CGIAR INDEPENDENT SCIENCE FOR DEVELOPMENT COUNCIL

November 2026

ISDC pre-reading materials for the CC25

CGIAR Futures Study Discussion Guide | Enhancing ISDC Advice | AI for Independent Science Advice | ISDC December 2026 Progress Update

CGIAR Futures Study Discussion Guide: Nutrition, Health, and Food Security (Full report)

Producing more food will not, on its own, ensure future nutrition, health, and food security for all. In future decades, these outcomes may depend increasingly on whether interconnected food systems can withstand compound shocks, maintain nutritious food supplies, and make healthy diets accessible and affordable.

Why this study and why now?

This study examines selected weak and emerging signals and how they might combine and interact with established trends to challenge assumptions underlying CGIAR research in the Nutrition, Health, and Food Security Impact Area. Requested during the 24th CGIAR System Council meeting, the study examines whether the assumptions underpinning today's Portfolio remain relevant in plausible futures where emerging signals intensify or converge. The aim was to inform debate about CGIAR's future science, capabilities, and partnerships—not to predict the future, guide prioritization or comment on the current Portfolio.

This study was an ISDC expert-led, evidence-informed, and iterative synthesis. It looked beyond established megatrends to identify weak and emerging signals that could reshape food systems. It is a selective study, intended to complement other studies based on quantitative forecasting and modeling. The study aimed to identify plausible future scenarios and consider their implications, including the capabilities and partnerships CGIAR may need for the design of future research portfolios to address the Impact Area.

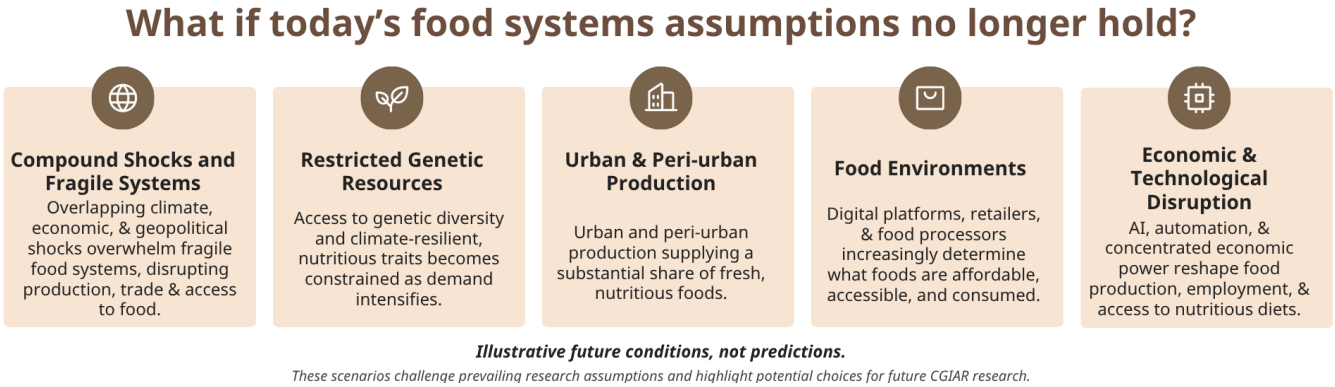
Five potential themes that deserve attention

1. **Resilience under Compound Shocks.** Food and agricultural inputs may become simultaneously inaccessible as trade fragments and key supply chokepoints fail. Research may need to assess shared vulnerabilities across production, inputs, markets, and diets rather than potential individual market shocks in isolation.
2. **Healthy Food for Future Diets.** Reliance on a small number of major staple crops may lead to climate-driven decline in the nutritional quality, availability, and yield of food. Diversification of diets including from a variety of crop, livestock, and aquatic sources is needed to provide affordable nutrient-dense foods. Consideration should be given to the broader application of advances in breeding and biotechnology, including AI-enabled tools, to better harness genetic diversity in genebanks, develop more resilient food and feed crops, reduce dependence on agricultural inputs, and address emerging diseases.
3. **Urban and Peri-urban Food Production.** Urbanization, resource constraints, and technological change could increase the importance of urban areas as sites of agricultural production. More intensive urban agriculture, protected cultivation, and controlled-environment systems may complement rural production and strengthen the supply of selected fresh, nutrient-dense foods. This may create new research needs that differ from those of conventional, extensive agriculture. Research agendas and capacities might need to adequately prepare to address this emerging production frontier.
4. **Food Environments, Affordability, and Urban Diets.** Retailers, processors, food service businesses, and digital platforms may increasingly determine which foods people can afford and choose. Nutritious primary food production alone may not translate into healthy diets. Research boundaries and downstream partnerships merit scrutiny.
5. **NHFS in Fragile and Geopolitically Exposed Systems.** Repeated shocks to infrastructure, institutions, markets, and services may cause lasting nutritional harm even when farms remain intact. Research may need to connect agricultural vulnerability to prolonged nutrition and health losses, alongside humanitarian and health partners.

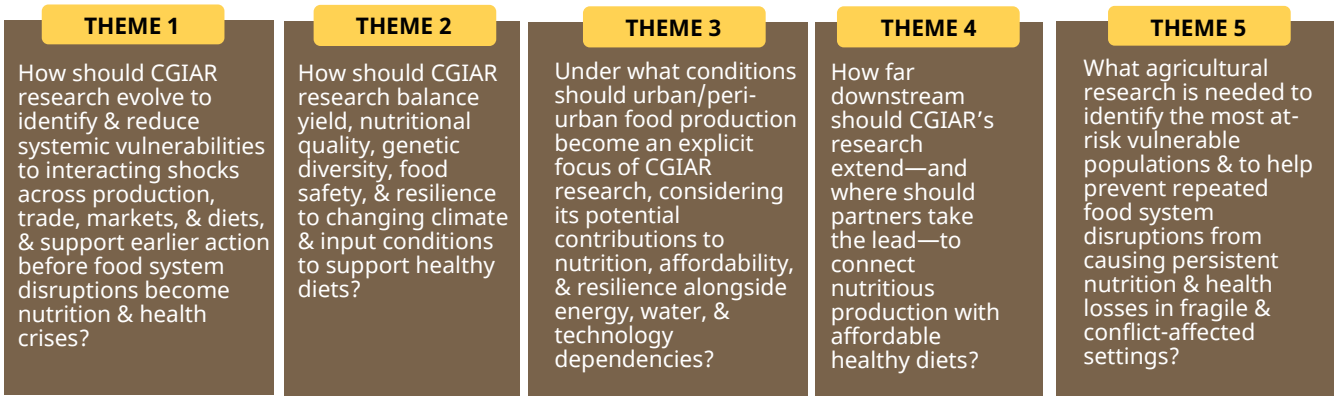
Illustrative plausible scenarios

Imagine a world in which some or all of these exploratory scenarios play out:

- Food and fertilizer trade is increasingly governed by geopolitical blocs, potentially disrupting access to critical supplies but encouraging regional diversification and more resilient production systems;
- Genebank access is disrupted when climate-resilient traits are urgently needed, or, despite this, genomic technologies and distributed conservation are expanding access to genetic diversity;
- Urban and peri-urban food production supplying a substantial share of fresh, nutritious foods, potentially shortening supply chains and reducing losses, while creating new dependencies on energy, water, technology, and capital;
- Food environments are increasingly governed by processors, food establishments, and digital platforms, favoring availability and affordability of highly processed, unhealthy foods compared to fresh, nutrient-dense foods, and contributing to soaring diet-related chronic disease. Or caloric deficiency and lack of dietary diversity are less significant, and opportunities open to mainstream healthy foods into new food environments.
- Food systems are failing because power, water, communications, and payment networks stop functioning, highlighting opportunities to develop more decentralized, redundant, and resilient systems.
- AI and automation transforming employment, food access, and agricultural markets, potentially increasing unemployment, inequality, and market concentration. Or creating opportunities for a new generation of technology-enabled farmers and entrepreneurs.



High-level strategic questions for discussion



Many trade-offs cut across the study: a) efficiency versus resilience and redundancy; b) caloric availability versus nutritional quality; c) rural production versus city food systems; d) disruption vs stability for supply chains, and 5) upstream agricultural innovation versus downstream access to healthy diets. Climate change amplifies each theme. AI and technological transformation could improve analytics, breeding, and production but could also deepen dependence, market concentration, and inequality.

ISDC's strategic science advice

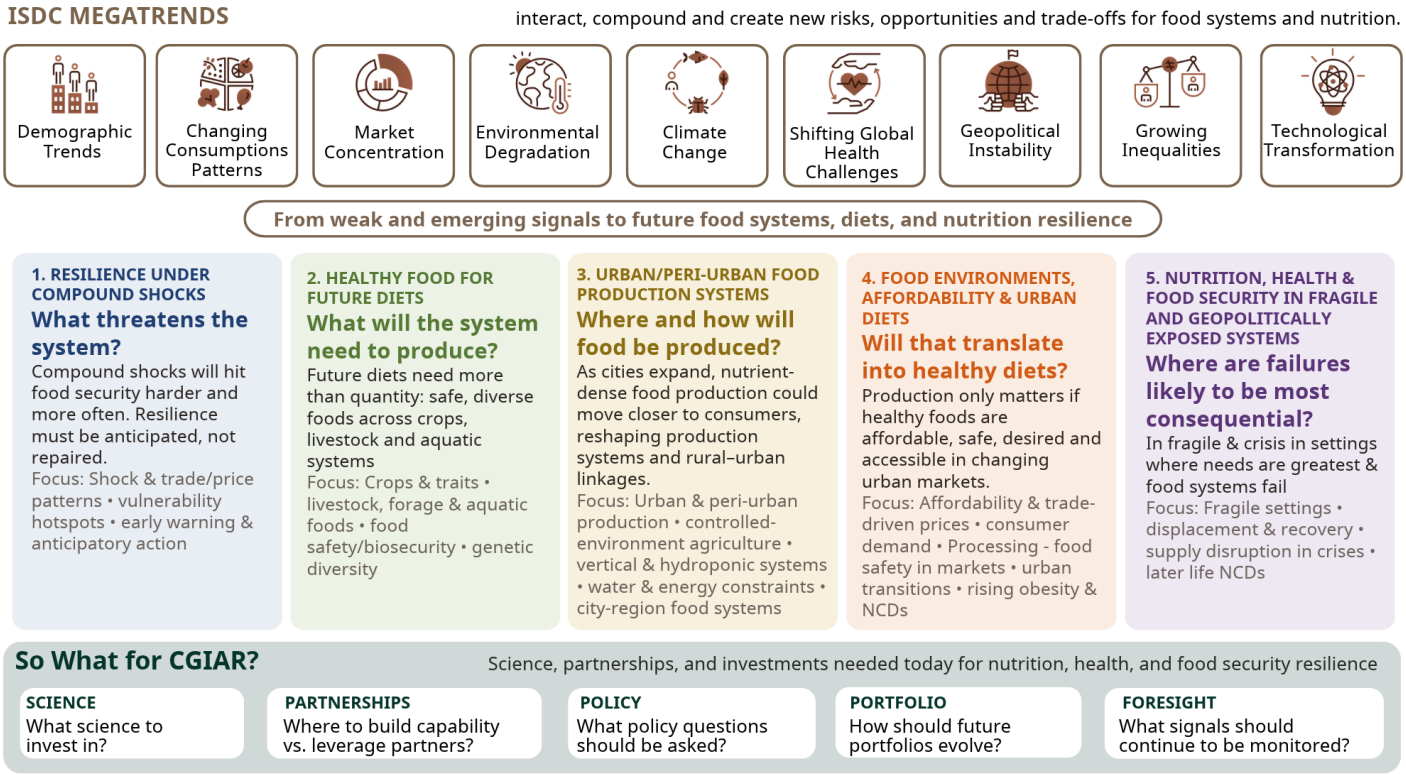
ISDC advises that future portfolio discussions consider the resilience of food systems and their capacity to withstand and adapt to disruptions while continuing to provide diverse nutrient-dense diets. This requires looking beyond agricultural yields and calorie production to consider the nutritional quality of food; access to genetic resources; shifting geographies of food production and trade; the influence of food environments on nutrition; and vulnerabilities in fragile and geopolitically exposed systems.

What CGIAR Council could do next

Use the five strategic questions to inform future strategy and portfolio discussions. Invite CGIAR Council members, CGIAR management, and leadership of Programs and Accelerators, and Centers to consider which underlying research assumptions remain valid, which are already being tested, and where emerging scientific needs may require different capabilities or approaches.

FUTURES STUDY: NUTRITION, HEALTH, & FOOD SECURITY

How will interacting environmental, climate, social, technological, and geopolitical changes reshape future food systems, diets, and nutrition resilience—and what does that imply for future CGIAR research portfolios?



Strategic Questions for CGIAR Discussion

The five themes raise strategic questions about the assumptions underpinning CGIAR research, the potential consequences of emerging developments, and the scientific capabilities and partnerships that may be needed in the future.

Table 1 (p. 4) provides a structured discussion guide linking weak and emerging signals to their potential implications, illustrative plausible futures, affected populations, assumptions to test, and strategic questions for CGIAR. The guide is intended to stimulate further questions and reflections on the future direction of CGIAR research rather than prescribe research investments.

ISDC Strategic Advice and Proposed Next Steps

ISDC advises that future CGIAR strategy and research portfolio discussions consider the implications of the weak and emerging signals identified for NHFS.

Specifically, ISDC invites CGIAR Council, management, and leadership teams to reflect on:

- Which emerging challenges are already being addressed through current research, but where important gaps exist.
- Whether existing scientific capabilities and partnerships are sufficient to respond to plausible future developments.
- Which weak and emerging signals warrant continued monitoring to inform future research decisions.

This process would provide an opportunity to consider the robustness and adaptability of CGIAR's portfolio across different plausible futures, to encourage forward-looking discussion, and how CGIAR can maintain its scientific relevance and contribution to NHFS as global food systems evolve. ISDC remains ready to contribute further to discussions on these questions.

Table 1 Nutrition, Health, and Food Security Discussion Guide

ISDC Theme	Weak/Emerging Signals	Future Implication(s)	Populations Most Affected	Illustrative Plausible Scenario	Research Assumption to Test	CGIAR Question
1. Resilience under Compound Shocks	Geopolitical disruption to food & input supplies; concentrated suppliers & import dependence; fertilizer, energy, feed, & logistics exposure; trade-route chokepoints; compound climate-food security events	The type & impact of compound shocks will vary by place. Disruptions can propagate across inputs, production, logistics, prices & diets, turning localized shocks into global food/nutrition crises.	Small-scale producers; low-income consumers; import-dependent populations	Global food trade fragments into geopolitical blocs. A small number of countries or blocs control critical shares of staples, fertilizer, feed, energy, or agricultural technologies, & access increasingly depends on political alignment. Major chokepoints are periodically unavailable. Some countries can no longer assume global markets will fill domestic production gaps.	Existing approaches to agricultural resilience are sufficient to address increasingly interconnected shocks across production, trade, markets and diets.	How should CGIAR research evolve to identify & reduce systemic vulnerabilities to interacting shocks across production, trade, markets, & diets, & support earlier action before food system disruptions become nutrition & health crises?
	Escalating geopolitical disruptions; export restrictions; unusual price or supply volatility; simultaneous climate & production shocks; deterioration in diet quality or market access	Earlier detection is increasingly possible, but value depends on translating signals & data into timely decisions under uncertainty.	At-risk producers & food insecure populations			
2. Healthy Food for Future Diets	Nutritional erosion of staples; emerging pests & diseases; underutilized/opportunity crops; water reuse, & closed-loop systems; reduced access to key inputs	Adequate calories may coexist with declining diet quality. Production may shift geographically toward more resilient crops, diversified systems, & less land- or water-dependent production.	Small-scale producers; innovation-ready farmers; nutritionally vulnerable populations	Conflict, political fragmentation, funding losses, or climate disasters make some global genebank collections inaccessible or non-operational just as demand for heat-, drought-, pest-, & nutrition-related traits accelerate. Alternatively, genomic technologies & distributed conservation radically reduce reliance on centralized collections.	Existing approaches to agricultural productivity, genetic resources, breeding, and food safety will remain sufficient to ensure the availability of safe, diverse, & nutrient-dense foods under changing conditions.	How should CGIAR research balance yield, nutritional quality, genetic diversity, food safety, & resilience to changing climate & input conditions to support healthy diets?
	Restructuring & concentration of value chains; growth of food manufacturing; AMR; PFAS & microplastic contamination; post-harvest contamination; expansion of processed & ultra-processed foods	Processing & value chain change can improve access, convenience & nutrition or amplify contamination, concentration & poor diet quality.	Producers; agrifood SMEs; consumers			
3. Urban/Peri-urban Food Production	Expansion of intensive peri-urban agriculture; diversification of production systems; protected and controlled-environment cultivation; high productivity per unit of land; emerging research needs beyond conventional field-based agriculture.	Production of some nutrient-dense foods could move closer to consumers, potentially reducing losses & some supply chain exposure, while creating new dependencies on energy, water, capital, & technology.	Urban & peri-urban producers; innovation-ready producers; food system enterprises	Urban/peri-urban areas become increasingly important sites of agricultural production, combining intensified conventional agriculture with protected cultivation. And, expansion of technically and economically viable, controlled-environment systems. These developments create new production models.	Rural production systems will remain the principal source of nutritious foods for growing urban populations, with urban/peri-urban production playing a complementary role.	Under what conditions should urban/peri-urban food production become an explicit focus of CGIAR research, considering its potential contributions to nutrition, affordability, & resilience alongside energy, water, & technology dependencies?

ISDC Theme	Weak/Emerging Signals	Future Implication(s)	Populations Most Affected	Illustrative Plausible Scenario	Research Assumption to Test	CGIAR Question
4. Food Environment, Affordability, & Urban Diets	Expansion of formal retail, street food, & online delivery; growth of food away from home; ultra-processed food expansion; declining home food preparation; rising financial & time costs of healthy diets; unequal access to nutritious foods	Food availability may no longer translate into healthy diets if affordability, convenience, marketing, platform economics, & purchasing power increasingly determine what people consume.	Low-income urban & peri-urban consumers; nutritionally vulnerable populations	Digital platforms, processors & food service companies become the primary gatekeepers of diets in many rapidly urbanizing LMICs. AI-driven pricing, marketing, & personalization shape what people eat more strongly than traditional markets or home cooking.	Increasing the availability of nutritious agricultural products will translate into healthier diets, even as commercial food environments increasingly shape consumption.	How far downstream should CGIAR research extend to understand whether nutritious agricultural products reach consumers as affordable, accessible, & desirable foods, & where should other partners take the lead?
5. Nutrition, Health & Food Security in Fragile & Geopolitically Exposed Systems	Food weaponization; export restrictions & strategic stockpiling; sourcing around allies; debt & financing constraints; declining or shifting ODA & humanitarian finance	Trade, finance, & geopolitics can alter food system architecture & transmit risk into peaceful as well as crisis-affected countries, with uneven impacts across populations.	Food insecure populations; import-dependent populations; smallholder farmers	Conflict is increasingly waged through cyberattacks, autonomous technologies & deliberate disruption of water, electricity, communications, satellites, ports, logistics & digital payments. Severe water scarcity becomes a source of geopolitical tension. Farms may remain physically intact while the systems needed to produce & move food stop functioning.	Existing approaches to agricultural research and food system resilience adequately account for vulnerabilities arising from geopolitical disruption, infrastructure dependence, & institutional fragility.	What agricultural research is needed to identify the most at-risk vulnerable populations & to help prevent repeated food system disruptions from causing persistent nutrition & health losses in fragile & conflict-affected settings?[1]
	Compounding shocks; displacement; disrupted services & markets; fiscal stress; reduced surveillance, extension & social-protection capacity	Repeated crises can create persistent nutrition & health losses that are not captured by food availability or food security indicators.	Crisis-affected populations; displaced people & host communities			

[1] While Theme 1 asks how shocks become systemic, this theme asks how systemic disruption becomes a human crisis and where and for whom those consequences are likely to be most severe and persistent.

Enhancing ISDC Advice: Assessing Awareness, Perceptions, and Use of ISDC Advice Across CGIAR **(Full report)**

This study examined the value, visibility, and use of advice from the Independent Science for Development Council (ISDC), and how it could better support CGIAR's governance and strategic decisions. Responding to the Strategic Impact, Monitoring and Evaluation Committee (SIMEC) recommendation to formalize stakeholder feedback, the study considered the experiences of CGIAR Council and Board members, leadership, and research managers. The methods used were stakeholder interviews, online survey, and document review to triangulate findings.

Main Findings

Two central findings emerged that were consistent through data collection methods. First, ISDC is valued for its perspective, independence, and scientific credibility. Second, advisory products, such as Quality of Research for Development (QoR4D), Comparative Advantage, Megatrends study, and other publications are valued among the respondents who are aware of them. However, the existence of these advisory concepts does not necessarily translate into timely, visible influence on governance decisions. ISDC can better support stakeholders by providing timely, clear, engaging, and decision-oriented advice.

What Do the Findings Mean?

The evidence indicated that ISDC's strongest contribution is its independent commentary and science quality assurance for CGIAR Council. Further strengthening that contribution requires addressing an identified gap between the production of credible advice and enabling its consideration at consequential decision points. For example, a clearer connection between the scientific assessment about what is at stake, which assumptions or risks matter, what alternatives and trade-offs exist, and what each choice implies would help decision making.

To better support usefulness, stakeholders reported favoring earlier ISDC advice that aligns with governance and Portfolio cycles and concise decision-oriented summaries accompanying detailed assessments, with opportunities for two-way dialogue. They also distinguished strategic frameworks from implementation tools. For example, QoR4D and Comparative Advantage remain valuable, but their application must be tailored to different research contexts. Specific suggestions for ISDC included the development of worked examples, guidance on specific areas, as well as lighter-touch application of frameworks to guide recurring strategic discussions.

Limited visibility into what happens after ISDC issues advice makes it difficult to assess uptake. Document evidence shows that selected concepts have become embedded in CGIAR, yet attribution and subsequent decision pathways are often unclear. Better feedback on how CGIAR Council considers the advice, and how it was implemented could improve ISDC's effectiveness without assigning it with the responsibility for implementation and compliance monitoring. CGIAR governance and management retain those responsibilities.

Considerations for ISDC Workplans

The study identified four interconnected questions:

- How can ISDC maintain its independence while making advice more usable for CGIAR Council decisions?
- How should advisory products and engagement be tailored to strategic decision cycles without diluting scientific rigor?
- How can ISDC support better timing across the System in its role, to enhance the sequencing of advice and subsequent decision making?
- What proportionate feedback arrangements would allow ISDC to learn from the consideration and use of its advice, while respecting institutional boundaries?

Study findings suggested several areas for consideration, including Portfolio prioritization, futures-oriented work, and potential updates to QoR4D and Comparative Advantage. Stakeholders valued ISDC's independent, crosscutting futures perspective and favored a rolling approach combining annual horizon scanning with deeper synthesis aligned with CGIAR strategic cycles, drawing on existing Center-level foresight capabilities. These stakeholder preferences, together with evidence on uptake and barriers, will provide inputs to ISDC in 2027.

Notably, interpretation of the data requires caution. Despite extensive outreach, only 50 of 158 invited stakeholders responded to the survey (32%), resulting in small subgroup samples. In addition, document correspondence provides evidence of stakeholder engagement but cannot demonstrate that ISDC advice directly influenced decisions. Nevertheless, the convergence across interviews, survey, and document review supported the central conclusion that ISDC's opportunity is to strengthen the pathway from independent scientific advice to informed governance decisions, rather than to broaden its institutional role.

AI for Independent Science Advice: Assessing the Role of Large Language Models in ISDC Review Processes **(Full report)**

Large language models (LLMs) offer opportunities to strengthen independent scientific advice, but their value depends on the task. The Independent Science for Development Council (ISDC) conducted two case studies in 2026 and found that LLMs can improve the focus, organization, and synthesis of complex information, while human experts remain essential for scientific judgment, contextual interpretation, and strategic prioritization. The findings point toward complementary human–LLM approaches rather than replacement of expert review within ISDC processes.

For ISDC, this distinction is consequential. Its mandate to advise CGIAR Council on scientific quality, portfolio coherence, and strategic direction requires both the capacity to assess substantial volumes of evidence and the independence to challenge assumptions, weigh competing perspectives, and identify what matters most. As resources tighten and expectations for timely advice increase, LLMs warrant systematic assessment to ensure the outputs are comprehensive and accurate.

Two case studies, complementary evidence

ISDC examined LLM performance in two distinct advisory activities:

Case Study 1: Strategic document advice. This real-time study examined LLM use in a document review of 13 CGIAR Programs and Accelerators. ISDC experts and an LLM independently reviewed the same source documents using a structured template. The Secretariat then used the LLM to develop cross-checked syntheses and identify five overarching CGIAR Portfolio themes, which ISDC discussed and refined through consensus building meetings. The study used a mixed-method approach to assess LLM performance and utility, drawing on facilitated discussions with ISDC experts and three sequential surveys to capture their experiences, perceptions, and judgments, including blind review aspects. This approach enabled an assessment of the relative strengths, limitations, credibility, and potential roles of LLMs within an ongoing scientific advisory process.

Case Study 2: Scientific proposal reviews. This retrospective case study examined LLM performance against ISDC's consensus reviews of three CGIAR Portfolio proposals done by experts before LLMs were available. Two LLM models independently assessed the proposals using ISDC's original review guidance, scoring criteria, and templates. Assessments were repeated with additional contextual documents to examine whether more information improved performance. LLM outputs were compared with human reviews to evaluate scoring agreement, scientific reasoning, recommendations, and supporting evidence, including verification of source references. A blind comparison survey of human and LLM review was followed by an informed assessment after authorship was disclosed. Together, these analyses examined the strengths, limitations, and potential roles of LLMs in scientific proposal assessment, including tasks where expert judgment was thought to be essential.

The studies combined quantitative comparisons, qualitative feedback, source verification, and structured expert assessment. The sequential blind and informed surveys helped distinguish actual perceptions of review quality from biased reactions to LLM authorship. Statistical testing was applied where appropriate, including adjustments for multiple comparisons. Although the two studies were relatively limited in sample size and only two LLM models were tested, the outputs point to five findings that provide a basis for future ISDC use of LLM support.

Five findings shape the way forward

A. LLM value is task dependent. In Case Study 1, 73% of respondents who were unaware of the review's authorship preferred the LLM review for focus, and 62% for identifying Portfolio-level implications. The LLM demonstrated potential to organize large volumes of information and identify cross-cutting patterns. In Case Study 2, the LLM was most useful for specific supporting tasks, such as locating relevant evidence in source documents, checking whether required information was included, and identifying inconsistencies. These findings support a preliminary distinction between tasks suitable for LLM assistance and those requiring expert scientific judgment.

B. LLMs cannot substitute for expert scientific judgment. Across both studies, human reviewers demonstrated advantages in contextual interpretation, assessing relevance, and weighing competing evidence. This distinction was particularly pronounced in Case Study 2, where all six participants preferred the human assessment. Although LLMs sometimes assigned the same scores as human reviewers for Likert criteria, their reasoning and identification of scientific concerns differed. Numerical scoring agreement does not necessarily indicate equivalent scientific assessment.

C. Combining human and LLM reviews offers complementary strengths. Case Study 1 highlighted the LLM's ability to organize information and identify crosscutting patterns, complementing experts' contextual understanding and scientific judgment. Case Study 2 identified opportunities for LLMs to support specific tasks, such as evidence checking, while experts assess scientific assumptions and implications. However, neither study established that integrating human and LLM reviews consistently improved final review quality or reduced total expert effort. Further testing is needed to determine how these complementary strengths can be combined effectively.

D. Transparency does not replace expert verification. Case Study 1 found that disclosing LLM authorship did not reduce respondents' confidence in the review. However, perceived credibility does not necessarily indicate scientific accuracy. Case Study 2 showed that even when LLM-generated findings could be traced to source documents, the conclusions drawn from that evidence were not always supported by appropriate interpretation. Together, these findings demonstrate that disclosure and source traceability alone cannot establish scientific validity, underscoring the need for expert verification of LLM-generated evidence, interpretations, and conclusions.

E. Risks go beyond factual errors. Both studies identified risks that LLM-generated reviews may omit important contextual information, overlook alternative scientific perspectives, or inadequately reflect uncertainty. In Case Study 1, respondents expressed concern that reliance on LLMs could narrow the diversity of perspectives considered, including minority viewpoints and institutional knowledge. These limitations may not be apparent even when LLM outputs appear accurate and convincing, reinforcing the need for expert oversight to preserve the depth, nuance, and independence of scientific advice.

Implications for ISDC's 2027 LLM Guidance Note

Together, the studies provide an empirical starting point for developing an *ISDC LLM Guidance Note* in 2027. The *Guidance Note* will clarify where LLM support may be appropriate, under what conditions, and with which safeguards.

A central consideration will be a task-based framework distinguishing bounded activities suitable for LLM support, expert-led activities that may benefit from LLM inputs and decisions requiring human scientific judgment and accountability. The preliminary classification developed in Case Study 2 provides a foundation that can be extended to strategic document reviews and portfolio-level synthesis.

The *Guidance Note* will also establish expectations for tracing analytical claims to their supporting evidence, verifying the accuracy of LLM-generated findings, documenting prompts and model versions, and safeguarding confidentiality and data security. It will also address the need to preserve important contextual information and ensure that LLM-assisted reviews consider alternative scientific interpretations and minority viewpoints. The *Guidance Note* will define when expert judgment is required and clarify responsibility for the final synthesis and advice.

An important conclusion of this work is that LLMs can strengthen selected components of ISDC reviews. The challenge for ISDC is to determine how to capture those benefits without compromising scientific rigor, independence, diversity of perspectives, or human accountability. The 2027 *Guidance Note* will offer the opportunity to turn these initial findings into a practical, adaptable framework for responsible use.

ISDC December 2026 Progress Update

This Progress Update documents key outcomes, outputs, and activities of the Independent Science for Development Council (ISDC) since 01 July 2026.

Workstreams of ISDC Workplan 2026

The ISDC 2026 workplan is grounded in the System Council Advisory Bodies' Consolidated 2026 Workplan and 2026-2027 Budget Summary and informed by the SIMEC Review of CGIAR's Advisory Bodies, both approved during the 23rd meeting of the System Council (SC23) in December 2025. In addition, during the 24th meeting of the System Council (SC24) in June 2026, SC requested ISDC to conduct a futures study for discussion at the next Council meeting, to highlight elements needed for future Portfolios that deliver to the Nutrition, Health, & Food Security (NHFS) Impact Area.

ISDC had four workstreams during the second half of 2026:

- Stakeholder study to enhance future ISDC advice;
- Two case studies on the role of Large Language Models (LLMs) in ISDC processes; and
- Discussion paper on NHFS.
- Participation in external reviews of CGIAR centers focusing on scientific and technical aspects

1. Enhancing ISDC Advice: A CGIAR Stakeholder Awareness and Use Assessment Summary

This workstream focused on the recommendation of the SIMEC Review to enhance feedback and engagement; both in terms of feedback mechanisms from CGIAR Council assisting ISDC in providing the most impactful recommendations, as well as improving the interaction of ISDC with CGIAR entities, management, research programs, and other governance bodies.

Following the presentation of the study concept note at SC24, ISDC conducted an assessment, using a mixed-methods approach, engaging a broad cross-section of CGIAR stakeholders, including CGIAR Council, CGIAR Board, Global Leadership and Global Science Teams, and Program/Accelerator Leads. The study findings, a CC25 pre-read, are intended to inform broader ISDC strategic planning and deliberations in 2027, within the overall aim to deliver timely, rigorous, and actionable scientific advice.

2. AI for Independent Science Advice: Assessing the role of LLMs in ISDC Processes

In line with the SC23 Chair Summary, advances in AI present potential opportunities to enhance elements of advisory processes. However, they must first be evaluated to assess how their use might support expert review. To explore technology advancements, ISDC adopted an exploratory, case study–based approach to assess the role of LLMs across two of its core functions:

- Strategic document reflection (first half of 2026)
- Scientific proposal reviews (second half of 2026)

The results of the two case studies are presented in a CC25 pre-read**,** discussing how structured workflows can potentially combine LLM-supported tasks with independent expert assessments. ISDC will proceed to synthesize the learnings from the two case studies into an advisory note with recommendations for future ISDC workflows in 2027.

3. CGIAR Futures Study: Nutrition, Health, and Food Security

This workstream responds to a request made during the 24th meeting of the System Council (SC24), to conduct a **study that highlights elements needed for future CGIAR research portfolios that deliver to the NHFS Impact Area for strategic discussion at CC25.**

The CC25 pre-read study looks beyond established megatrends to weak and emerging signals that could reshape food systems. It asks whether assumptions underlying today's research would still hold if the identified signals intensified or converged. Its purpose is to stimulate discussion about the science, capabilities, and partnerships needed to inform future CGIAR research portfolios. The pre-read has a companion Discussion Guide Brief.

4. Participation in Center External Reviews (CER)

ISDC contributed to the first CGIAR CER, of IWMI, supporting a cross-functional approach between the Independent Advisory and Evaluation Service (IAES) Evaluation Function and ISDC. The review drew on ISDC's Quality of Research for Development (QoR4D) framework as part of its conceptual and evaluative framework, while an ISDC member and ISDC Secretariat staff participated in the CER steering forum, providing strategic and methodological advice and contributing to quality assurance. The ISDC Chair participated in the CER consultative group. Ongoing and future CERs will follow the same model of ISDC contribution.

ISDC Chair also participated in the selection process for the Senior Evaluation Manager for CER.

ISDC Membership Update

Two ISDC members, Dr. Erin Lentz and Dr. Ingrid Fromm, completed their one-year tenure in 2026. As per ISDC Member Competencies, time commitment and honorarium arrangements, all members are subject to a one-year assessment period for confirmation of continuation of the term. During Q4 2027, ISDC Chair conducted the two assessments required, confirming continuation of the term for both members.

ISDC also contributed to the dissemination of the vacancy for two new ISDC members, published by SIMEC in August 2026. The ISDC Chair served as an observer on the nominations panel.

Coordinating Across CGIAR Stakeholders: Meetings and Communication

ISDC held five regular monthly virtual meetings during the reporting period. In addition, ISDC organized targeted engagement with five CGIAR 2025-30 Portfolio teams with topics aligned with the 2026 futures study on Nutrition, Health, and Food Security Impact Area, including:

- Sustainable Animal and Aquatic Foods (August 2026)
- Breeding for Tomorrow (August 2026)
- Policy Innovations (September 2026)
- Food Frontiers and Security (October 2026)
- Better Diets and Nutrition (October 2026)

ISDC members attended multiple CGIAR Council, Board, and Portfolio touchpoints held during the period. ISDC also accepted the invite from the Global Science Team to participate in a discussion session on application of QoR4D framework across CGIAR Portfolio *(scheduling in progress)*.

As per the ISDC workplan, the second 2026 face-to-face meeting will be held in Rome, Italy, 6-8 December 2026, focusing on 2027 planning, in view of work finalized and presented to CC25. *(IAES, including ISDC Secretariat, is hosted by the Alliance of Bioversity International and CIAT, at Rome HQ).*

ISDC Chair, Lesley Torrance, attended the following meetings since July 2026:

- Meetings with SIMEC Chair (July, November)
- 2nd CGIAR Board meeting (September, Ibadan, Nigeria); 3rd CGIAR Board meeting (November, virtual)
- Regular meeting between EMD, Chief Scientist and Advisory Bodies (October)
- Meeting with Chief Scientist (November)
- Center External Review: Consultative Group Meeting (scheduling in progress)

Finally, to maintain strong communication between the ISDC and CGIAR Council, the two Chairs met in November 2026, following a Meet & Greet session held earlier in the year. They discussed ISDC contribution to CC25 as well as establishing a regular cadence of meetings in preparation for the twice-yearly CGIAR Council.

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