CAPI
THE CANADIAN AGRI-FOOD POLICY INSTITUTE

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Looking for Innovation Challenges, change and the need for reform within Agri-Food R&D

A *What We Heard* Report prepared for CAPI by Elisabeta Lika

What We Heard Report

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The Canadian Agri-Food Policy Institute's mission is to lead policy development, collaborate with partners and advance policy solutions within agriculture and food.

This report was funded in part by Agriculture and Agri-Food Canada under the Sustainable Agricultural Partnership's AgriCompetitiveness Program.

The findings and analysis in this report are informed by data from a national survey distributed by CAPI and insights from the Agri-Food Research, Innovation, Skills & Education (AgRISE) workshop convened by CAPI, the Deans Council Agriculture, Food & Veterinary Medicine, Canadian Federation of Agriculture, and EMILI.

Canada's agricultural R&D:

Understanding challenges, framing the future

Why it matters

Canada's ag R&D system powered breakthroughs like the $30 billion canola crop, steady dairy gains, and crop innovation for decades.

Today's global disruptions, climate, and new technologies mean yesterday's model isn't enough to meet tomorrow's needs.

Strengthening Canada's agricultural innovation system is vital for food security and global competitiveness.

Evidence at a glance

Funding drop
21% decline since 1985

Aging infrastructure
95% reduction in capital funding

Fragmentation
Siloed efforts, national vision lacking

Private sector gap
<25% of R&D from private sources

Talent risk
30% of workforce retiring by 2030

Adoption lag
Only 54% of rural Canada with reliable broadband

What needs to happen first

Building a shared understanding of the challenges is essential. Quick fixes and siloed initiatives cannot solve deeply rooted problems. Honest, inclusive dialogue across the sector must come before solutions.

Path forward

See strengths as tools
Research base, reputation, and science to serve new goals

Prioritize long-term thinking
Plan beyond the next funding cycle

Turn obstacles into opportunities
Modernize, don't just patch

Learn from leading examples
e.g. Australia's national coordination

Utilize existing frameworks to unify action
Innovation Continuum

Looking ahead

As part of a broader initiative, this report lays the groundwork. Stay tuned for further analysis and action-oriented policy work.

Note from CAPI

For complex issues like agricultural R&D, making real progress depends on trust, honest and productive dialogue, and looking beyond individual interests to see the bigger picture. That's why combining survey evidence with in-depth workshop discussion is so helpful. It gives space for honest, sometimes tough questions about whether the current system is truly fit for the 21st century and how to foster a long-term vision that transcends individual interests.

This approach helps test whether there's real consensus or just parallel conversations. When stakeholders feel invited to challenge assumptions, listen to each other, and reflect on both local needs and wider priorities, it creates a better starting point for long-term reforms everyone is willing to support.

This report is part of a CAPI initiative exploring the future of Canada's agricultural R&D system, aiming to foster inclusive, evidence-informed dialogue about potential reforms. This and other reports, dialogues and communications, encourage reflection on the role the agriculture R&D system needs to play in helping Canadian agriculture and agri-food achieve its full potential.

That broader initiative is organized around four objectives:

- Build consensus on the main challenges and opportunities in Canada's agri-food R&D system.
- Co-design a new framework by convening funders, performers, and users to define shared 21st-century priorities.
- Develop actionable recommendations to guide program and policy changes that are grounded in evidence and realities on the ground.
- Assess future needs, including tools and processes needed for continuous learning and real improvement.

Key Takeaways

1. **There is broad agreement that the agricultural R&D system is facing major challenges.** While stakeholders see strengths across the agricultural R&D system, there's widespread recognition that reform is needed.
2. **Stronger alignment and dialogue on the path forward can accelerate progress.** Because innovation is central to Canada's long-term resilience, competitiveness, and food security, treating it as a shared national priority, and clarifying how different actors contribute to that role, would help the system move forward with greater coherence and momentum.
3. **Delaying action risks losing ground.** If efforts to improve the agricultural R&D system stall, the sector faces the threat of losing investment, talent and progress, reducing competitiveness, productivity, and long-term resilience.
4. **Progress requires partnerships and leadership**. Neither the public nor the private sector can lead reform on its own, but governments play an important role as a funder, performer and regulator and they will play an important role leading change.
5. **Big changes are needed, but small change is better than no change.** Building consensus for reform is not easy, but dialogue, engagement and incremental change can build momentum towards more meaningful reform.

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Context and purpose

Canada's agricultural R&D system is navigating tighter budgets and higher expectations. With federal funding for agricultural R&D shrinking over time and federal government facing tough trade-offs across a long list of priorities, questions about "what more should be funded" have turned into questions about "what really needs to change." Most new spending, if it comes at all, will be incremental, aimed at essentials at a time when every part of the public sector is being asked to justify its impact.

This stage of agricultural R&D initiative draws from two main sources: a national survey developed by CAPI and a focused Agri-food Research, Innovation, Skills & Education (AgRISE) roundtable discussion. The CAPI survey gives a quantitative snapshot of how different stakeholders in the sector see the current state and future needs of agri-food R&D. The AgRISE workshop, held in Winnipeg in July 2025, provided space for farmers, industry, researchers, and others to come together to discuss priorities of the system and trade-offs. AgRISE serves as a collaborative effort to deepen understanding beyond numbers and to grapple with real challenges and potential solutions collectively.

The survey drew responses from 114 stakeholders from across the sector, including farmers and processors, academic researchers, government officials, and industry representatives, with particularly strong participation from the Prairie provinces. Most respondents reported being very or somewhat familiar with the current innovation system, so the results[1] reflect the views of people who are already engaged in it rather than the general public.

The feedback from both sources points to challenges that begin well before dollars are allocated. Coordination is a persistent bottleneck, programs tend to look for short-term results, infrastructure investments are limited, and there are questions about how effectively research findings reach farmers that could apply them.

These challenges appear differently depending on where someone sits along the innovation continuum. The current system seems to deliver the most value to those who are already well connected, such as established research groups, major commodity organizations, and longstanding industry players who have familiarity with funding channels and established relationships. For these groups, programs and networks can be navigated or leveraged to good effect, and some see the system as generally fit for purpose.

"The conversation has to move beyond just funding. Put out small fires without knowing what is causing the problem. Get problems and challenges out there, then figure out funding and innovation."

- Workshop participant

[1] The findings should be interpreted as indicative of stakeholder perspectives rather than a statistically representative picture of all actors in Canadian agriculture.

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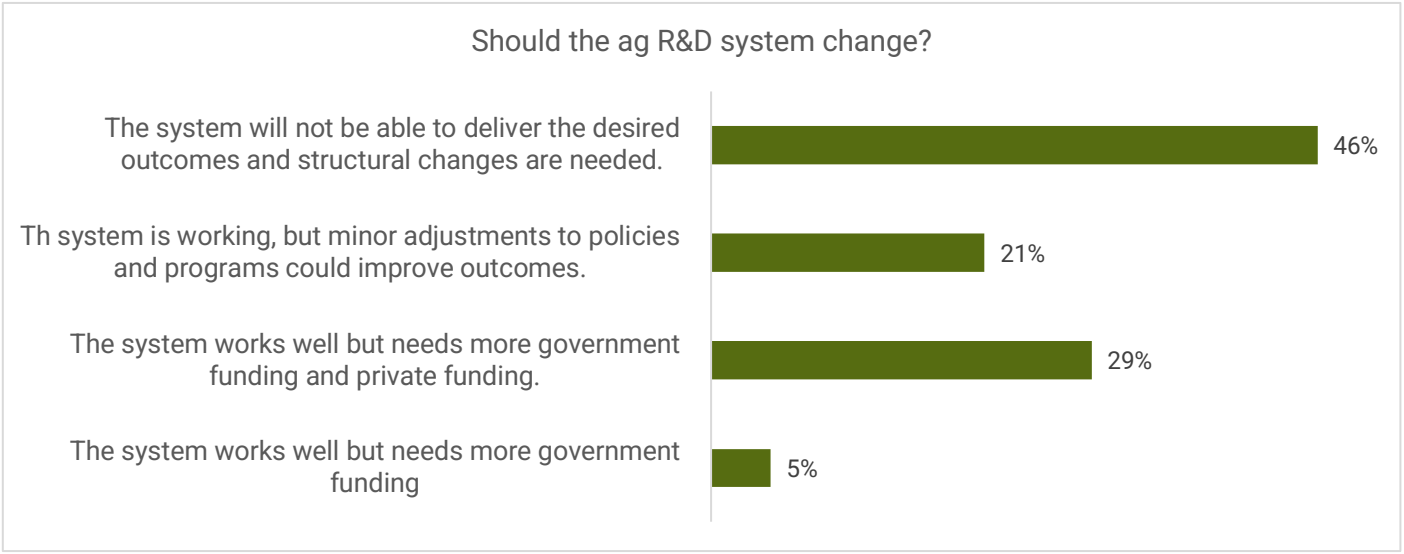
However, those newer to the system, working in less mainstream areas, moving between regions, or lacking ties to established organizations face more frequent challenges. These include navigating complicated funding applications, overlapping program mandates, difficulty accessing infrastructure, and less clarity on how to have their priorities reflected in decision-making. Discussions at AgRISE highlighted that this is not simply a matter of experience or persistence: even active contributors sometimes find themselves repeating work, missing out on knowledge transfer, or facing gaps between research and real-world adoption. Many who seek practical reform are motivated by these lived inefficiencies and by the sense that value and opportunity are not widely shared or evenly distributed.

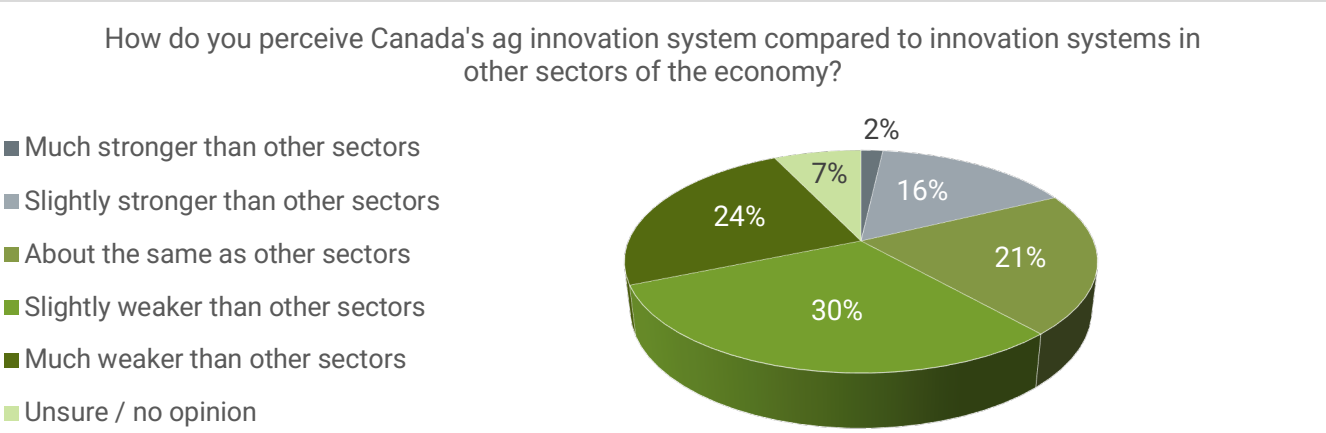
This variation across the sector highlights why uniform, top-down fixes are unlikely to succeed on their own. The strengths that currently serve many organizations can be built upon, but reforms will need to address persistent barriers and friction points that show up unevenly, sometimes depending on the type of organization, the region, or the stage of innovation involved. The findings that follow focus on what stakeholders identify as essential to a more effective system and how progress can be made within current realities.

System performance and appetite for change

The agriculture sector recognizes both its rich history of innovation and the high expectations now placed on its R&D system. CAPI's earlier report 'At a Turning Point: Canada's Agricultural R&D' has acknowledged significant achievements and world-class outcomes enabled by the innovation system, from canola and dairy productivity to new crop varieties, as evidence of what a well-aligned system can deliver. However, the present survey and workshop continue to confirm that persistent bottlenecks and systemic challenges remain.

Three out of ten respondents see Canada's agri-food innovation system as "slightly weaker" than those in other major sectors, and nearly one-quarter judge it as "much weaker." Fewer than one in five describe the sector as "slightly stronger," with only a small share selecting "much stronger".

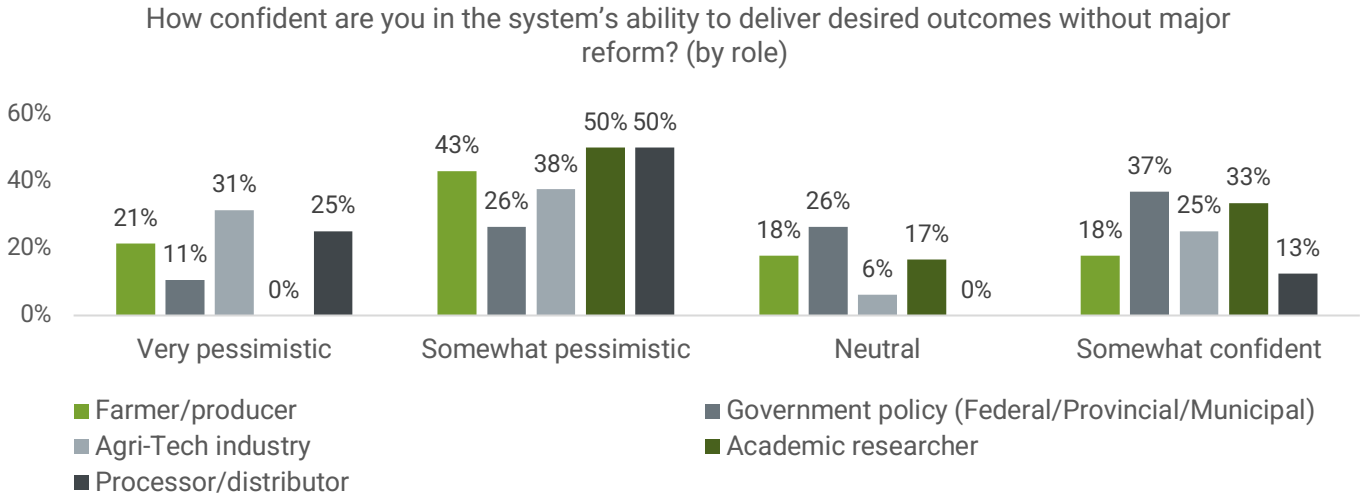




"The tire is leaking, but it isn't flat. But we aren't pulling over to change the tire [because we keep tolerating slow decline rather than confronting the need for system reform]. Unwilling to act. "

- Workshop participant

Confidence in the system's ability to deliver meaningful outcomes without a major reform is modest across the board, but the desire for change varies by stakeholder role. Those most involved with market delivery, such as farmers, processors, and agri-tech leads, express the strongest desire for change, emphasizing concrete reforms and faster adoption. By contrast, many academic and government participants are more likely to favour steady progress and continuity over sweeping change.



What emerges from both the survey and the AgRISE roundtable is a strong signal that incremental tweaks to programs will not address the core issues. Credibility and better value for investment will come through solutions that advance governance, regulatory clarity and speed, and especially new approaches to extension and knowledge mobilization that connect ideas with application.

There is increasing recognition that the real cost of inaction is reduced competitiveness, stalled productivity, and missed opportunities for Canada's food and farm sector, all of which impact both immediate results and long-term resilience.

Common roadblocks in ag R&D

As highlighted in CAPI's 'At a Turning Point: Canada's Agricultural R&D' report, despite a consensus on the need for meaningful change, the sector continues to encounter persistent barriers that prevent even well-supported reforms from taking root.

While survey and workshop discussions concentrated on challenges within the research and development stages, participants consistently framed their concerns within the broader agricultural innovation system. This reflects an understanding that obstacles at any point along the continuum, from fundamental research through commercialization to on-farm adoption, affect the entire pipeline. Delays in regulatory approval, for instance, don't just slow product launches but also discourage early-stage investment. Similarly, weak extension services undermine the value of upstream research by preventing practical application at the farm level.

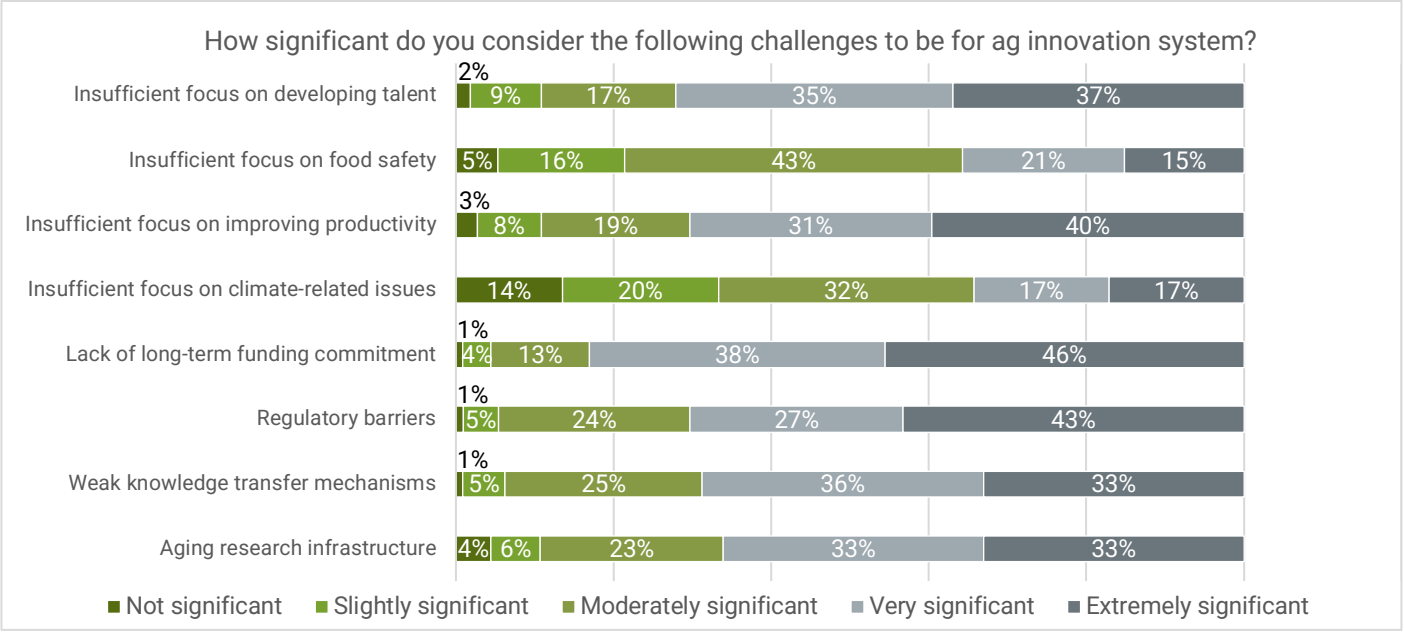
Image adapted from Innovation, Science and Economic Development (ISED)

Progress in strengthening ag R&D system is seen as less about solving technical issues and more about removing persistent obstacles rooted in system design and governance.

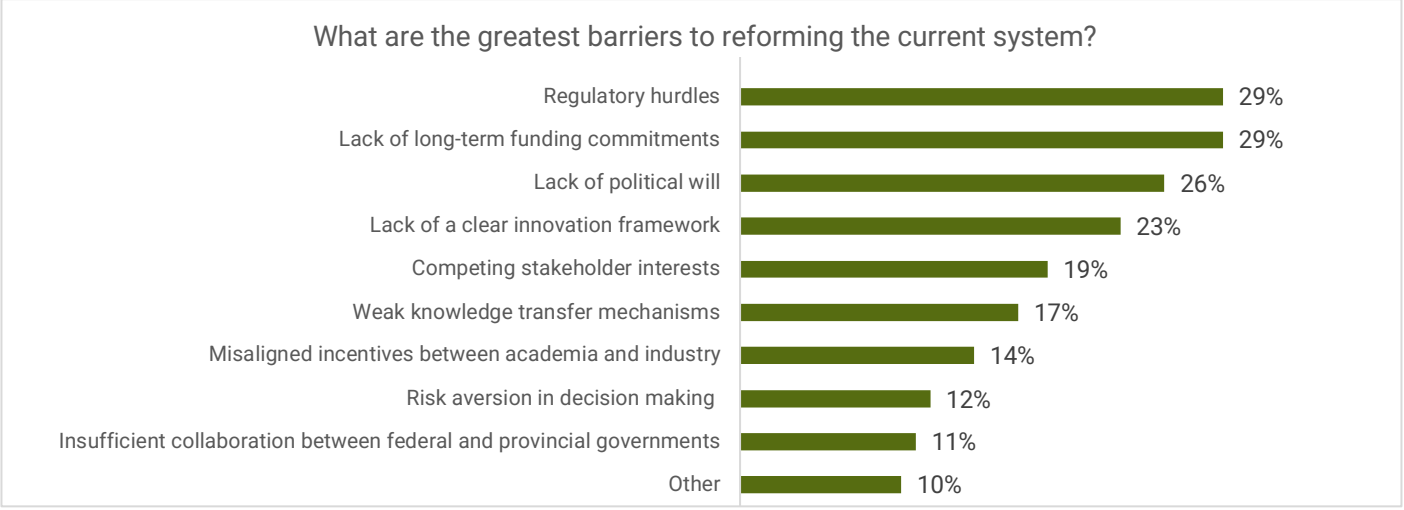
> **"We are not being innovative. We are not focused; we haven't had a strong focus on innovation in Canada. We haven't created partnerships to drive innovation. Limited public investment. We struggle with lack of commitment. "**
>
> *- Workshop participant*

Both the survey and the workshop surface similar friction points, duplication of programs and policy mandates, regulatory complexity that inhibits timely product introduction or market expansion, unpredictability in long-term funding, and unclear boundaries between the roles of federal, provincial, and industry actors. Patchwork or adjustments that do not resolve who is accountable for removing obstacles, in other words symptom-level solutions, have limited staying power.

This does not mean all programs are ineffective. Many participants pointed to specific initiatives that work well on their own terms, but argued that even strong programs can be held back when they operate in isolation, chase similar objectives without coordination, or are not assessed alongside others for how they contribute to system-wide outcomes.



Survey responses sharpen the profile of these barriers. Regulatory processes and long-term funding uncertainty each stand out as frequent concerns, while a significant portion of the sector points to lack of political will and an often ambiguous or fragmented innovation strategy. Other concerns include a field marked by multiple and sometimes competing interests, and a disconnect, particularly in regions without strong agricultural schools, between parts of the academic research community and the practical needs expressed by farmers or industry partners.



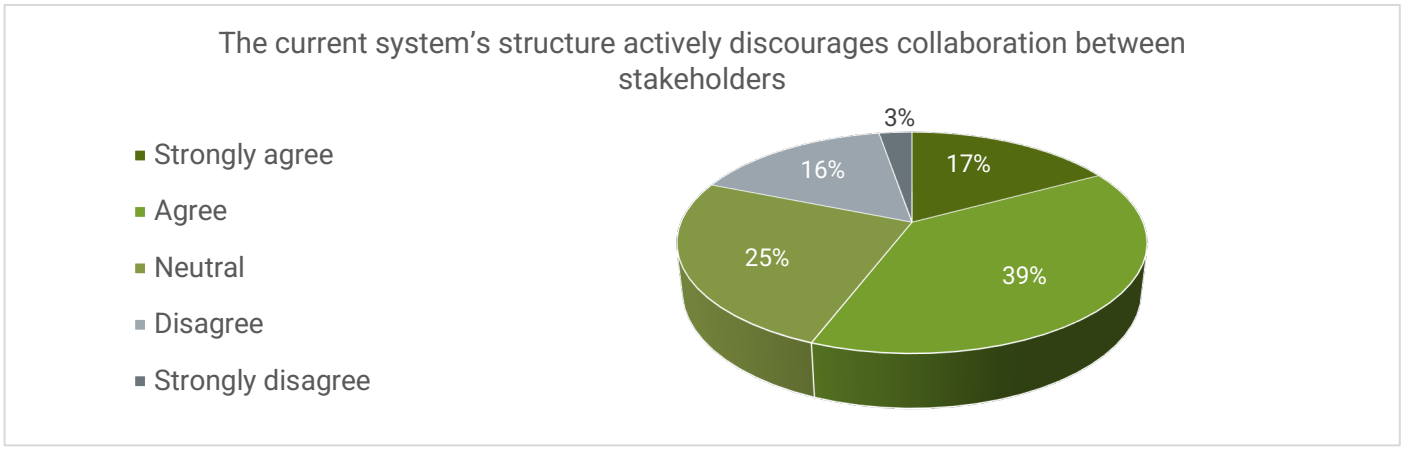
Consistent across these discussions is a call for comprehensive review and decisive leadership. The sector is looking for the government and industry to co-lead on rationalizing and streamlining programs, clarifying responsibilities, and setting up mechanisms for monitoring progress. Workshop references to initiatives such as the Agriculture Funding Consortium show that targeted, coordinated models, whether domestic or learned from peers such as Australia, can improve access, alignment, and accountability.

Early leadership on regulatory modernization, accountability for results, and transparent funding structures are seen as necessary to attract investment and align sector actors around genuine solutions. Without this, the sector risks revisiting the same set of problems at each planning cycle.

Real collaboration still lags

Many of these barriers stem from a deeper problem: real collaboration across the sector remains elusive, making it difficult to mount a unified response to shared challenges.

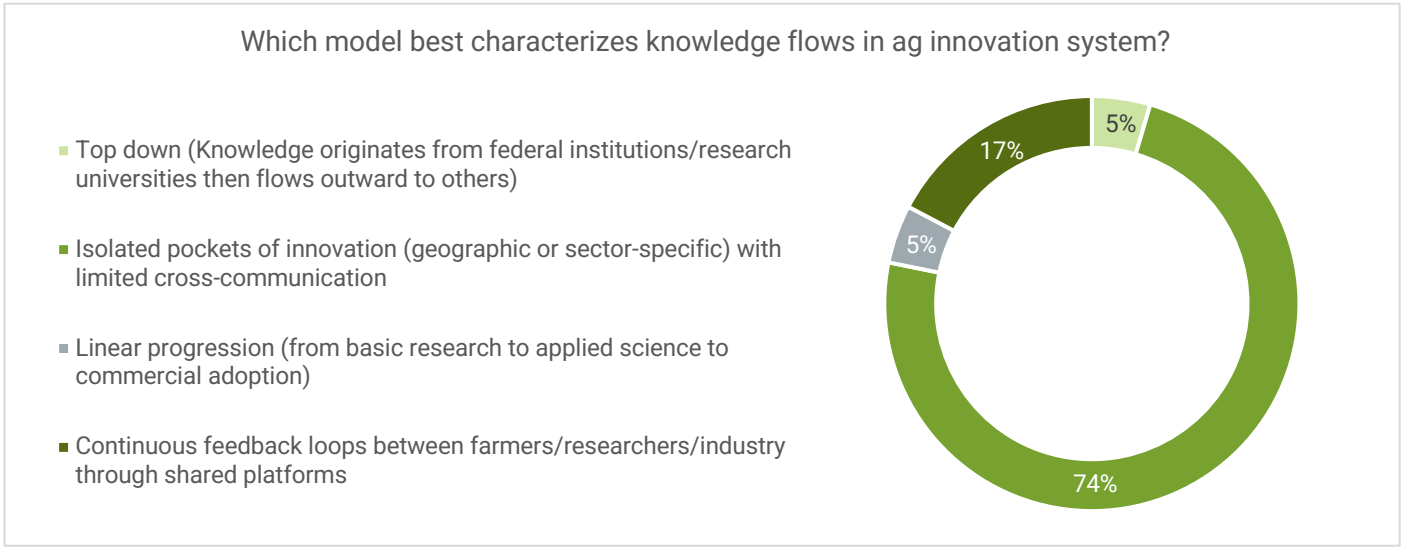
The prevailing picture, both from the survey and workshop, is of an ecosystem where coordination is the exception rather than the rule. Most collaborations remain local, limited to familiar partners or bounded by sector and region, rather than acting as bridges across the wider value chain. Within government, academia, and business circles, longstanding silos persist, with information, funding, and expertise moving in parallel streams rather than through open, enduring channels.



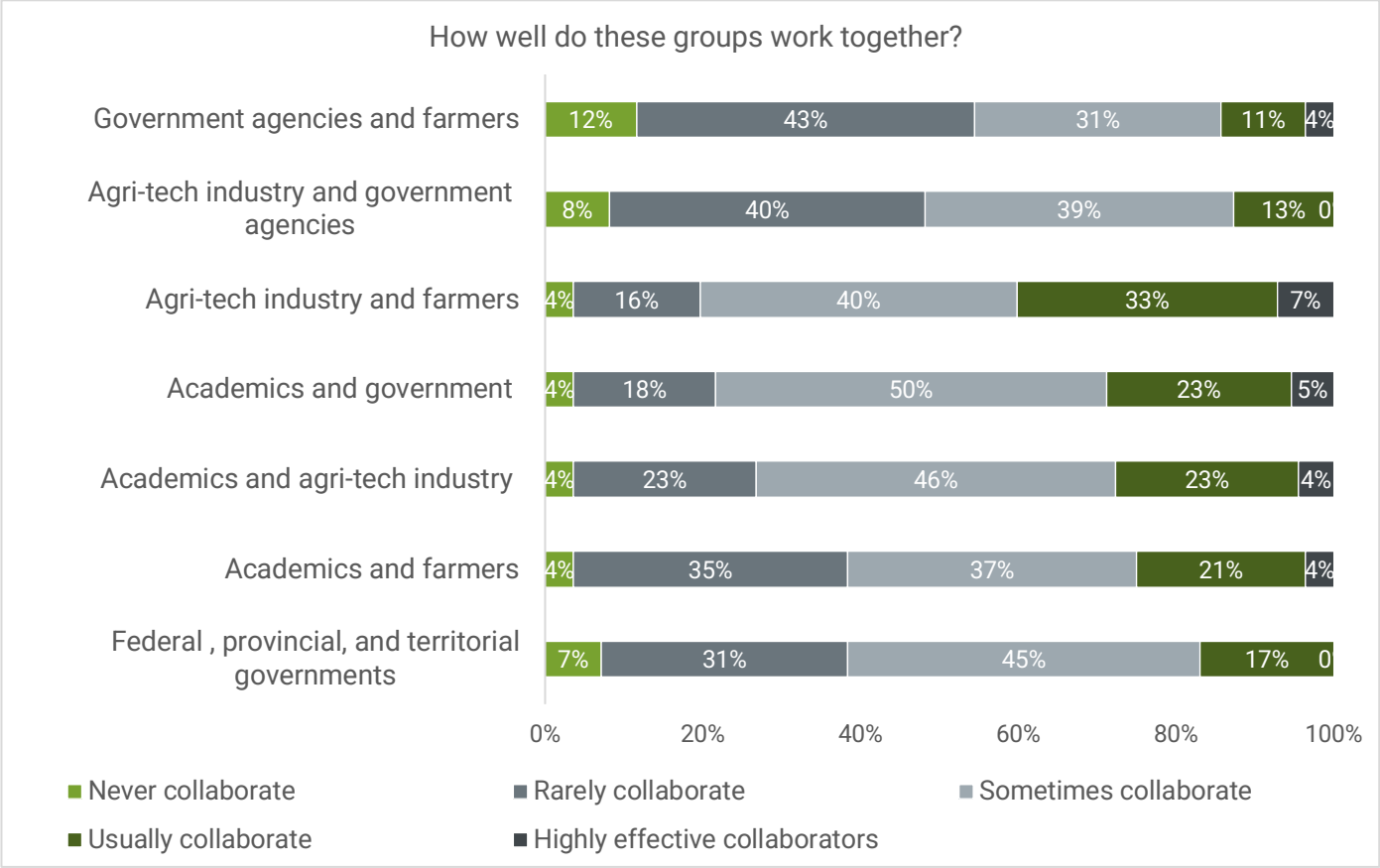
"Once it gets to a certain level, bureaucrats compete against each other. ISED has cool programs, but they are geared to individual business solutions rather than industry-wide solutions. Collaboration on the government side needs to mirror that of the private sector to bring [silos and turf together]."

- Workshop participant

Survey responses highlight the nature and depth of the challenge. The most common description of the system is "isolated pockets," with a minority noting regular feedback loops or linear program structures.



Experiences shared at the AgRISE roundtable reflect this reality. Workshop participants pointed to the proliferation of programs and agencies, at times resulting in dozens of overlapping funding windows, that complicate the navigation of opportunities and unintentionally reinforce isolation. The absence of shared digital platforms, national extension networks, and operational brokers are cited as some of the reasons why work often remains siloed and why hard-won lessons in one region or sector do not circulate widely. As participants noted, searching for a clear "single window" for innovation that serves as a point of entry that guides, connects, and supports at a stages remains a common frustration.



"In Australia there is one single funding window. Here we have different funding organizations. You can't navigate it. Unreasonable and not streamlined on an innovation side. No white glove concierge service."

- Workshop participant

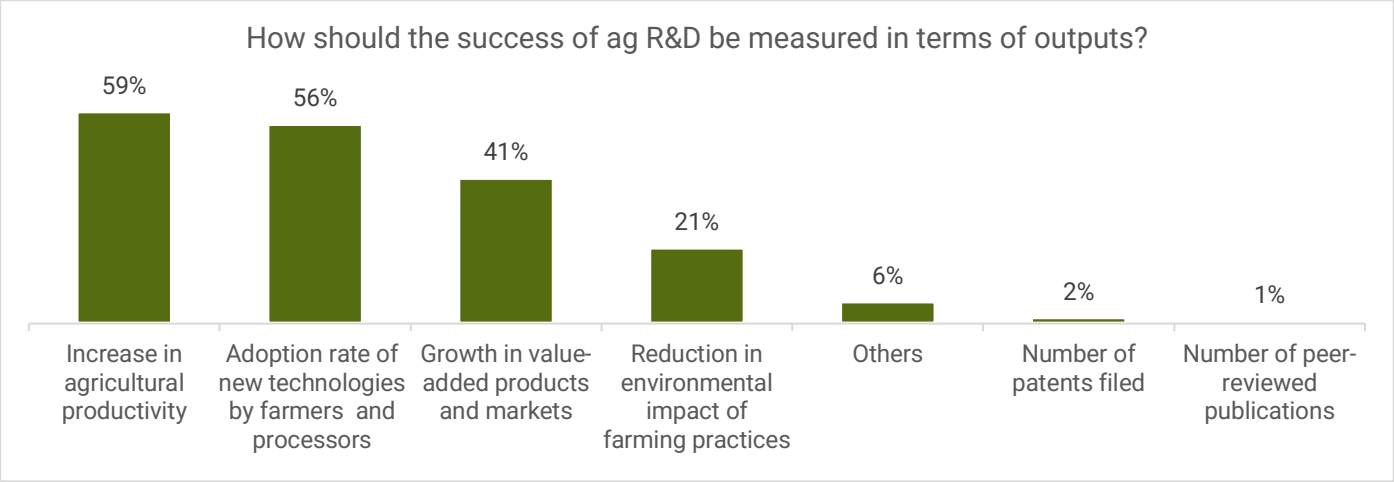
Alongside this, there is a growing recognition that waiting for organic partnership to close these gaps is not effective. Instead, the sector would benefit from a culture and infrastructure that explicitly supports and rewards purposeful, cross-sector collaboration. Workshop participants consistently pointed toward smarter investment in digital infrastructure, deliberate cross-pollination of ideas, and credible national extension services as sources of improvement that do not depend simply on higher budgets, but rather on prioritizing knowledge mobilization, operational leadership, and platforms that link innovation with adoption in practice.

Where partnerships are designed to share risk, align learning, and accelerate adoption,not just capture transactional benefits, the sector stands the best chance of delivering real improvements in performance, productivity, and resilience.

How the sector measures success

These gaps in collaboration and knowledge flow also shape how the sector thinks about what progress looks like, and how to tell if things are really improving.

There is a visible move among sector leaders toward using measurable outcomes, rather than just counting activities or academic publications, to track progress.Stakeholders did not dimiss publications or patents outright, especially for early-stage and discovery research, but they consistently stressed that, as work moves closer to market and on-farm use, measures such as adoption, productivity, and environmental performance become more meaningful indicators of success.



"Commercialization [is important, yet] we are still measuring success in patents and papers. Don't care about adoption. Want job creation."

- Workshop participant

Survey respondents cite increased productivity (59%) and tech adoption (56%) as top indicators, with value-added growth (41%) and reduced environmental impact (21%) also important. Findings from the AgRISE workshop build on these survey priorities: participants addressed the need to evaluate reforms by whether they actually deliver adoption by farmers, new economic activity, and the spread of digital capacity throughout the sector. The group pointed out the importance of not only establishing indicators that capture change but also embedding tools for monitoring performance and assessing whether research investment, extension, or new technologies are reaching their intended users and yielding tangible results.

"Farmers are looking for ROI, but it's hard to prove ROI. Need to de-risk certain technologies and encourage private sector technology [adoption]."

- Workshop participant

"Success will depend on a unified national vision or Canadian strategy for agri-food innovation similar to what they have in Australia, with progress measured through clear investment and R&D indicators."

- Workshop participant

This appetite for greater accountability is reflected in calls for regular “check-ins” on progress toward sectoral goals, with frameworks that emphasize both outputs and transparency in resource use. Workshop also stressed that effective accountability should include feedback that helps steer strategic adjustments, and that private and public investment should be pooled to empower and sustain this change.

Both sources urge the use of practical performance indicators and strategic resource alignment as core elements in making the innovation system credible, adaptive, and results-oriented.

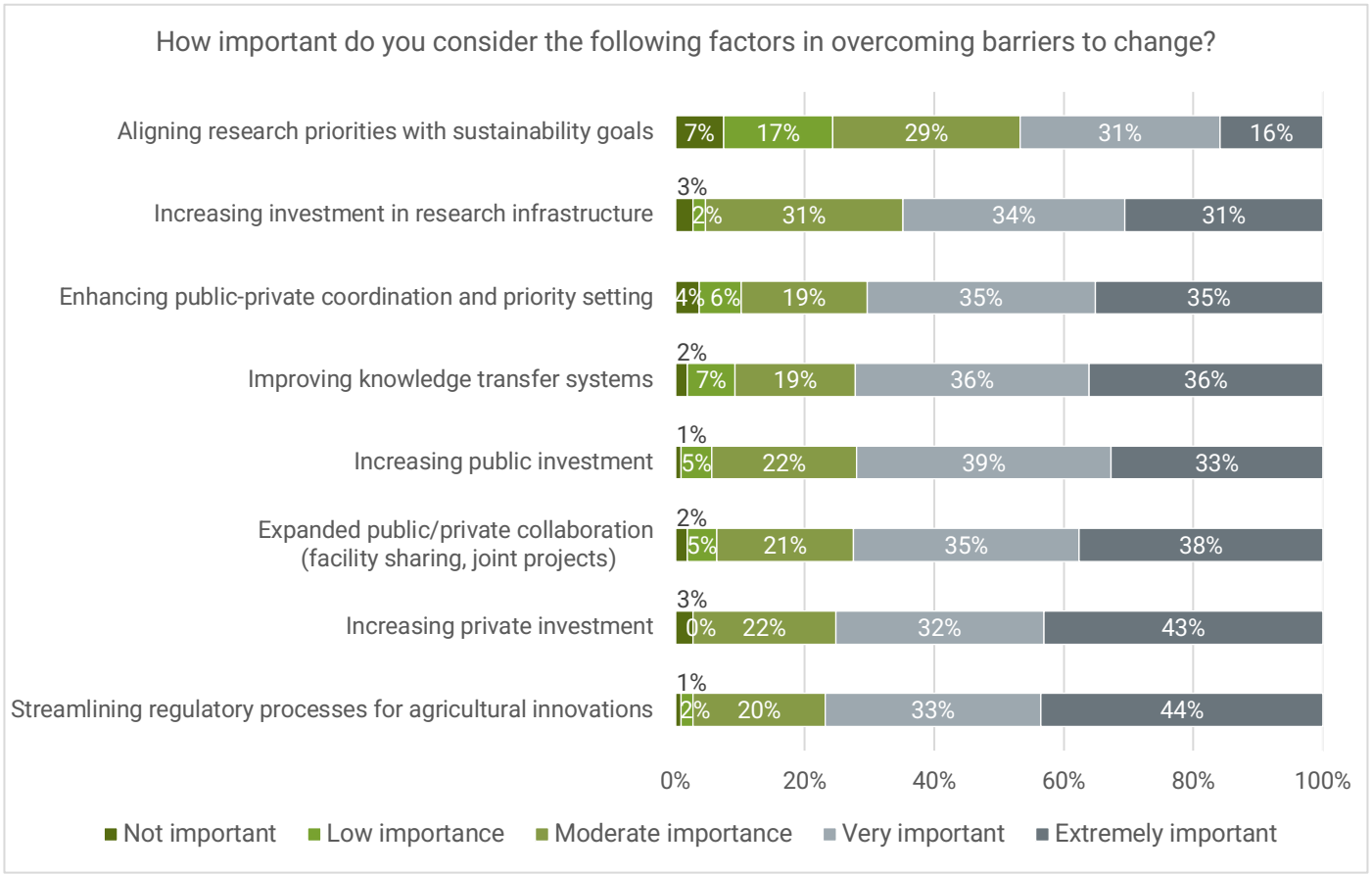
What will really make a difference

With expectations shifting toward outcomes that matter on the ground, discussion is focusing on what practical steps would break through the usual bottlenecks.

While there is broad caution about overpromising or pursuing “overnight” transformation, stakeholders agree that real progress comes from making the most of what the sector already has, and focusing on the levers that matter most.

Both the survey and the workshop pointed to several practical moves that could make a difference.

Clearing regulatory bottlenecks and creating better routes for private investment are seen as essential for turning research into real impact. Sharing facilities and partnerships so organizations don’t duplicate costs or effort is another promising enabler. Stronger systems for sharing knowledge, including more use of digital and extension tools and better support for the skills and talent needed to use them, are flagged as especially important, but only if paired with clearer priorities and better coordination across groups.



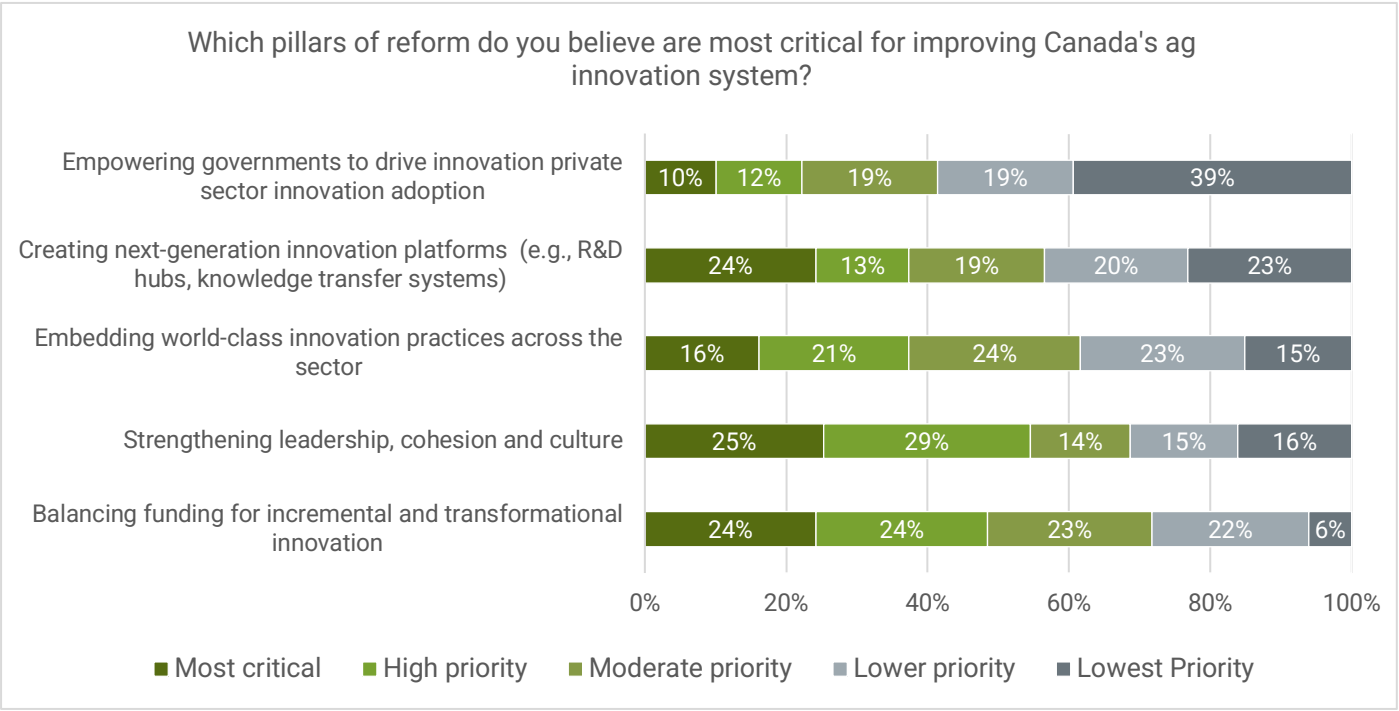
"Canada is risk-averse [in its innovation culture and funding approach]. Lack of extension on the crop side, though it exists in dairy. [We need mechanisms that support longer-term, higher-risk innovation rather than short-term returns.]"

- Workshop participant

One message that came through clearly is that better results come when government supports are oriented toward creating spaces and platforms where companies, researchers, and producers can join forces, even before products reach the market. Australia's experience, where government helps build "pre-competitive" partnerships among industry, is a model worth learning from, alongside other international examples where coordinated funding and governance structures have helped turn research strengths into tangible gains in productivity and resilience. Canadian stakeholders want to see government step up as an enabler and making it easier for the private sector and others to work together early on, manage shared risks, and align around what works for the whole sector.

"The current situation is a crisis, and therefore, the government must be involved. However, to effectively communicate this crisis, solutions must be highlighted, along with existing Canadian successes. Core to the Ag Innovation Agenda should be a recommitment to collaboration and coordination across the innovation continuum, as innovation is not a strictly linear progression."

- Workshop participant



Sustained change will come not from chasing new dollars, but from aligning institutions and resources behind the outcomes that matter most for Canada's sector competitiveness and resilience. Public support should be directed to reinforce and mobilize private sector innovation rather than act as a substitute.

Who should lead and set ag R&D direction

Translating action into real momentum also depends on clear leadership and knowing who is responsible for what at each step. Participants stressed that one of the problems with the current system is lack of clarity about their respective mandates, especially when it comes to who sets priorities, who funds and performs research, and who is accountable for extension and adoption.

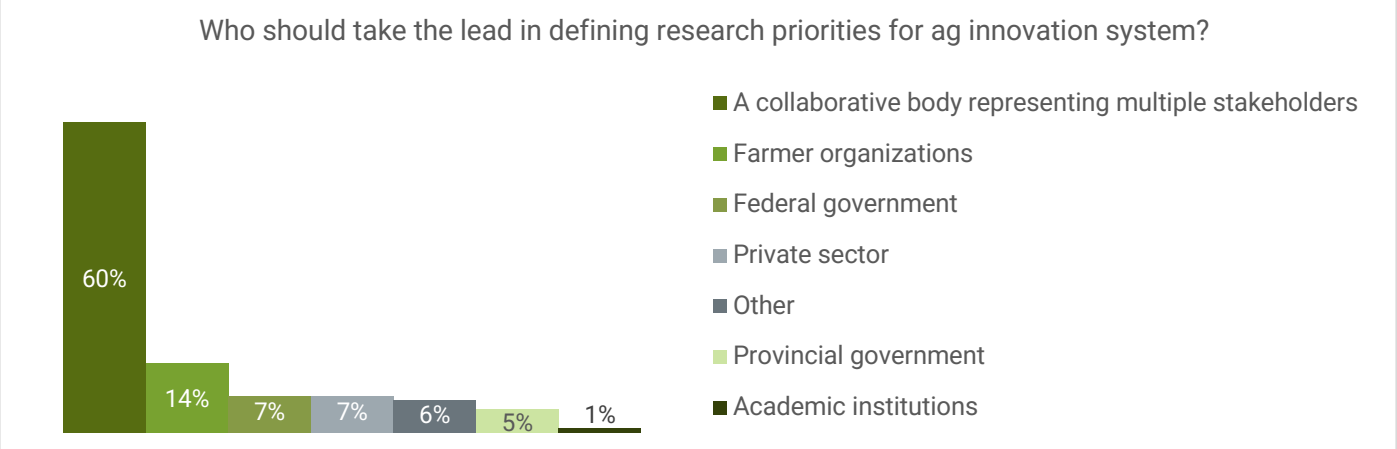
The outlook for governance and oversight in ag R&D system is becoming clearer, shaped by a shared understanding that no single institution or sector can effectively set direction alone. Most stakeholders say that governance and oversight should be shared, disciplined, and transparent. The appetite is for a "coordinating body" or a national board that combines industry, academic, and extension perspectives, with clear accountability built in. The idea of "commodity roundtables" and an adaptive framework customized to sector or regional needs appeared often in the workshop.

Survey results bear this out: 60% back a collaborative, multi-stakeholder leadership approach. Workshop attendees drew attention to successful sectoral models abroad and recommended reducing the focus on top-down structures in favour of frameworks that can expand by commodity and region. Many emphasized the need for a modernized extension presence and stated that neither universities nor the private sector can fill this gap alone. Clear, shared roles across federal and provincial governments, industry partners, and post-secondary institutions were seen as essential to using limited funds more strategically and strengthening the education and research capacity that underpins ag R&D in the long term.

Participants saw the most promise in structures that set national expectations and priorities, while leaving room for commodity and region-specific approaches to be developed by those closest to implementation.

"The need to define our partnerships is huge. Where are the advantages? Government can't be in everything or in all of the boxes of the continuum. Universities have personnel and recruitment. Where is the government situated best to support? [It] can't be everywhere. Who should lead? Partnerships need to be strong."

- Workshop participant



A recurring point was that good leadership is not about centralization but about clarifying mandates, establishing credible processes for reviewing and learning from results, and refreshing priorities as new needs and opportunities emerge.

Conclusion: Steering the Next Phase

Although voices in the sector do sometimes differ or hesitate, the accumulated evidence from multiple sources, such as the expert analysis, survey, and leadership roundtables, makes it clear that problems in Canada's ag R&D system can no longer be seen as merely a matter of opinion. They all point to fragmentation, underinvestment, and slow adaptation as structural challenges that are eroding competitiveness just as the pace of global innovation and trade is accelerating.

In today's dynamic global environment, where competitor countries are moving quickly to align investments, streamline regulation, and fast-track new ideas from lab to field, arguing that the status quo is 'good enough' simply puts Canada further behind. Failing to accept these realities, or spending valuable time deciding if evidence is convincing, runs counter to the demands of this moment, which is in fact defined by urgency, not comfort, and where incrementalism will not keep pace with either market demands or policy ambition abroad.

What the sector, through both expert and stakeholder voices, increasingly calls for is a willingness to move beyond describing problems and toward shared responsibility for tangible fixes. The value of public sector leadership here should not be to dictate solutions but to facilitate the conversations that can clarify priorities, set expectations for collaboration, and keep momentum focused on those levers emphasized to matter: more open and rapid feedback, clarity about who owns each part of the pipeline, and better extension.

"People want to avoid making a choice, but not making a choice is a choice. Consensus destroys motivation… So many voices it makes it hard. You can lose momentum."

- Workshop participant

The lesson from this phase of the initiative is that the costs of waiting are now greater than the risks of acting. The window for "maybe someday" has closed; what happens next depends on making the choice to move from evidence to action.
