certain plantation (allocations of agricultural land to specific yields, guidance to which food can be donated and which food cannot be donated for the nutrition insecure population and more. (4)
- Public sector needs to provide standards and framework to define the prices of food by focusing on water, nutrition, and emissions. Investment in big data informatics and analytics can help with true pricing on natural capital/natural resources to quantify

*better the value of nature positive approaches, inclusiveness, or positive nutritional outcomes designed to position the primary producer. (5)*

- *The establishment of an inclusive regulatory authority for national food and nutrition. (2)*

## Inclusion

- *Participants acknowledged the need for a change of narrative, with a stronger focus on embracing diversity, bringing about a culture of empowerment, and rethinking our habitats while reconsidering the value of food with the lenses of a true cost approach. (5)*
- *Inclusion. Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (3)*
- *For this, an increased awareness, passion, curiosity, knowledge and inclusion in all sectors of the food systems are guiding features. (2)*
- *Tearing down the invisible wall that has traditionally divided urban and rural areas, means linking sustainability with social proximity, where enacting through food a virtuous cycle of civism, responsibility, connectivity and education, will lead to new forms of social fabric. (3)*
- *There is a strong need to focus on avoiding conflicts between urban and rural areas; trying to create a denser bond between these two realities and destroy that invisible wall that divides them. (3)*
- *We define this approach using the term of social proximity. This implies more sensibilization, awareness, passion, curiosity, knowledge, and inclusion in all sectors of the food systems. (3)*
- *If farmers have a voice themselves: where are they in the FSS dialogues? We hardly hear their voice. (3)*

- *Allocation of resources and land in cities, especially to the underprivileged, to grow food. (4)*

## Infrastructure

- *Infrastructure for logistics and cold storage to reduce food wastage. (5)*
- *Invest not only in education but also more broadly in sectors such as transportation and energy infrastructure. (4)*
- *In a macro approach, the state/government is important in increasing consumer access to healthy and sustainable traditional foods. The state can promote healthy and sustainable traditional foods through policies, programs, promotion, building relevant infrastructure, and to reduce the distance traveled during the distribution of traditional foods to minimize carbon footprint. (1)*
- *New technologies and applications are emerging, and more research and collaboration with academics are needed to find solutions to agriculture losses and find other more sustainable alternatives to preservatives, fertilizers, and during transportation and storage. (13)*

## Innovation

- *Innovation should be brought to scale in order to reach the SDGs. To empower actions at scale, place policies, regulations and incentives are needed which enable a sustainable recovery at regional level. Innovative solutions and technical assistance should be able to reach farmers and be delivered in partnership with the private sector. (5)*
- *Besides, promoting local markets can enhance greenhouse gas emission reductions. To achieve 50% reductions in food loss, improving and increasing technologies, logistics and innovation are found essential. (10)*
- *Tradition is a dynamic and complex concept due to its constructed nature. For this reason, it cannot be said that tradition and innovation are opposed, because the latter needs the former and innovation has always been part of*

development. The future often draws inspiration from the past and it would therefore be more accurate to speak of innovations as "new traditions".

Moreover, innovation is necessary when the current situation does not produce sustainable results. In order to link tradition and innovation to create a better future in terms of food production and consumption, cooperation between the different generations is necessary as much as the reform of the education system. (10)

- Innovation at serving lower-income consumers – rather than just medium and higher-income consumers. (3)
- Small ticket financing – ready for SMEs. (4)
- If we see successful, scalable new and innovative business models: such as the project ACORN that was showcased as a Firestarter (see: <https://channels.ft.com/foodrevolution/marketplacefor-change/>) combining agroforestry with nutritious fruit trees, technical data and GPS monitoring (provided by Microsoft to smallholders) and carbon sequestration with new ways of income for smallholders. (4)
- Innovation is essential in order to stop converting natural lands, limit the use of water resources to produce food and minimize the loss of natural ecosystems. (4)

## Livestock

- Legislation of coerced treatment of food loss and food waste throughout the food systems – from livestock and plant agriculture to industrial and municipal food waste. (10)
- We have to solve the conflicting policies which on one side encourages meat and animal-based food consumption by incentives to the livestock agriculture and even for marketing and tax-lowering on meat and even processed meat imports, which distorts the consumer decision as the prices do not respect the real cost of these food products. Moreover, this while the ministry of health recommends reducing - avoid ultra-processed meats as they are carcinogenic on high-level evidence base. (5)

- The livestock industry must transform on the whole process how it is being grown, density, food, antibiotic and medication use etc., as major factor in assuring healthy and sustainable food system. (5)
- There is a need for a transparent, professional supervisory system with accountability on all livestock food systems. The regulation has to be clear to who supervises the indicators and must be coordinated among all parts. The hazards of livestock systems endanger public health on a high level, from different pathogens such as Salmonella and Campylobacter thru Zoonosis as Tuberculosis, Anti-microbial Resistance, and pandemics such as avian flu, the Spanish flu, and the covid-19. As we all realize today, the broken food systems, especially from the livestock industry, set a global danger and must change to suit the global resources and human health. (5)
- There is a lack of a national holistic food policy. Each ministry works independently without any coordination. There is a need to include animals' welfare in the general policy. (5)
- There is a need to include animals' welfare in the general policy. (13)
- The food waste including the livestock industry which partly thrown in the nature feeds the wild animals with destructive effect on ecological systems. Climate change and crisis's ahead, will influence agriculture capabilities that must be taken into account in our strategy to assure food and nutrition security for all. (5)

## M&E

- M&E We need a global theory of change for investing in nutrition SMEs to identify pathways to impact: along the lines of Lancet series that sets out best practices/ pathways across contexts (which will require very rigorous pilot level M&E), which would then allow us to use more process level/ intermediary indicators for larger-scale ongoing investments that are made according to that evidence-based roadmap. (4)

- *Setting measurable goals in all aspects: health and nutrition, economy, welfare, education. (5)*
- *Measuring progress is still hard and therefore indicators or monitoring and evaluation systems should be implemented or improved to measure progress and success. (10)*

## Partnerships

- *ACCELERATION. Governments, financial institutions, research centers and investors as a whole need to partner to accelerate growth in the nutritious food production sector by facilitating access to funding. (2)*
- *Blending of public and private finance can lead to new financial instruments that increase the size and tenor of loans for transformational (as opposed to incremental or otherwise insufficiently large) investments. (2)*
- *H.E Dr Lia will establish a multi sectoral actors' task team to develop a National document. The task team will identify partners/multi stakeholders to develop a medium and long-term action plan with multisectoral dimension, and actors including financiers. (16)*
- *One or more large-scale regional risk reduction facilities (e.g., risk capital pools plus technical assistance) to mobilize regional commercial capital, including long-term, patient investors' capital, for regional (local currency) investments for agri-SMEs (particular focus on Africa). (14)*
- *Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (2)*
- *Partnerships are essential in bringing diverse food systems stakeholders closer along the whole food chain through innovative partnership models which enable action. Stakeholders should step out of different siloes to ensure integration and cooperation between different sectors and enable their alignment. Strong partnerships require transparency and interdisciplinary communication. (10)*
- *Partnerships are essential in bringing diverse food systems stakeholders closer along the whole food chain through innovative partnership models which enable action. Stakeholders should step out of different siloes to ensure integration and cooperation between different sectors and enable their alignment. Strong partnerships require transparency and interdisciplinary communication. (10)*
- *Strong partnerships require transparency and interdisciplinary communication.*
- *Additionally, especially the link and partnership between science, the public- and the private sector should be prioritized, as well as the link between producers and consumers. (10)*
- *Establish relationships between a variety of stakeholders including scientists, researchers, and economists together with farmers, civil society, government agencies, businesses, educators, and political and social thought leaders. Each of these groups has a vital role to play in transforming food systems, as well as evaluating trade-offs and measuring results. (10)*
- *The importance of partnerships was also underscored, which would enable multidisciplinary collaboration among farmers, NGOs, governments and international organizations to design projects that can connect small farmers with international markets. (11)*
- *The most important factor brought up multiple times is the strong need for alliances between science, the private- and public sectors. (12)*
- *Participation of those who are further down the food chain, such as farmers and consumers, must be ensured in decision making processes, and the general public needs to be included in this discourse. (10)*
- *Government/private sector/ Academia and Research/ private entities (such as YES Malawi): Work collaboratively to develop, market and make available low cost technologies or the mechanization of agriculture and other processes within the food system. This will make engagement in food systems attractive for youth and less tedious for all including women (involved in the primary production stage). (6)*

- *There should be collaboration between Food Systems Stakeholders including youths and the government. (8)*
- *There should be a strong linkage and interaction between all actors across the entire value chain for a sustainable food system using the top bottom approach. (15)*
- *Combine the agenda with N4G and let the public and the private make a pitch, bringing different players together and make changes. (15)*
- *New technologies and applications are emerging, and more research and collaboration with academics are needed to find solutions to agriculture losses and find other more sustainable alternatives to preservatives, fertilizers, and during transportation and storage. (16)*
- *Create networks to link SMEs to investors, including pathways for NGOs to support for-profit solutions, mitigate risk and develop effective proof of concepts. (5)*
- *An interdisciplinary council that will include all parts of the local food system is needed. (4)*
- *Multi-sectoral partnerships are needed for storage and food preservation, re-insurance, innovation, and technology transfer. (5)*
- *We need to further connect networks of people, producers, consumers, distributors so that there is transition of information along the value chain, transparency, care, and understanding about how a product is made. This will imply changing the status of food from commodity to public good. (2)*
- *Investment in 'nutritional food' is likely to have a significant positive impact on government health spending globally. For instance, US federal spending on health is expected to be over 20% of the GDP. A study carried out by Cleveland Clinic suggests it can drop down to 7% with healthy habits and healthy eating. (3)*
- *Facilitated dialogues to create alignment -- we need to bring government, private sector, non-profit, scientists, researchers, regulatory altogether and determine how to use the information we have to facilitate*

*dialogue to figure out how to match gaps with solutions. (4)*

- *Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (4)*

## **Private sector**

- *There is a need to engage the private sector: with tighter regulation on one hand and a call to join forces for the good of all. (2)*
- *Massive stimulus for private sector engagement through creating enabling business environment, trade policies based on best practices, science, innovation, incentives including tax holidays for more fresh foods. Support public procurement for promoting healthy diet, as a way understanding of access to healthy foods. Support and Introduce Bio fortification to add nutrients to staple foods, and Introduce Cold chains solutions for vaccine, and all sorts of fortifications. (5)*
- *We need to learn how to incentivize the local private sector and include it in the process. (16)*
- *The business sector has a powerful impact on health and food systems, and is a part of the problem - including it needs to be part of the solutions. (5)*
- *Blending of public and private finance can lead to new financial instruments that increase the size and tenor of loans for transformational (as opposed to incremental or otherwise insufficiently large) investments. (5)*
- *Facilitated dialogues to create alignment -- we need to bring government, private sector, nonprofit, scientists, researchers, regulatory altogether and determine how to use the information we have to facilitate dialogue to figure out how to match gaps with solutions. (2)*
- *Municipalities can take part in all SDG's Proposal: since food systems are so complicated, each municipality or region must have an inclusive food and sustainability council led by the mayor and lead the region's healthy and sustainable policies. Proposal: connecting the municipals' private sector to be part of the solutions to*

*changing the local food systems to healthier and sustainable ones. (4)*

### **Quality food**

- *Deliver good quality of food in order to meet consumer and cultural aspirations. Action to be taken by Government and agencies in the food sector. (5)*
- *Focus on the quality of the food and continuous monitoring of the nutritional values of foods grown in Israel, including appropriate legislation (e.g., monitoring the selenium/magnesium values). (1)*

### **Reduce Waste (Food and Plastic)**

- *Eliminate food loss and waste in the supply chain. (5)*
- *Food rescue: is another aspect, with the need of the government to recognize of its advantages and support it. There is huge question on the ultra-processed food donations which eventually are major part of what is called "food rescue", that is given to the nutrition insecure population. (11)*
- *Reducing food waste and plastic packaging that is not environmentally friendly c. Guarantee the totality of the full use of food ingredients so that food loss does not occur. (5)*
- *However, value addition to food crops will reduce the degree of food wastage. (13)*
- *A lot of school feeding programmes are run t a federal level which results in a lot of food going to waste we need to make federal guidelines more flexible to local situations. (15)*
- *Waste separation and organic waste should be sent to a designated site to be composted in each region. (17)*
- *Reducing food losses and food waste by rescue food. (5)*
- *Waste: The cost of food waste to the cities is enormous. 40% of the local authority's waste is organic waste. There is a huge saving for municipalities and individuals. Changing waste policy to the European model - those who reduce waste will be compensated, and payment will be according to the amount*

*thrown away. The solution to food waste needs to be implemented at the municipal level first. (5)*

- *Differential pricing, active policies, and actions inside specific target populations to reduce food waste. (5)*
- *Communicate the message of the urgent need to reduce food waste at all levels. Municipalities are the main actor in changing post-harvest food waste: In retail chains, in restaurants, institutional kitchens, and households. For example, waste tax, "pay as you throw," at all these levels. (5)*
- *The awareness of food waste is very low in Israel, and there is a fear of shortage. We need to connect food waste to costs and explain that it is also a waste of money. (5)*
- *It is challenging to predict food amounts to prepare when it is a big institutional kitchen, so solutions to the food not eaten should be prioritized. (5)*
- *The situation with institutional kitchen is too many restrictions on using "old" food, because of food safety issues, it is in contradiction to the need to reduce food waste. (5)*
- *In-depth analysis is needed to treat food loss in the field, agricultural depreciation, post-harvest as a critical stage, including legislation to change expiry dates system, retailer's chains purchasing systems, and infrastructures designed to detect waste optimize utilizing all products. (5)*
- *Reducing food waste – promoting better consumption and purchasing through policies. (5)*
- *Lastly, concrete initiatives to reduce food waste and losses (such as the app "Too Good To Go") are useful if they bring the system closer to the true costs of food, thus as a transition instrument. (3)*
- *The Planet we need to have benefit from new nature impact solutions by connecting the smallholder ECOSYSTEM to agroforestry projects or nutritious production such as fruit trees or cold chain solutions in the ecosystem with less food loss & waste. (3)*
- *Infrastructure for logistics and cold storage to reduce food wastage. (4)*
- *Legislation of coerced treatment of food loss and food waste throughout the food*

systems – from livestock and plant agriculture to industrial and municipal food waste. (4)

- Create incentives and penalties throughout the food system: To reduce food waste, a different waste stream system, such as households paying per weight waste, incentives for farmers to reduce agriculture waste and for consumers to buy "ugly" fruits and vegetables. (5)

## Research

- They emphasized the importance of collecting data and evidence about trade-offs and what works, leveraging technology for sharing real-time information, and being inclusive. (5)
- There is a decrease in output in many crops (including crops such as tomatoes, cucumbers, onions, and various fruits) and, at the same time a large increase in price, contributing to less accessibility to fresh produce. Research is needed to understand why there is a decline in production. (11)
- Conduct action based research as an entry to programme planning and design on food and nutrition programs targeting youth and women. (5)
- We do not have enough data and transparency. There is a shortage of budget to gather the data on the complex issues of antibiotic use, infections, etc. In comparison to Europe 10. (8)  
The needs reliable information sources on healthy, sustainable, and safe nutrition
- Collecting data and more research about effective strategies for food security, awareness, industrial development, and agricultural practices. (5)
- Alongside these, we need more information– research on health, dietary consumption, and dietary patterns in the Arab sector. 50% of the children are nutrition insecure, and most of them are poor. (5)
- Support R&D, and nurture Larger businesses in Eth to make informed decisions on investment, Industrial Parks to produce more nutritious foods. (16)

- There is a necessity for change in terms of how we frame our food system. We can do this by collecting data at all points in the supply chain. This data should not serve as a marketing strategy or profit tool for retailers / brand owners but rather as a way to shape food and trade policy to support local communities, create new financial instruments to support producers, and create information that is useful for consumers. (3)
- Data infrastructure for metrics and standardized metrics, perhaps through the ESG lens, applying success from other sectors for a pathway to impact. (4)
- Substantial budgeting for research as a permanent part of the masterplan. (5)
- Collecting data and researching food loss and food waste through the whole food system – from agriculture to households. (5)
- Establishing Big Data integration center to cope with the huge challenges of contradicting regulation and lack of data in significant parts of the food system in Israel (lack of data on antimicrobial resistance, food insecurity population, the nutritional composition of agriculture production). (5)

## Small-scale farmers

- Creation of more sustainable engagements with small scale farmers for a swift paradigm shift as the population grows. (15)
- De-risking farmer livelihoods. (11)

## Standards

- Agreement on standards we use for healthy/unhealthy diets and how to identify gaps. (4)
- Consensus on healthy/non-healthy diets and what guidance is used. (4)
- Public sector needs to provide standards and framework to define the prices of food by focusing on water, nutrition, and emissions. Investment in big data informatics and analytics can help with true pricing on natural capital/natural resources to quantify

*better the value of nature positive approaches, inclusiveness, or positive nutritional outcomes designed to position the primary producer. (2)*

- *Technology is key to overcoming informational challenges leveraging also financial innovations and improved warehouse receipt systems, improved regulations and standards also help overcome information gaps. (2)*
- *Creating a benchmark for the whole livestock: from agriculture to food waste. Including data collection and transparency to prevent Antimicrobial resistance and zoonotic disease development. (5)*
- *Countries need to work towards an EU standard. (5)*
- *To address malnutrition and obesity, a standard should be created to inform consumers about nutrition and establish social protection policies to secure nutrition levels. Besides, policies need to address food costs, as this is a huge barrier to nutritious food access for all members of society in Latin America. (6)*

### Systems or holistic approach

- *Promotion of a holistic view, focusing on local agriculture as a primary provider of food security, with emphasis on quality and not only quantity and eco-friendly agriculture. (10)*
- *Mapping and solving conflicting policies through system thinking according to the masterplan. (5)*
- *The current focus is on the cost of food only, dealt mostly by import and causing uncertainty and unprofitability. Holistic approach, including the need to produce quality and accessible food, is needed. (5)*

### Supply chains

- *A solution would be to have shorter and more circular supply chains, exchanging only the goods necessary for every community to have a healthy diet. (5)*

### Sustainability

- *Building sustainable food systems and healthy nutrition patterns have been identified by the Global Sustainable Development Report 2019, as one of six entry points to achieve transformational change toward sustainable development in ways that capitalize on synergies while minimizing trade-offs. (3)*
- *Success in transforming to sustainable food systems will require the engagement of young people. Participants urged that education be oriented to young people in addition to on-site problem solving to advance sustainable agriculture. (12)*
- *Practices needed for food system sustainability include equitable value distribution along the whole food chain as well as between genders. (11)*
- *To ensure the future vision of food systems, a generational change of producers is needed by empowering and including youth and women; ensuring equal payment and raising awareness is essential. (11)*

### Technology

- *Smart logistics systems need to be built to support also direct agricultural marketing. (10)*
- *Technology based solution to cope with the change in quality as well as quantity. (5)*
- *Roll out digital solutions among a broad community of financial institutions serving agri-SMEs, focusing on solutions that reduce the costs of acquiring smaller clients, managing risk, and achieving positive environmental/climate impact. (14)*
- *Several panellists noted that skill development, including digital skills related to drones and satellite data, as well as access to finance, are important enablers for transforming farmers into competitive entrepreneurs. This would ensure better economic empowerment of women and attract more younger workers. (12)*
- *The factors affecting food sustainability are ever-available so, adaptive measures to respond to their incidence must be adopted. Climate Smart Agriculture, incorporation of Geographic*

- Information System and other technologies into the Food System etc have been said to be adaptive. (15)*
- *It was concluded that adoption of Climate-Smart Agriculture, Geographic Information System, Technology, Crop selection etc will enhance an adaptive and sustainable Food System in Nigeria. (15)*
  - *New technologies and applications are emerging, and more research and collaboration with academics are needed to find solutions to agriculture losses and find other more sustainable alternatives to preservatives, fertilizers, and during transportation and storage. (5)*
  - *Technologies are needed to better adaptation and mitigation Proposal: to make sure the technologies that are being developed are used to support health and sustainable diets and not produce ultra-processed food. Proposal: use of technologies (special apps) to reduce food loss and food waste –including on retails, catering services, restaurants, and neighbourhoods. (5)*
  - *Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (4)*
  - *The Profit we need with business models and business cases, and the need to address this ECOSYSTEM with technology, leapfrog smallholders to the innovation potential with digitization and new financial solutions such as carbon credits as the new currency. (4)*
  - *An "Uber" for farm implements and TA. (4)*
  - *Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (3)*
  - *A controlled and responsible use of new DNA editing technologies is accepted, only if these will not compromise traditions, typical products, biodiversity and health. (3)*
- *Lastly, concrete initiatives to reduce food waste and losses (such as the app "Too Good To Go") are useful if they bring the system closer to the true costs of food, thus as a transition instrument. (3)*
  - *Rural and marginalised areas should have access to new technologies. (3)*
  - *INCLUSION Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (2)*
  - *Nature positive A move to Nature based solutions will require the following: efforts to achieve Zero emissions; regenerative agriculture; and emphasis on a circular bioeconomy while maintaining economic viability. Therefore, its necessary find ways to valorize nature based solutions – such as attributing value to biodiversity, carbon sequestration (carbon trading systems exist but the methods to reliably measure are not yet available). Other options include green bond issues, carbon credits and sequestration which could all create income for farmers to cover costs of transition – for ex. Planting cover trees and using their carbon sequestration capacity to generate income while other crops grow to maturity underneath. There is a need to harness assets and technologies that were not available 5 or 10 years ago to develop out of the-ordinary solution thinking: use of satellites/drones to monitor progress across multiple small holding reserves; and cheap monitoring sensors that were not previously available to help with issues like fertilizer, water, soil carbon etc. Academia and food producers must collaborate to reflect the realities at different scales for better policy and impactful finance. (2)*

- *Technology is key to overcoming informational challenges leveraging also financial innovations and improved warehouse receipt systems, improved regulations and standards also help overcome information gaps. (2)*
- *Encourage digital payment options such as mobile banking to reduce information asymmetry and link warehouse receipts to financial system to support farmers' access to credit. (2)*

## Trade-offs

- *The trade-offs between production and export need to be re-examined, as Irish agriculture is focused on dairy and meat exports, very little land is used for crops (human consumption) and most grain (60%) is grown to feed animals. (6)*
- *Value chain finance. Value chain finance is obstructed by high transactions costs arising from lack of information, lack of understanding and trust between participants, lack of standards and regulations, and simple logistical challenges, all of which make it hard to measure and manage risks (as required to allow financing to flow). The responses mainly focus on different ways of reducing these transaction costs. (2)*
- *The trade-offs in terms of what are most important issues to tackle in terms of distribution practices: the competitiveness of low-cost imports versus local production versus the need to ensure efficient and nutritious food distribution; etc. (3)*
- *The trade-offs between consumers' access (buying capability) and producers' income. (3)*
- *The situation with institutional kitchen is too many restrictions on using "old" food, because of food safety issues, it is in contradiction to the need to reduce food waste. (5)*
- *The trade-offs between production and export need to be re-examined, as Irish agriculture is focused on dairy and meat exports, very little land is used for crops (human consumption) and most grain (60%) is grown to feed animals. (6)*
- *Young people need to understand the complexities and trade-offs involved in shaping food systems. (6)*
- *It was found that trade-offs are important and should be addressed more. (10)*
- *Areas that need further exploration are addressing trade-offs and developing ways to measure progress. (10)*
- *Multi-stakeholder inclusivity: We support inclusive multi-stakeholder processes and approaches within governments and communities that bring in diverse perspectives, including indigenous knowledge, cultural insights, and science-based evidence to enable stakeholders to understand and assess potential trade-offs and to design policy options that deliver against multiple public goods across these various systems. (10)*
- *Considering ecosystem services is crucial in Latin America due to its vast diversity of ecosystems. B) Areas that need further exploration are addressing trade-offs and developing ways to measure progress. (10)*
- *Establish relationships between a variety of stakeholders including scientists, researchers, and economists together with farmers, civil society, government agencies, businesses, educators, and political and social thought leaders. Each of these groups has a vital role to play in transforming food systems, as well as evaluating trade-offs and measuring results. (11)*
- *Data and evidence, evaluating trade-offs. (11)*
- *Policies and partnerships to help consumers choose healthier foods (labelling, taxation, advertising). Improve access to affordable, nutritional food. Market incentives for farmers. Who: PPPs. Assess: Trade-offs between farmer incomes, nutrient quality, food prices, and sustainability. (11)*
- *Participants focused on The urgency of data and evidence to evaluate trade-offs, and make adjustments in an iterative and timely manner. Practices that are needed for food system sustainability: Participants expressed the importance of involving a variety of stakeholders in the process of*

*developing innovative solutions to transform to end to end food systems. They emphasized the importance of collecting data and evidence about trade-offs and what works, leveraging technology for sharing real-time information, and being inclusive. (11)*

- *Each of these groups has a vital role to play in transforming food systems, as well as evaluating trade-offs and measuring results. (11)*
- *Assess: Trade-offs between farmer incomes, nutrient quality, food prices, and sustainability. (11)*
- *Assess: Data and evidence, evaluating trade-offs. (11)*
- *Areas that need further exploration: Given the extent of transformation that will be required to adapt food systems to address climate change and ecology, as well as food security and public health, participants focused on The urgency of data and evidence to evaluate trade-offs, and make adjustments in an iterative and timely manner. (11)*
- *They emphasized the importance of collecting data and evidence about trade-offs and what works, leveraging technology for sharing real-time information, and being inclusive. (11)*
- *Building sustainable food systems and healthy nutrition patterns have been identified by the Global Sustainable Development Report 2019 , as one of six entry points to achieve transformational change toward sustainable development in ways that capitalize on synergies while minimizing trade-offs. (12)*

## Urban Development

- *Urbanized habitats should be reorganized with an eye on nature and urban/peri-urban food production and processing. (3)*
- *Cities should move toward edible cities or at least edible neighborhoods. Planting fruit trees in the city, together with a productive community garden. These are solutions, even if partial, for food security. (8)*

## Value chains

- *Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (4)*
- *Integration of value chains to the smallholders' benefit with the right technology: digitizing value chains, enabling digital wallets on smartphones, monitoring individual plots enabling farmers to access pre-harvest advances when the need for finance is at its peak. (4)*
- *Provide decently rewarded employment across the supply chain, with skills and training. Action to be taken by business owners, and government. (1)*

## Ways of thinking/working

- *One way to get there might profit from initiatives aiming at setting up a new tradition pattern, where our natural need for a sense of belonging couples with the revaluation of ancient know-how blended with innovative approaches. (3)*
- *We need to reconsider the status of consumers as queens and kings and accept what natural resources can give us without compromising their ability to do so for next generations. (3)*
- *Distribution needs to change its current way of working, namely to take the best products (in terms of product and nutrient quality) and send it to the bidder of highest price (wealthy nations or wealthy neighbourhoods). (3)*

## Women

- *In order to close the gender gap, access to family care and child support are essential to enable women to work in agriculture. (10)*
- *Involve youth and women in the design and targeting of all food security and nutrition action plans. This should include the provision of education about the links between nutrition and good health for individuals, groups and their families and food systems. (8)*

- Promote the engagement of women and youth in seemingly simplistic innovations such as backyard vegetable farming and home Irrigation farming, which for the poorest members of society can be very empowering. (8)
- Review existing relevant policies and ensure that youth and women roles / challenges in food systems are mainstreamed, which should the strengthening of youth and women groups and the deliberate provision of income earning opportunities for them (8)
- Inclusion Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (2)
- Increased access to affordable tech solutions. Current cost for access to the internet and to technological based solutions in the developing world is prohibitive. Youth and women cannot leverage technology to overcome many of the challenges they face because these are expensive. (8)
- Capacity-building especially among women and youth through training to resolve the lack of human resources and technical skills for easier access to finance is critical. Such education usually takes place at the tertiary level, but this is considered too late. (2)
- Practitioners, government and private sector stakeholders should provide information to women and youth to build their knowledge and capacity to enable them to better engage in the food system. This should be with the aim of changing mindsets and equipping them with knowledge and skills to effectively participate in the food system. (8)
- Government should make deliberate efforts to incentivize women and youth to participate in the food system. This can be done in various way: - Legal frameworks should have a special focus on women and youth smallholder

farmers for example in Malawi this can mean enforcement of the Cooperative Act to ensure the effective engagement of women and youth. (8)

- Need for changes to policy, legislation and planning in order to: - protect girl children from teen marriages and pregnancies – safeguard and increase women’s access to, and control over, incomes and other resources – enhancing women’s and youth and women’s participation in microfinance facilities – explore creative approaches to reduce women’s time constraints e.g. provision of improved water supply – increase women’s involvement in decision making at all levels. (8)
- Ensure inclusion of women and youth specifically by addressing the problem of capacity building, especially for youth and start-up companies and ensure that the voices of the youth are heard. This also includes the access to financing for women, improve their ability to start business and capacity to prepare a business plan etc; need for education for women; access to technology for women in rural areas; legislation to ensure that women can access the finance. (2)
- Capacity-building especially among women and youth through training to resolve the lack of human resources and technical skills for easier access to finance is critical. Such education usually takes place at the tertiary level, but this is considered too late. (2)
- Participants emphasized that women—including women of color—must have equal access to vital resources including financial capital, technology, and land tenure. That women need educational opportunities. That women must have a voice in decision-making. (11)

## Youth

- Involve youth and women in the design and targeting of all food security and nutrition action plans. This should include the provision of education about the links between nutrition and good health for individuals, groups and their families and food systems. (8)

- *Engage youth climate action leaders to incorporate food security, health, access, and systems innovation. (11)*
- *Children and youth are actively involved in shaping our food systems The concept of Food Systems needs to be made more accessible to young people and integrated at a sooner stage into the school curricula. Young people need to understand the complexities and trade-offs involved in shaping food systems. By making the language more accessible to young people, they can be included in this dialogue. (6)*
- *Youth inclusion and intervention in the food systems will bring about a change in the trajectory because of their creativity. Collections and implementation of individual solutions from the youths will help meet our food sufficiency and sustainability needs. Youths were implored to connect and engage with Agriculture Movements to explore the possibilities of adaptive Food Systems in Nigeria. (15)*
- *Active participation of the youths was said will proffer solutions to the developing constraints in the food system and encourage innovation in the Food Systems. (15)*
- *Governments should invest in educating the youth on business, technology, and entrepreneurship from an early age. (2)*
- *Capacity-building especially among women and youth through training to resolve the lack of human resources and technical skills for easier access to finance is critical. Such education usually takes place at the tertiary level, but this is considered too late. (2)*
- *Actions to engage young people in science-based social movements include raising awareness by visualizing the potential future of food systems through education and exposure on social media platforms. (10)*
- *Africa's rural areas and food systems will have to play a bigger role in absorbing young job seekers than they did in other regions, given the continued growth of rural populations. 2. There are more Opportunities in food systems for youth but very little is seen across board. (1)*
- *Need for more tailored finance that is responsive to the unique needs of youth and women in developing context food systems. (8)*
- *Focus on broad-based growth, not just on youth, to create an economic environment in which food system businesses can thrive and generate jobs for both young and old. (1)*
- *Actions to engage young people in science-based social movements include raising awareness by visualizing the potential future of food systems through education and exposure on social media platforms. (10).*



# Part 5

## SYNTHESIS METHODOLOGY & SYNTHESIS TEAM

### APPROACH TO THE SYNTHESIS

**Overall approach.** The analysis approach included multiple steps to analyse the data and develop a standards approach to coding data, which resulted in a Code Book. We reviewed 17 reports which were accessible to the team as of mid-March. One French report will be coded in the next round.

- **Step 1.** Three team members read 9 reports individually. Two team members then used open inductive coding to code these reports, and then compared their coding. These codes were then discussed with a fourth team member who had read but not coded the reports.
- **Step 2.** The team then consulted a range of literature and selected descriptions from *The Food System Decision Support Tool* – a toolbox for food system analysis (Wageningen University & Research and KIT Royal Tropical Institute, 2021) to identify key processes and actors in the food system and grouping of codes.
- **Step 3.** All relevant codes were then combined into one Code Book, that was used to code an additional eight reports. Slight changes were then made to the Code Book (e.g., redundancies reduced).
- **Step 4.** A Food Systems Specialist and the overall Team Lead reviewed and refined the Code Book and then used by three coders (the initial two coders and a third coder) to re-code all 17 reports.

The coded data from Step 4 were then used to identify the patterns and themes shared in this report. In addition to coding we described, we have coded the data to link to the Tracks that report writers have identified.

*Limitations to the study.* There are several challenges to analysing the data. These include:

1. **The term “dialogue” does not necessarily mean the same thing for each event.** While all dialogue reports identified that they followed the suggested approach, reading the dialogues suggest otherwise (e.g. some were panels). Further, it is questionable if participation of over 800 people, as seen in one instance (*Advancing equitable livelihoods in food systems*), could still be considered a dialogue.
2. **Dialogue titles do not have standardized information.** For example, region, country, sector, convenor is not clear or often identified. At times the convenor’s information is mixed (e.g. on the organisation is listed).
3. **Lack of variance to question on the approach.** The question regarding “Did you use the same method as recommended by the Convenors Manual?” does not offer any variance. All responses thus far are “yes” however it is clear from some reports that that method was not always used.
4. **Participation categories are not always completed.** Further it is not clear if these are participation rates or registration rates. This data also does not always add up (e.g. the total number versus the participants in each sector).
5. **The dialogue reports do not follow any consistent approach for reporting challenges, strategies and innovative ideas.** While some reports identify challenges and strategies separately, others seemingly fold the two together, and at times intermix ideas.
6. **The strategies do not always offer details but rather offer general statements.** At times, the researchers had to discern and make interpretations among unclear statements and ambiguous descriptions.
7. **It is not clear whose voice is being heard.** The dialogues are written as a

summary. Therefore, there can be no attribution of quotes, comments, ideas or suggestions to a certain group or person (e.g. farmers said this, government said that). Anonymity was an intentional design feature of the dialogue reporting to protect confidentiality.

**8. The various report sections do not always offer clarity for reporting.**

Some reports have repeated information throughout the reports, while others offer summaries that then have no additional information to support that summary in the remainder of the report.

**9. Action Tracks are “ticked” by report writers, but do not always accurately appear to reflect the report’s content.**

At times, report writers tick all the Action Tracks. At other times the Action Track is ticked however the content analysis does not identify that Track as being covered.

**10. Attribution.** The formatting approach for attributing quotes changed several times during the writing and formatting of the final report. While all quotes can be attributed to a specific Dialogue Report and place in that report, our final report may have some errors. Should mistakes be identified, the authors can identify all quotes based on the initial analysis.

These kinds of coding challenges are not unusual for this kind of decentralized, voluntary engagement process. It is to be expected that there would be variation in how reporters interpret and undertake their task. We mention these challenges to be open and transparent about the data strengths and weaknesses.



## Blue Marble Evaluation Team

Blue Marble Evaluation (BME) is an approach to evaluating global initiatives aimed at transforming systems towards a more sustainable world. Blue Marble Evaluators constitute a global network of evaluators who work in the space of global systems transformation. For this assignment, our BME team brings together evaluators from around the globe who offer an interdisciplinary approach to research and evaluation. As a team, we bring various standpoints yet at the same time we have a shared view seeing the world as a global system of ecological and human interdependence.

**Dr. Michael Quinn Patton, Team Lead**, is the founder of BME. He has 50 years' experience conducting applied research and program evaluations and is a former president of the American Evaluation Association (AEA). He was on the faculty of the University of Minnesota for 18 years, including 5 years as director of the Minnesota Centre for Social Research, has authored multiple research and evaluation books, including [Blue Marble Evaluation](#), and won numerous prestigious evaluation awards. He has hand-picked the core multidisciplinary evaluation team, which he oversees. He will add members to the team as we move forward with our assignment and identifies the need for different insights, values and skill sets. He is based in Minnesota, United States.

**Dr. Donna Podems**, Lead Evaluator and program manager. Dr Donna Podems is an evaluator with nearly 25 years of evaluative experience in Latin America, Eastern Europe, Asia and Africa. She manages and implements between seven to 10 evaluations a year for non-profits, foundations, governments, UN agencies and the private sector. She is a former National Board member of the American Evaluation Association (AEA) and the South African M&E Association (SAMEA), current AEA representative to the global evaluation forum, has written numerous articles, and books chapters and is the author of [Being an Evaluator](#). She is based in Cape Town, South Africa.

**Dr. Lauren Wildschut**, Lead Atlas Ti Methodologist. Dr. Wildschut is currently the academic coordinator of the Monitoring and Evaluation Programme at CREST, Stellenbosch University where she is responsible for the postgraduate diploma, Masters and PhD in Evaluation Studies. She is also the deputy director of the Evaluation Research Agency (ERA) which has conducted evaluation studies in several African countries in the fields of Education, Higher Education and Health. She is the Director of the African Institute for ATLAS.ti (AIA) which aims to build a cadre of qualitative researchers across Africa who produce rigorous research utilising ATLAS.ti. She is the former Chairperson of the South African Monitoring and Evaluation Association (SAMEA). She is based in Stellenbosch, South Africa.

**Dr. Marlene Roefs**, Food Systems specialist. Currently with Wageningen University, Dr. Roefs is a Monitoring and Evaluation specialist. She has more than 20 years of research and consultancy experience in poverty, food security, economic and sustainable development, governance, basic services, and renewable energy. She is based in the Netherlands.

**Ms. Tikwiza Silubonde**, Data researcher. Tikwiza is a lecturer at the Centre for Research on Evaluation, Science and Technology Studies (CREST). Tikwiza has over five years of professional practice in conducting research and conducting evaluations for a range of clients including government, non-governmental organisations, and international development agencies. She has a multi-disciplinary background in social development, international development, higher education, and community engagement. Tikwiza brings strong qualitative data analysis skills in ATLAS.ti. She is a Board member of SAMEA. She is based in Stellenbosch, South Africa.

Our core team is further supplemented by native French speakers, and our core team will expand as the need for further expertise (e.g. language) arises during the assignment and as the number of reported dialogues increase.

**Acknowledgements:** This work has been supported financially by the Global Alliance for the Future of Food, the Kellogg Foundation, and The McKnight Foundation.



## Annex A: List of Documents Coded

### DOCUMENTS CODED

To identify which quotes are related to which document, use number following each quote.

	Document ID (ATLAS.ti)	Document Title
1	001_Nov_5_20_CGIAR	<a href="#">Transforming Latin American food systems to build back better from COVID-19 and tackle climate change &amp; nature loss</a>
2	002_Nov_19_20_CGIAR	<a href="#">Game-changing Partnerships for Game-changing Solutions for Food and Climate</a>
3	005_Dec_11_20_Aggrey J	<a href="#">Maintaining Functionalities By Building Resilience to Vulnerabilities</a>
4	006_Dec_16_20_UNDESA	<a href="#">Advancing equitable livelihoods in food systems: a UN DESA Global Policy Dialogue</a>
5	008_Dec_19_20_Niode AK	<a href="#">Preserving Indonesian Traditional Foods for Sustainable Consumption</a>
6	011_Jan_11_21_SAFIN	<a href="#">Agri-SME finance at the Food Systems Summit</a>
7	020_Jan_26_21_IFAN	<a href="#">High Level Dialogue on Finance at CFS 47 - Finance &amp; Investment</a>
8	021_Jan_27_21_Donati L	<a href="#">Bites of Transfoodmation - Journeys of Transition in Food Production and Distribution Practices</a>
9	030_Feb_4_21_CAFS_CSAYN	<a href="#">Adaptive Approaches for Food System Sustainability in Nigeria</a>
10	035_Feb_9_21_Hussein AO	<a href="#">High level Round table - For Ethiopia Food System</a>
11	037_Feb_12_21_Food Systems for the Future_Multi	<a href="#">Financing Food Systems &amp; Nutrition Transformation</a>
12	041_Feb_17_21_Adler D	<a href="#">Food Nutrition security, Nutrition security, agriculture, and climate crisis</a>
13	050_Feb_23_21_World Vision Ireland	<a href="#">Good Food For All</a>
14	054_Feb_25_21_Guzman HS	<a href="#">Towards the Sustainability of Local Food Systems and Public Policy Design in México</a>
15	057_Feb_26_21_YES	<a href="#">Empowering women and youth to better contribute to transforming food systems in Malawi</a>
16	060_Feb_27_21_Peace Jam	<a href="#">Food Systems, Climate Change &amp; Youth Power</a>
17	080_Mar_13_21_Impact Youth Sustainability_Multi	<a href="#">Pathways to sustainable and resilient food systems and communities</a>

# DETAILED SYNTHESIS REPORT: DOCUMENTATION AND EVIDENCE

## Participation/registration in dialogues

### Total Number of Participants

A total number of 1864 people participated in the 17 dialogues held from 5 Nov 2020 to 13 March 2021 at an average of 114 per dialogue. Attendance rates for the different dialogues varied from 10 (Food Systems, Climate Change & Youth Power) to 886 (Advancing equitable livelihoods in food systems).

### Data Availability

Data for gender, age, sector and stakeholder groups were reported for 14 of the 17 dialogues. The three dialogues not reporting background represent 236 participants or 12% of the total: 1) Financing Food Systems & Nutrition Transformation, 2) Food Nutrition security, 3) Nutrition security, agriculture and climate crisis and Good Food for All.

### Participation by Gender

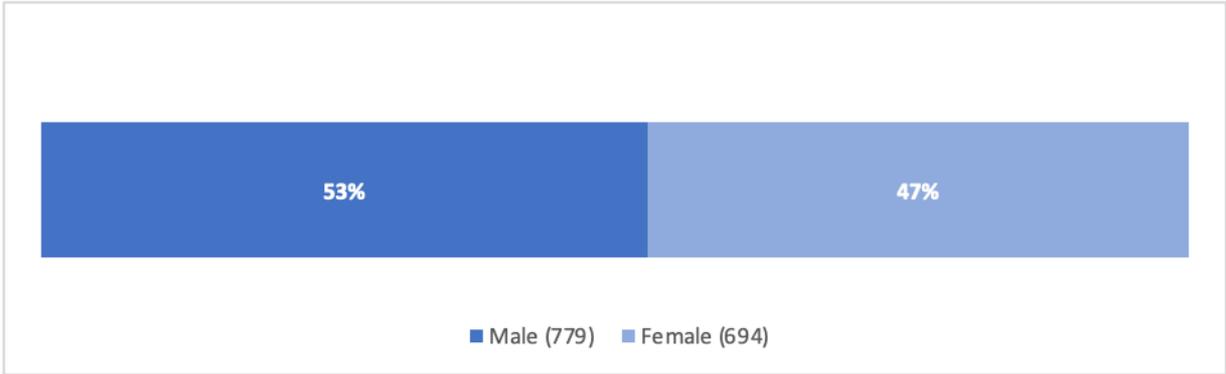


Figure 1: Population breakdown by gender for 14 dialogues (N=1473)

Slightly more males (779 or 53%) than females (694 or 47%) attended the dialogues. Both genders participated in all fourteen dialogues.

**Participation by Age**

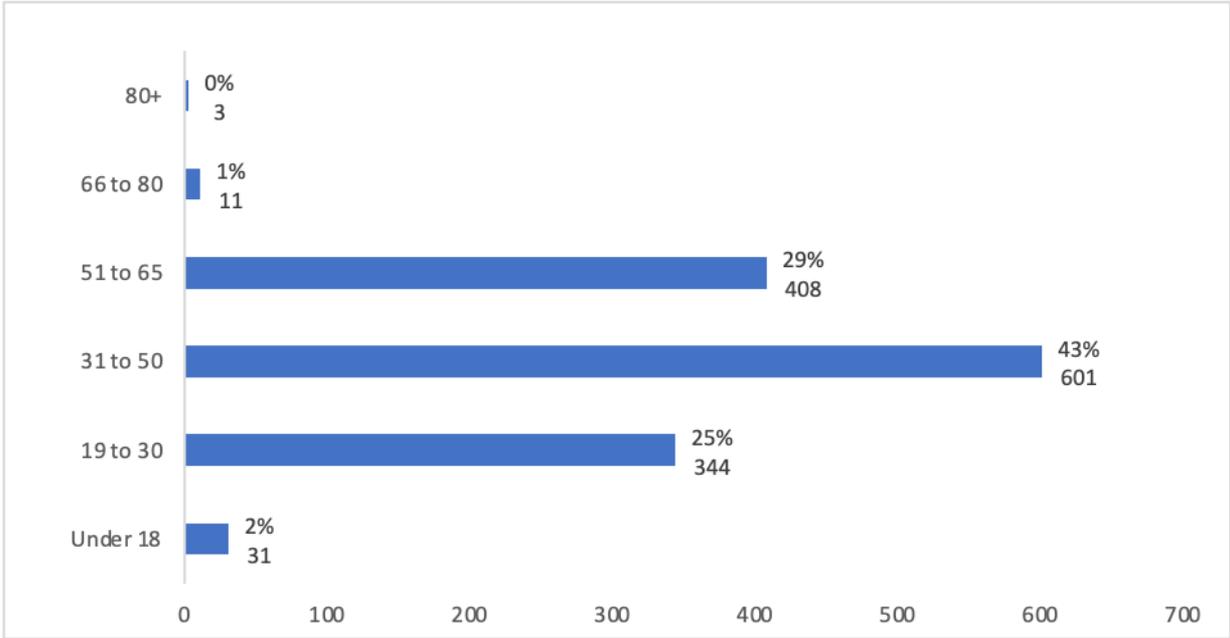


Figure 2: Population breakdown by age [N=1398]

About half (601 or 43%) of dialogue participants were 31 to 50 years old, only two percent (31) participants were younger than 18.

Table 1: Representation per age group in 14 dialogues

Age group	Under 18	19 -30	31 -50	51 -65	66-80	80+
Number of dialogues with at least one person of the age group (maximum is 14)	4	14	14	12	5	1

The age groups 19 to 30 and 31 to 50 were represented at all 14 dialogues. Four dialogues included participants younger than 18 years. Those were 1) Preserving Indonesian Traditional Foods for Sustainable Consumption, 2) Maintaining Functionalities By Building Resilience to Vulnerabilities, Food Systems, Climate Change & Youth Power and 4) Pathways to sustainable and resilient food systems and communities.

**Participation by Sector**

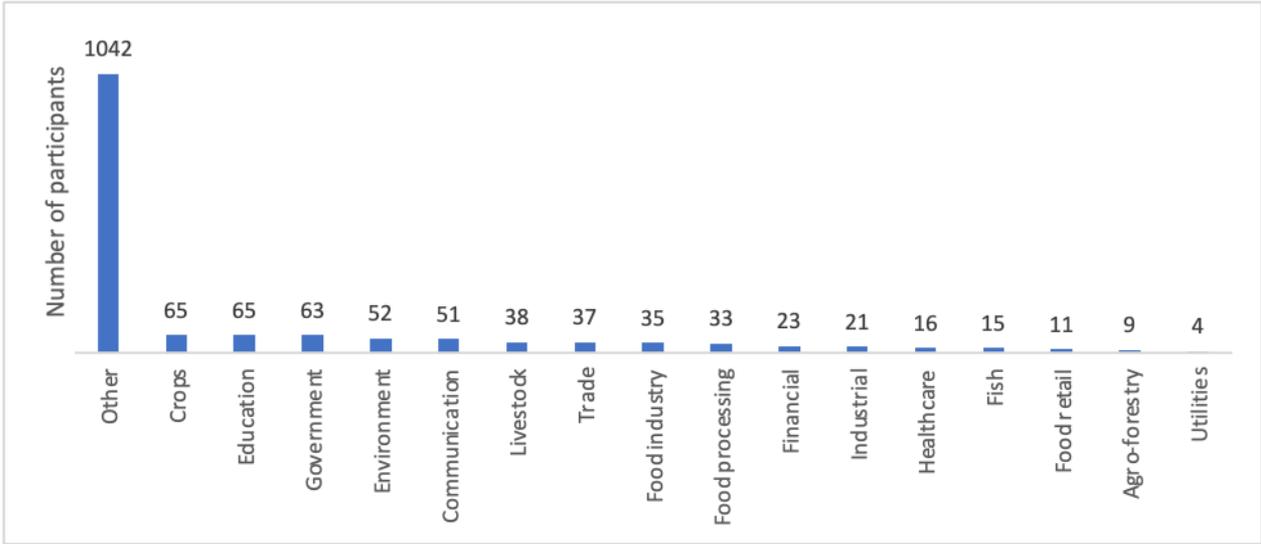


Figure 3: Population breakdown by sector [N=1580]

The most presented sectors excluding those marked “other” are Crops, Education, Government, Environment and Communication, with between 51 and 65 representatives.

Table 2: Representation per sector at the 14 dialogues

Sector	Number of dialogues with at least one person of the sector
Education	11
Other	11
Livestock	10
Crops	10
Food industry	10
Government	10
Communication	9

Sector	Number of dialogues with at least one person of the sector
Food processing	9
Environment	8
Trade	8
Fish	7
Healthcare	7
Industrial	6
Food retail	5
Financial	5
Agro-forestry	4
Utilities	2

The different sectors were well represented in most of the dialogues. Only the utilities, agro-forestry, financial, food retail, and industrial sectors were partaking in less than half of the dialogues (between 2 and 6).

### Participation by Stakeholder Type

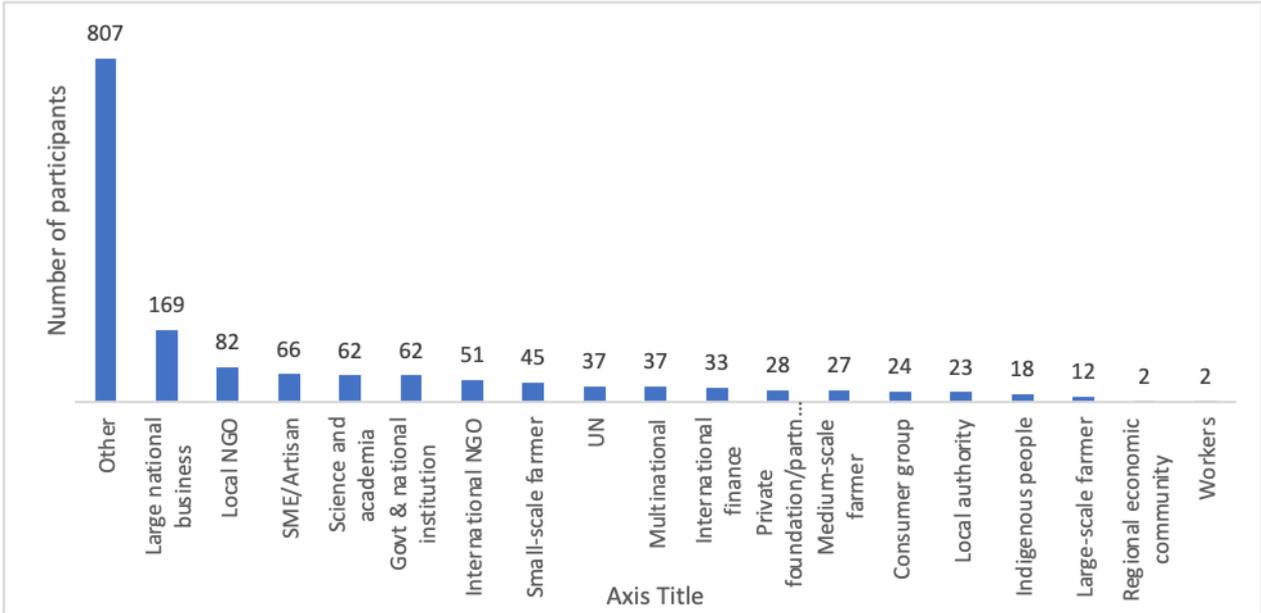


Figure 4: Population breakdown by stakeholders [N=1587]

Excluding those marked “other”, large national business attended the dialogues far better than any other stakeholder group, with 169 participants at four dialogues. Many participants from local NGOs (82) and International NGOs (51) attended nine dialogues. The combined farmer groups (small, medium and large-scale) had 84 participants at seven dialogues.

For the qualitative review to identify themes, we reviewed 17 reports. We have one French report that will be translated and coded in the next report.

# THE OFFICIAL FEEDBACK FORM

## 2. Principles of Engagement

Food Systems Summit provide an opportunity for diverse, purposeful and respectful exchanges between food systems stakeholders, at all times taking into account the Principles of Engagement of the Food Systems Summit.

**Act with urgency:** We recognize the utmost urgency of sustained and meaningful action at all levels to reach the respective 2030 Sustainable Development Goals.

**Commit to the Summit:** We commit to practice what we preach personally and professionally to contribute to the vision, objectives and the final outcomes of the Food Systems Summit.

**Be respectful:** Within our respective capacities and circumstances, we will promote food production and consumption policies and practices that strive to protect and improve the health and well-being of individuals, enhance resilient livelihoods and communities and promote good stewardship of natural resources, while respecting local cultures, contexts.

**Recognize complexity:** We recognize that food systems are complex, and are closely connected to, and significantly impact, human and animal health, land, water, climate, biodiversity, the economy and other systems, and their transformation requires a systemic approach.

**Embrace multi-stakeholder inclusivity:** We support inclusive multi-stakeholder processes and approaches within governments and communities that bring in diverse perspectives, including indigenous knowledge, cultural insights and science-based evidence to enable stakeholders to understand and assess potential trade-offs and to design policy options that deliver against multiple public goods across these various systems.

**Complement the work of others:** Recognizing that issues related to food systems are being addressed through several other global governance processes, we will seek to ensure that the Food Systems Summit aligns with, amplifies and accelerates these efforts where practicable, avoiding unnecessary duplication, while encouraging bold and innovative new thinking and approaches that deliver systems-level transformation in line with the Summit's principles and objectives.

**Build trust:** We will work to ensure the Summit and associated engagement process will promote trust and increase motivation to participate by being evidence-based, transparent and accessible in governance, decision-making, planning, engagement and implementation. We – from member states to private businesses to individual actors – will hold ourselves accountable for commitments made with mechanisms in place to uphold this accountability.

How did you organize the Dialogue so that the Principles were incorporated, reinforced and enhanced?	
How did your Dialogue reflect specific aspects of the Principles?	
Do you have advice for other Dialogue Convenors about appreciating the Principles of Engagement?	

Page 3 of 8

## 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** → Please move to Section 4: Dialogue Outcomes

**NO** → Please share more information about the method used in the comment box below.

Please consider commenting on how the event was curated as well as the reaction of participants to this curation. It may also be appropriate to comment on the facilitation in the Discussion Groups: were points of divergence and convergence both able to surface? Were all voices heard?

Page 4 of 8

## Official Feedback Form

A manual version for Convenors without access to the online form

This document is available to give Convenors an indication of how the online Feedback Form will be structured. If you are a Convenor and are ready to submit your feedback but are not yet able to use the online Official Feedback Form, please contact the Food Systems Summit Dialogues Team at [info@summitdialogues.org](mailto:info@summitdialogues.org)

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.

The Official Feedback Forms has FOUR KEY SECTIONS:

1. Participation
2. Principles of Engagement
3. Method
4. Dialogue Focus & Outcomes
  - a. Major Focus
  - b. Key Findings
  - c. Discussion Topic Outcomes
  - d. Areas of Divergence

Additional information can be included as attachments which can be shared along with the Feedback Form submission.

You are invited to feedback the outcomes of their Dialogues to the Food Systems Summit shortly after the Dialogue has taken place. When feeding back, please use the Official Feedback Form hosted online on the Summit Dialogues Gateway [summitdialogues.org](http://summitdialogues.org).

Dialogue Date	
Dialogue Title	
Convened by	
Link to Dialogue event webpage on the Gateway	

Page 1 of 8

## 1. Participation

Total number of participants							
Number of participants in each age range	0-18	19-30	31-50	51-65	66-80	80+	
Number of participants by gender	Male	Female	Prefer not to say and other				
Number of participants in each sector							
Crops				Food retail			
Fish and aquaculture				Food industry			
Livestock				Financial services			
Agroforestry				Health care			
Environment and ecology				National or local government			
Trade and commerce				Utilities			
Education				Industrial			
Communication							
Food processing							
Others (please list):							
Number of participants from each stakeholder group							
Small/medium enterprise/artisan				Member of Parliament			
Large national business				Local authority			
Multinational corporation				Government and national institution			
Small-scale farmer				Regional Economic Community			
Medium-scale farmer				United Nations			
Large-scale farmer				International financial institution			
Local Non-Governmental Organization				Private Foundation / Partnership / Alliance			
International NGO				Consumer Group			
Indigenous people							
Science and academia							
Workers and Trade Union							
Others (please list):							

Page 2 of 8

### C) Discussion Topic Outcomes

Please share the outcomes that relate to each Discussion Topic. The outcomes detailed here will include participants' views on actions that are urgently needed, who should take these actions, ways in which progress could be assessed, and challenges that might be anticipated as actions are implemented.  
You are welcome to feedback about a maximum of 10 Discussion Topics. Please describe each Discussion Topic Outcome in under 600 words.

Action Tracks	Keywords			
Please tick if this entry is related to one or more of the Action Tracks	Please tick if this entry is related to one or more of the following keywords			
Action track #1 ensure access to safe and nutritious food for all	Finance		Governance	
Action track #2 shift to sustainable consumption patterns	Policy		Trade-offs	
Action track #3 boost nature- positive production	Innovation		Human rights	
Action track #4 advance equitable livelihoods	Data & Evidence		Environment and Climate	
Action track #5 build resilience to vulnerabilities, shocks and stress	Women & Youth Empowerment			

[Add another Discussion Topic Outcome]

### D) Areas of divergence

Please share the areas of divergence that emerged during your Dialogue. An area of divergence is an issue where participants held diverse views, different opinions and/or opposing positions. For example, this might be related to a) strengths and vulnerabilities within food systems, b) areas that need further exploration, c) practices that are needed for food system sustainability, d) stakeholders whose interests should be prioritized.  
Please describe all of the areas of divergence in under 800 words.  
Note: Please do not attribute any views to named individuals.

Action Tracks	Keywords			
Please tick if this entry is related to one or more of the Action Tracks	Please tick if this entry is related to one or more of the following keywords			
Action track #1 ensure access to safe and nutritious food for all	Finance		Governance	
Action track #2 shift to sustainable consumption patterns	Policy		Trade-offs	
Action track #3 boost nature- positive production	Innovation		Human rights	
Action track #4 advance equitable livelihoods	Data & Evidence		Environment and Climate	
Action track #5 build resilience to vulnerabilities, shocks and stress	Women & Youth Empowerment			

## 4. Dialogue Focus & Outcomes

### A) Major focus

Please detail the focus of your Dialogue. For example, it could be (i) a comprehensive exploration of food systems, (ii) an exploration of one of the five Action Tracks or levers of change of the Summit, (iii) examination of links between one or more of the Action Tracks and levers of change, (iv) or another specific theme.

Please describe the major focus in under 600 words.

Action Tracks	Keywords			
Please tick if this entry is related to one or more of the Action Tracks	Please tick if this entry is related to one or more of the following keywords			
Action track #1 ensure access to safe and nutritious food for all	Finance		Governance	
Action track #2 shift to sustainable consumption patterns	Policy		Trade-offs	
Action track #3 boost nature- positive production	Innovation		Human rights	
Action track #4 advance equitable livelihoods	Data & Evidence		Environment and Climate	
Action track #5 build resilience to vulnerabilities, shocks and stress	Women & Youth Empowerment			

### B) Main Findings

Please share your appreciation of the main findings (or conclusions) that emerged from your Dialogue. For example, your key findings might detail a) the need to establish new connections between certain stakeholders, b) an agreement on actions that stakeholders will take together (expressed as intentions or commitments), c) a decision to explore specific aspects of food systems in greater depth.

Please describe all of the main findings in under 800 words.

Action Tracks	Keywords			
Please tick if this entry is related to one or more of the Action Tracks	Please tick if this entry is related to one or more of the following keywords			
Action track #1 ensure access to safe and nutritious food for all	Finance		Governance	
Action track #2 shift to sustainable consumption patterns	Policy		Trade-offs	
Action track #3 boost nature- positive production	Innovation		Human rights	
Action track #4 advance equitable livelihoods	Data & Evidence		Environment and Climate	
Action track #5 build resilience to vulnerabilities, shocks and stress	Women & Youth Empowerment			

## **Annex D: References**

Posthumus, H., J.M. Bosselaar, H. Brouwer. (2021). The food system decision support tool – a toolbox for food system analysis. Wageningen University & Research and KIT Royal Tropical Institute.