

OFFICIAL FEEDBACK FORM

DIALOGUE DATE	Wednesday, 13 October 2021 07:00 GMT -04:00
DIALOGUE TITLE	Surfacing perspectives on action-oriented research priorities to support a shift toward equitable and sustainable food systems that contribute toward climate action in the next decade.
CONVENED BY	Bruce Currie-Alder, International Development Research Centre (IDRC)
DIALOGUE EVENT PAGE	https://summitdialogues.org/dialogue/45600/
DIALOGUE TYPE	Independent
GEOGRAPHICAL FOCUS	No borders

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

1. PARTICIPATION

TOTAL NUMBER OF PARTICIPANTS

31

PARTICIPATION BY AGE RANGE

0 0-18 3 19-30 18 31-50 9 51-65 1 66-80 0 80+

PARTICIPATION BY GENDER

16 Male 15 Female 0 Prefer not to say or Other

NUMBER OF PARTICIPANTS IN EACH SECTOR

9	Agriculture/crops	5	Education	0	Health care
0	Fish and aquaculture	1	Communication	2	Nutrition
1	Livestock	0	Food processing	0	National or local government
1	Agro-forestry	1	Food retail, markets	0	Utilities
4	Environment and ecology	1	Food industry	0	Industrial
0	Trade and commerce	0	Financial Services	6	Other

NUMBER OF PARTICIPANTS FROM EACH STAKEHOLDER GROUP

0	Small/medium enterprise/artisan	0	Workers and trade union
1	Large national business	0	Member of Parliament
0	Multi-national corporation	0	Local authority
5	Small-scale farmer	2	Government and national institution
1	Medium-scale farmer	0	Regional economic community
0	Large-scale farmer	0	United Nations
4	Local Non-Governmental Organization	0	International financial institution
6	International Non-Governmental Organization	1	Private Foundation / Partnership / Alliance
0	Indigenous People	0	Consumer group
10	Science and academia	1	Other

2. PRINCIPLES OF ENGAGEMENT

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

Embrace multi-stakeholder inclusivity: This dialogue was designed to bring together a range of stakeholders to surface perspectives on action-oriented research priorities to support a shift toward equitable and sustainable food systems that contribute toward climate action in the next decade. Commit to the Summit: The dialogue aimed to support the vision for sustainable food systems by surfacing priorities and recommendations for action research in adapting food systems. Act with Urgency: This event aimed to identify barriers to action and opportunities to overcome them through collaboration across disciplines and stakeholder groups – and how the Adaptation Research Alliance, its members and other actors collaboratively could seize these priorities/opportunities. The Alliance builds on the United Nations 2019 Call for Action and is intended to provide the pioneering science and technical expertise to inform and underpin the work of the Adaptation Action Coalition. Be Respectful: We briefed all facilitators to ensure everyone would have space to contribute to the discussion, and that all views would be welcomed, understood, and discussed. Build trust: We designed the dialogue to ensure a safe space to communicate, share, and collaborate. A digital platform was selected as a tool to support everyone's participation (both in writing and verbally) and shared decision making (voting).

HOW DID YOUR DIALOGUE REFLECT SPECIFIC ASPECTS OF THE PRINCIPLES?

Recognize Complexity: We took a 2-stage approach, consisting of a survey widely distributed followed by a virtual dialogue with multiple stakeholders representing different perspectives (scientists and academics, knowledge brokers, and practitioners, among others), that surfaced priorities and recommendations for action research in adapting food systems. Build trust: The dialogue was designed to be open and transparent. For transparency, the organizers shared the raw (anonymized) data from the preliminary survey. The methodology for processing the preliminary data was explained. The breakout group discussions of the dialogue allowed participants to consolidate, debate, and refine the data. Breakout discussions allowed everyone to be actively engaged, so all played a role in defining key priorities and identifying priority actions. Complement the work of others: The whole spirit of this event was about identifying priority areas for solutions-oriented action research where collaboration is needed to seize those opportunities. Therefore, collaboration implies complementing the work of others, and this was reinforced in the way the small group discussions were designed.

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

The Dialogue Convenors should read the convenor guidance to ensure the event is designed in alignment with the Principles of Engagement. The dialogues should be designed to ensure outcomes are as useful to participants as they are to dialogue convenors.

3. METHOD

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

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

Yes

No

4. DIALOGUE FOCUS & OUTCOMES

MAJOR FOCUS

Our Dialogue focused on surfacing priorities and recommendations for action research in adapting food systems.

The dialogue was the second part of a wider two-step consultation process. A full Chair's Summary from this process can be found here: <http://hdl.handle.net/10625/60830>. French and Spanish translations are also available.

ACTION TRACKS

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

KEYWORDS

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

MAIN FINDINGS

Healthy, sustainable, and equitable food systems are essential for food security, and highly sensitive to the impacts of climate change. They also have the potential to play a key role in mitigating and adapting to climate change. Seven priority areas related to food systems were identified in this dialogue:

- Transforming food systems
- Transitions toward agroecology
- Supporting healthy and sustainable diets
- Justice, equality, and inclusion in food systems
- Supporting the resilience of smallholder farmers
- Anticipatory planning for climate risk in food systems
- Reducing emissions in food systems

The dialogue also noted the absence of some important priorities, including a focus on how we might transform food systems through a better understanding of market demands for increased protein (in particular, meat), and a focus on economic incentives to move towards agroecology.

Cross-cutting observations for consideration:

- the enormous scale and cost of adapting food systems in the context of climate change, which will demand considerable investment and a transformation in thinking;
 - the need to consider the pros and cons and ideal circumstances for international collaboration, taking into account that adaptation is essentially local and that collaboration carries transaction costs in terms of time and effort to coordinate action research across diverse actors;
 - a request that the Adaptation Research Alliance (ARA) document and share the learning from across different research collaborations and experiences;
 - the urgent importance of understanding and communicating risks and uncertainties, and using risk assessments for decision-making - as a starting point for every project; and
 - the need to think holistically, rather than addressing each priority as a silo.
- In chairing this dialogue, IDRC notes its value in exploring which priorities best lend themselves to action research, and which require collaboration. It will nonetheless be important for the ARA to also draw from evidence reviews in designing its research support agenda.

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KEYWORDS

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

OUTCOMES FOR EACH DISCUSSION TOPIC - 1/7

Below are the findings for each of the seven action research priority areas surfaced through the Dialogue:

Priority 1- How to transform food systems

Proposed focus: The role of multi-stakeholder governance and cooperation across sectors in scaling innovations and increasing transparency and equitable participation in value chains.

Why is this important?

Transforming innovation systems to deliver impacts at scale and making knowledge and innovation more accessible and actionable to farmers should be a priority. Research in this area would accelerate the deployment of demonstrated technologies and shed light on innovative financing mechanisms to scale new approaches and harness the power of the private sector. We need to better understand how to shift power dynamics and the status quo to transform food systems. Understanding the impacts of this bundling approach is vital for building systemic resilience against climate.

Opportunities for action

The consultation surfaced 33 opportunities that can be characterized as a set of approaches to exploring food system transformation that focus on the drivers, process and intended "destination" of transformation.

1. Understand the different motivations, drivers, incentives of different food system actors - and those of researchers - and test key leverage points for changing these incentives. For example:

- Explore market incentives to support national exports that use sustainable practices.
- Develop guidelines for large supermarkets around minimum share of local supply.
- Direct market linkage to reduce food prices and reduce the exploitation of small farmers (such as by eliminating intermediaries or creating cooperatives that will increase farmers' bargaining power).

2. Ensure the PROCESS of transformation is participatory, and that stakeholders, including underrepresented groups (indigenous communities, women, smallholder farmers, low-income households) are aligned to address the root causes of systemic problems. This entails:

- Research that adopts a systematic perspective, doesn't reproduce power inequalities, and values local, traditional, and Indigenous knowledge; and
- Research on the best ways to link farmers (and other often ignored groups of producers such as pastoralists and urban/peri-urban farmers), businesses, governments, and donors to work in the same direction despite their different motivations, drivers, and decision-making processes.

3. Clarify the "destination" - what should we be aiming for in new food systems? Focus on what would bring about a climate resilient and food secure future for all, in each specific context and globally. This includes:

- Understanding the trade-offs (such as between adaptation and mitigation, or between food security and food sovereignty) and context specificity, acknowledging that there are different types of farmers and therefore different pathways for transformation; and
- Socializing narrative on what it takes to transition to a healthy and sustainable food system, such as reducing meat and unhealthy food consumption; improving environmental regulation in agriculture; engaging all of society; and adopting a wholesale 'end-to-end' approach across food systems, from 'farm to fork'.

ACTION TRACKS

<input type="checkbox"/>	Action Track 1: Ensure access to safe and nutritious food for all
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<input checked="" type="checkbox"/>	Action Track 3: Boost nature-positive production
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KEYWORDS

<input type="checkbox"/>	Finance	<input type="checkbox"/>	Policy
<input type="checkbox"/>	Innovation	<input checked="" type="checkbox"/>	Data & Evidence
<input type="checkbox"/>	Human rights	<input checked="" type="checkbox"/>	Governance
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<input type="checkbox"/>		<input type="checkbox"/>	Environment and Climate

OUTCOMES FOR EACH DISCUSSION TOPIC - 2/7

Priority 2 - How to transition toward agroecology

Focus: Practical research to identify the conditions and drivers to achieve the agroecological transition needed to contribute to soil regeneration and food systems that are more sustainable, equitable and climate resilient.

Why is this important?

Agroecology has the potential to contribute to both adaptation and mitigation of climate change; it would enhance food security at the national level while promoting greater inclusion by benefiting smallholder households and indigenous small producers.

Opportunities for action

Building on a total of 30 opportunities for action identified through the survey and virtual workshop highlighted the need for funding to support alliances that would broadly engage around the urgent need to shift towards agroecological production, given its contribution to both human resilience (through nutrition, health and social benefits) and natural resilience (preserving soils, biodiversity, and ecosystem services).

As part of this paradigm shift, national policies need to promote climate resilient and sustainable food systems, rather than focusing only on for-profit commercialisation of food products. Within the research and policy community, there is a need to build consensus around the central principles of agroecology, getting past the terminology to reduce polarization. To support transition at the farm level, a focus on research-into-use opportunities, such as integrating agroecological production within extension services, will help farmers apply new knowledge and techniques. At the popular level, there is a need to promote collective action and education demanding healthier and sustainable diets.

Research must be transdisciplinary and participatory, ensuring leadership from marginalized groups. This may be advanced through collaboration with agroecological and food sovereignty-focused civil society movements around the world, such as Via Campesina, the Alliance for Food Sovereignty in Africa, and IFOAM Organics.

In terms of research focus areas, the dialogue surfaced a number of opportunities, including:

- developing monitoring and accountability systems (including development of metrics) that track health and environmental outcomes of food system policies;
- protecting local knowledge, seed biodiversity, plant genetic resources through farmer seed exchanges, and participatory technology development;
- generating evidence on the economic advantages of agroecology, and developing business models to make the case for agroecology at scale; and
- understanding agroecology trade-offs (and potential ‘triple wins’) for people, nature, and climate in LDCs with context-specific evidence.

ACTION TRACKS

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KEYWORDS

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OUTCOMES FOR EACH DISCUSSION TOPIC - 3/7

Priority 3 - How to support healthy and sustainable diets

Focus: Incentives for healthy consumption patterns of sustainably produced food, including plant-based food and low agrochemical inputs

Why is this important?

The participants highlighted the health and environmental advantages of a plant-based diet and the potentially high impact of wide-scale adoption of more sustainable and health diets.

Opportunities for action

A total of 43 opportunities were identified, focusing largely around four key areas of potential action:

1. Institutional procurement

There is a need to build on existing interventions to ensure that procurement programs (like for school food) meet the joint goals of enriching diets and sourcing food sustainably. This is very relevant for Asia and Africa. Given potential commercial interest in procurement programs, these must be designed with care to ensure the desired nutritional and environmental outcomes. It will be important to research the effectiveness of program design and consider carefully which food system actors need to be included. For equity purposes, decision-making cannot involve only government officials or private businesses, but must also include community representatives - particularly those who are food insecure.

2. Food policy bundle (incl. taxes, subsidies, labelling, marketing regulation)

This focal area would aim to create a more enabling policy and regulatory environment – helping to shape demand for more sustainable and healthy diets while also addressing supply-side factors. It may involve, for example, dismantling elements of trade agreements that undermine the competitiveness of sustainable local farmers. The objective is to have macro-level regulatory and economic policy tools that would influence the consumption and supply of not only food products, but also carbon emissions and agricultural inputs (fertilizers, water, and land). This would make the resource allocation in food systems more environmentally sustainable and improve health and equity outcomes. The aim would be to make unhealthy and unsustainable products more expensive than healthy sustainable foods.

3. Building narratives that support a shift to healthy, sustainable diets

Addressing food insecurity, dietary quality, and environmental sustainability requires multi-sectoral action and negotiating trade-offs (like between the returns to farm labour and profits for private enterprise, and between food quality and prices). Given the many actors and their incentives, standard critiques that delay action - like the cost of transitioning to healthy diets and the potential impact on private industry of regulations - can be barriers to change. These need to be countered by creating narratives on why and how to make the shift to healthy sustainable diets (like by illustrating the co-benefits for environment and health, and opportunities to increase wages for low-income food system workers). Such narratives can help create an incentive structure to shift industry practices for farmers, agri-business, and vendors towards better nutritional and ecological outcomes. Creating these narratives will require support for advocacy and civil society mobilisation, incl. through investigative journalism that exposes the powerful interests that support unhealthy food systems and reports on the health, economic, and environment impacts of industrial agriculture.

4. Increasing the diversity of food sources (incl. traditional and local and sustainable foods)

Multiple food systems can co-exist. We need to expand the reach of food systems that incorporate diverse food sources while addressing food insecurity and ensuring food accessibility, availability, and affordability - which all depend on well functioning global value chains. Increasing this diversity demands understanding the mechanisms for change - how, for instance, increasing the supply of a particular crop involves trade-offs between farmer incomes, land use, and dietary diversity. It also requires understanding the political economy of the relevant food system and how the integration of global food value chains interacts with requirements for ensuring food sovereignty.

ACTION TRACKS

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OUTCOMES FOR EACH DISCUSSION TOPIC - 4/7

Priority 4 - How to promote justice, equality, and inclusion in food systems

Focus: Combatting food insecurity for vulnerable groups and supporting collective action for food sovereignty and more equal access to healthy and sustainable food for all.

Why is this important?

This is a cross-cutting priority that intersects with all other areas for action research on food systems, and is instrumental to advancing progress on the sustainable development goals (SDGs). The Intergovernmental Panel on Climate Change (2019) finds that empowering and valuing women increases their capacity to improve food security has a multiplier effect, contributing to poverty reduction, food security, and better nutrition for families and whole communities.

Opportunities for action

The consultation surfaced 29 opportunities which, through discussion, crystallized around three key research opportunities:

1. Address how research is carried out in food systems for more inclusive and just outcomes.

This entails engaging all actors in the food system, including women and marginalized groups, through a highly collaborative approach – building coalitions and collective action through the research process itself.

This includes an emphasis on rights-based approaches.

- Support research that drives and scales collective action and resilience practices, such as by linking researchers to civil society groups working on food sovereignty (among other areas), and explore ways to incentivize food producers to embrace resilience and nutrition rather than only mass production.
- Understand the behavioural factors that underpin social change processes, such as by focussing on knowledge translation, engaging youth, and improving education on climate change and food systems.
- Intentionally integrate justice, equity, and decolonizing lenses into every stage of research to drive food system transformations that support the most vulnerable.
- Prioritize transdisciplinary and participatory research that combines traditional, local, and Western knowledge systems.

2. Link social policy goals and related support measures (such as social safety nets and access to finance) to climate and agricultural policy through incentives.

- Focus incentives for transforming food systems on tackling the root causes of inequality. Such incentives might include, for example, measures that help overcome powerful business interests and 'growth at any cost' economic models, or that link local producers with community groups serving the vulnerable.
- Target subsidies to promote agroecological production that meets food, social, and ecological goals, and discourage environmentally harmful practices.
- Create voucher systems that link people with limited means to local food systems.

3. Address the structural and systemic exclusion of marginalized groups, removing institutional and governance barriers they face, and increasing their access to and influence over decision-making.

- Take a rights-based approach, including respect for the tenure and land claims of Indigenous groups.
- Move beyond action research toward a rights-based approach that prioritizes legal empowerment of marginalized groups. For example, entrench the right to a healthy environment in law, thereby providing legal recourse for marginalized people.
- Use education to inform grassroots groups pressuring elected leaders to shift policy.
- Integrate analysis of power relations into food systems research to reveal vested interests and engage influential actors in food system change.

ACTION TRACKS

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KEYWORDS

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✓	Human rights		Governance
✓	Women & Youth Empowerment		Trade-offs
			Environment and Climate

OUTCOMES FOR EACH DISCUSSION TOPIC - 5/7

Priority 5 - How to support the resilience of smallholder farmers

Focus: Promote locally produced and consumed food and increase the access of smallholder farmers to markets and to climate adaptation and mitigation options.

Why is this important?

Enhancing the welfare and resilience of smallholder farmers in the context of climate change is essential for food and nutrition security.

Opportunities for action

From a total of 34 opportunities identified, discussion focused on three key areas of potential action:

1. Help smallholder farmers access markets and grow their incomes.

Markets-related action research can facilitate smallholder farmers' access to markets, helping them grow their incomes and achieve both financial and food security.

The two main research opportunities are:

- institutional innovations in terms of how market actors, particularly smallholders, collaborate; and
- exploring what kinds of markets support different kinds of smallholder farmers.

We can also explore what happens to markets and how they respond in crises, and how to support well functioning markets where transportation links are minimal, especially during and after crisis situations such as conflicts or climate-related disasters. Digital communications - particularly of market-relevant information (like climate services, commodity prices, or market access information) – are increasingly important. It's also important to explore innovations to address value chain disruptions considering the range of different market actors – including smallholders - affected by such disruptions.

Research around markets should include a comprehensive and systemic approach to food production and distribution (e.g., local food system platforms linking food production, transport, commercialization, and consumption). Smallholder farmers should also have access to climate advisories, early warning systems, and adaptive safety nets to reduce risks coming from climate variability and extreme events. Gender considerations are important to ensure the care burden and time poverty of women farmers are addressed to enable them to participate in markets.

It is also critical to explore alternative opportunities for income generation through economic diversification programs.

2. Promote e-commerce and other mechanisms to facilitate direct interactions between consumers and producers.

Rapid e-commerce growth in certain countries during the pandemic caused disruptions for farmers. While e-commerce offers important opportunities, it also poses risks to small farmers. How can we increase smallholder farmers' access to this technology and help them tap its strength in connecting with consumers? Many do not have access to the connectivity and infrastructure required. There are also big regional - and gender - differences in access.

E-commerce can support income growth for smallholder farmers, but it requires appropriate linkages among different actors involved. In other contexts, NGOs or other entities may be better suited to this role. Context-specific research can shed light on how best to facilitate these linkages.

There is a clear opportunity for action research and policy influence to find innovative ways to make these digital technologies more user-friendly to both men and women farmers and more accessible to youth, which could motivate their renewed participation in agriculture and food production.

3. Enhance information access, training and capacity development for smallholder farmers.

For smallholder farmers to be relevant and profitable in the current competitive environment, continued education, timely knowledge access, and training emerged as important. Farmers need further training and information in such areas as climate-smart (climate-resilient) crops and practices, sustainable agronomic practices, and financial management.

Developing and implementing well designed training programs for agricultural extension workers who can adapt knowledge to local contexts for smallholders to understand and implement, is another area of research opportunity. Supporting peer learning and bridging research-into-use through digital tools are other opportunities.

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KEYWORDS

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OUTCOMES FOR EACH DISCUSSION TOPIC - 6/7

Priority 6 - How to plan for climate risk in food systems

Focus: Adapting to extreme and slow on-set changes through rapid learning, foresight, and sustainable agricultural practices.

Why is this important?

Climate change and extreme events pose a wide range of human and economic costs, including famine. Focusing on reducing climate risk in food systems would benefit local governments and those engaged all along the food supply system.

Opportunities for action

From a total of 27 opportunities identified, the three priority action areas are:

1. Create storylines (socialization in public discourse) to communicate narratives that support transformation in a complex system.

This would entail improving communication:

- between government ministries and departments, to help to surface trade-offs. Irrigation, for example, may reduce risk in terms of agricultural productivity, but may increase risk in the water sector, or the health sector;
- with consumers - who are shifting their diets or may want to do so - on the implications of their choices; and
- with various actors along the value chain, incl. between extension service providers and farmers.

This links with the need for capacity development, including the capacity to better communicate, if better narratives need to be co-developed.

There is a need to better communicate risk, in a timely manner, in ways understood by communities, and to explain how to feasibly reduce risk. Too often risk awareness is not followed by action, or is communicated too late, or without risk management options that communities can afford. Key actors should be mobilized, including civil society, in demanding justice in the way risk is managed and communicated.

2. Assess climate risks and opportunities along value chains.

There is also a need to better understand risks, underlying factors, and uncertainties and to improve risk assessments for decision-making. Such assessments should be conducted at the beginning of projects, not at the end. Assessment must include risks triggered by actions aimed at reducing other types of risk.

Risk needs to be assessed along all parts of the food system value chain, including how risk is unevenly distributed among actors. This entails co-assessing climate risks, with all stakeholders, taking into consideration who uses or needs to use the information, and fine-tuning the information accordingly.

o Use system thinking to assess how risk travels along value chains, how it is altered across actors, its ripple effects, and implications of our actions.

o Better understand how risks are distributed, in type, timing, and magnitude: Are there equal risks across the value chain? Where are the weaker parts of each value chain, in different contexts? Can we better target our interventions based on this knowledge? Will minimizing risk in one part of the value chain increase risk in another, or for other people?

o Strengthen the link between risk assessments and solution identification. While risk assessments are well developed, we can't say the same about solution identification, which should be based on equally robust technical assessments.

3. Overcome the 'last mile' challenge in the delivery of climate services.

This demands major investments in proactive climate risk management strategies, including early warning and adaptive safety net programs that have the potential to secure more resilient livelihoods for millions of farmers in low- and middle-income countries. To help user communities and countries cope with climate change, climate services need to be easily accessible to all. Research can play an important role in understanding how to overcome this 'last mile' challenge in the delivery of climate services.

It is important to note, however, that not all risks can be foreseen by better climate services. There are components of risk linked to structural weaknesses of food systems, which may similarly present shocks, as happened with COVID-19. Some of these shocks may be addressed in part through actions – such as changing agricultural practices and shifting diets - proposed under other priority research areas.

ACTION TRACKS

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KEYWORDS

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

OUTCOMES FOR EACH DISCUSSION TOPIC - 7/7

Priority 7 - How to reduce emissions in food systems

Focus: Use of low carbon technologies and methods that regenerate and protect soils and water while reducing food loss.

Why is this important?

Survey respondents highlighted the significant contributions of agriculture to greenhouse gas emissions, and the related impact that carbon-intensive industrial agricultural practices have on both soils and people – increasing poverty and vulnerability in fragile contexts.

Opportunities for action

This priority identified in survey responses was not selected for synthesis discussion by workshop participants.

Nonetheless, the consultation generated more than 40 potential opportunities for action. These have been aggregated as follows:

1. Support agricultural practices that reduce emissions and mitigate impacts on soils.

- Support the diversification of farming practices, including agroforestry and agroecology, permaculture, and others that help to reduce emissions and increase carbon sequestration.
- Research soils across different farming and landscape systems to show the change needed for healthy soils (which reduce emissions and enable climate resilience).

2. Tackle the economic underpinnings of carbon intensive farming.

- Conduct cost-benefit and investment return analyses on agroecological systems, and use the results to advocate for change in agri-business models.
- Address private sector interests, lobbying and disincentives to adopting low-carbon food systems.
- Explore the use of taxes and subsidies to incentivize sustainable, regenerative local food production, and discourage high-emission production.
- Reduce the costs of healthy diets.
- Create incentives for companies to measure and curtail food loss and waste.
- Deploy public private partnerships.

3. Use policy and regulatory reforms to reduce emissions.

- Identify and scale tools and policies to improve transparency and accountability within the commodity supply chains that are driving high emission production.
- Develop regulation and incentives to reduce food waste, such as by encouraging smaller portion packaging, recycling, or increasing food waste disposal costs.
- Use regulation and enforcement, together with real-time remote sensing, to secure and enforce protection of high-carbon landscapes.
- Implement "demand-side" policies that incentivize "supply-side" changes, such as food labelling systems that inform consumers on emissions and water use in food.

4. Invest in innovation.

- Rethink existing investment in agricultural research and innovation to focus more on climate-resilient, low-emission technologies and practices.
- Pressure large financial sector agencies to finance corporations that invest in low carbon foods.
- Explore market-based approaches to incentivize farmers' adoption of climate-smart technologies that also enhance their livelihoods.

5. Reduce carbon intensive value chains.

- Shorten and diversify supply chains for greater resilience within food systems.
- Look at emissions in post-harvest, post-production segments of value chains, such as through food loss, transport, storage, and infrastructure.
- Develop early warning and information management systems to reduce food loss.
- Ensure every adaptation project has access to mitigation experts who can help evaluate whether the adaptation changes proposed will increase or decrease emissions.

6. Bridge knowledge gaps on emissions reduction among various stakeholders.

- Foster knowledge sharing to ensure innovations reach farmers.
- Engage high-level policymakers in dialogue on emissions reduction in agriculture – giving them confidence to address it in their Nationally Determined Contributions.
- Support platforms and dialogues at local and regional levels to build policy capacity within governments and extension services.
- Improve our understanding on trade-offs and how to minimize them, such as when improving the diets of marginal communities entails more carbon-intensive infrastructure development.
- Educate and organize the public on food loss and their right to safe, secure, healthy food, so that they start demanding low-emission, low-input and fairly produced food.

ACTION TRACKS

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

KEYWORDS

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

AREAS OF DIVERGENCE

The seven priority areas related to food systems that were presented for discussion in the dialogue were surfaced by nearly 40 survey respondents in the weeks leading up to the dialogue. Some of the dialogue participants noted the absence of some important priorities, including a focus on how we might transform food systems through a better understanding of market demands for increased protein (in particular, meat), and a focus on economic incentives to move towards agroecology. Note that the seven priority areas are not ranked, and neither the survey nor the dialogue asked that these be weighed against one another to reach any consensus around order or prioritization.

While not areas of divergence per se, the dialogue flagged a number of overlapping areas among priorities, including that aspects of several priorities link with agroecology and that justice, equality and inclusion must be seen as cutting across all the other priorities. This highlights the need to think holistically, rather than addressing each priority as a silo. Similarly, some participants highlighted the need to think about how we do research differently, rather than just identifying research gaps and priorities. This would entail new ways of rewarding scientists to motivate, support, and reward participatory and transdisciplinary research; better understanding how research can support transformation; and ensuring the people we are trying to help are engaged in the research process.

In a post-dialogue debrief, IDRC organizers reflected on gaps in representation in the overall consultation process. Some regions (MENA and Asia-Pacific in particular) and stakeholder groups (mainly research users) were underrepresented. ARA and others that use the findings from this consultation process should consider other validation steps to ensure research directions reflect the needs of producers, consumers, and farming communities, not just the perspectives of funders and researchers. There was also some unevenness in the distribution of expertise. Some group conversations included leading experts. For them the gap was less on what to do (they felt there was clear agreement on what works) but how. And while social and economic trade-offs rippled across many priorities, we did not have many economists present, so there was no discussion in, for example, the agroecology group, on economic incentives, while in the discussion of healthy sustainable diets, two of the four participants were economists. This likely skewed the selection and elaboration of proposed actions.

ACTION TRACKS

<input type="checkbox"/>	Action Track 1: Ensure access to safe and nutritious food for all
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KEYWORDS

<input type="checkbox"/>	Finance	<input type="checkbox"/>	Policy
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<input type="checkbox"/>	Women & Youth Empowerment	<input type="checkbox"/>	Trade-offs
<input type="checkbox"/>		<input type="checkbox"/>	Environment and Climate

ATTACHMENTS AND RELEVANT LINKS

RELEVANT LINKS

- **Food system research priorities in the context of climate change**
<http://hdl.handle.net/10625/60830>
- **Priorités de recherche sur les systèmes alimentaires dans le contexte des changements climatiques à propos de l'alliance pour la recherche sur l'adaptation**
<http://hdl.handle.net/10625/60827>
- **Prioridades de investigación sobre los sistemas alimentarios en el contexto del cambio climático**
<http://hdl.handle.net/10625/60825>