Sustainable Intensification: Feeding the Future Without Consuming the Planet

Climate Week - Outcome Report Sustainable Intensification
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Sustainable Intensification: Feeding the Future Without Consuming the Planet

High Level Roundtable
Climate Week NYC – September 24, 2025

Outcomes Report

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Disclaimer: *This paper is a compendium of perspectives expressed by participants at the High Level Roundtable held on September 24, 2025, in New York. It has been prepared for informational purposes only and does not constitute policy, investment, or legal advice. The views, findings, and recommendations summarized here are those of the participants as interpreted by the author and do not necessarily reflect the positions of the International Fertilizer Association (IFA), its members, or any affiliated institution. References to companies, products, programs, or countries are illustrative and do not imply endorsement. All mistakes are the responsibility of the compiler.*

CHAPTER 1 — BACKGROUND

Purpose and context

This roundtable, held during NYC Climate Week, examined how sustainable intensification (SI) can deliver food security, resilience, and livelihoods at speed and scale, especially in developing economies. Participants framed SI as a practical response to converging pressures: geopolitical instability that turns hunger into a driver of conflict and displacement; the limits of land and water; the urgency of climate targets; and the reality that most know-how, products, and investment capacity sit in the private sector. **The discussion consistently returned to outcomes over intent - what gets produced, protected, and improved on the ground - not just how much advice or money is spent.**

Hosts and participants

Convened under the title "Sustainable Intensification: Feeding the Future Without Consuming the Planet", the session brought together senior voices from diplomacy, development finance, research, environmental NGOs, global agribusiness, and farmer-facing finance. Contributions came from a former U.S. Ambassador to UN food agencies; leaders from IRM, Yara, The Fertilizer Institute, the World Bank, Environmental Defense Fund, Rabobank, the Tony Blair Institute, Canada's bilateral DFI, Bayer, IFPRI/CGIAR, and IFA, who also moderated the session. **The diversity of perspectives created an unusually candid conversation about policy realism, investability, and adoption at the farm gate.**

How sustainable intensification was positioned

Participants were explicit that SI is not about "more inputs." They described it as growing more with less productivity, paired with stewardship and resilience. Several speakers argued for a language reset to reduce polarization: productivity should mean yield plus resilience; innovation should blend technology and tradition; sustainability should combine stewardship with national food sovereignty. Because food insecurity fuels instability, SI is not just an agricultural plan but a peace and stability strategy.

Challenges and opportunities

The conversation highlighted uneven realities across regions: under-application of nutrients in parts of Africa versus imbalances driven by current practices, including legacy subsidies elsewhere; water efficiency inseparable from nutrient efficiency; and supply-chain exposure to concentrated sources of inputs, and sanctions issues. Participants stressed farmer economics -

if producers are operating in the red, they cannot afford to go green. Measurement is another gap: while yields are easy to track, agreed sustainability indicators and low-cost Monitoring, Reporting and Verification (MRV) remain underdeveloped, complicating policy design and financing covenants.

Building blocks already in motion

Concrete references anchored the discussion: Kenya's farmer digitization and soil health cards to target nutrients; Brazil's conservation-aligned policy packages and state-bank guarantees that de-risk adoption; Denmark's livestock tax coupled with a transition plan; and the World Bank's AgriConnect initiative designed to line up foundational infrastructure, policy reform, and private investment. Participants also cited an emerging G7 development finance institutions (DFI) effort to define investable "sustainable food systems," seen as a promising foundation for a common SI investment taxonomy.

What success would look like

Success would be judged by outcomes: higher yields and resilience on existing land, protection of high-carbon ecosystems, better farmer livelihoods, and credible measurement that allows public policy and private capital to reward what works. Farmer-focused work, and regulatory acceptance of science and technology were treated as non-negotiables.

CHAPTER 2 — OUTCOMES AND RECOMMENDATIONS

1. A Coherent Narrative that must evolve from Ideology to Implementation

Participants agreed that Sustainable Intensification (SI) is often misread and mistrusted because the term has been stretched to mean conflicting things. Several speakers stressed that SI is not shorthand for "more inputs." Instead, they framed it as growing more with less - pairing productivity with stewardship and resilience and urged a language reset that makes this balance explicit. The room highlighted how polarized binaries (technology vs. tradition, smallholders vs. commercial farms, ecology vs. economics) obscure how real farming systems work and stall collaboration. To move forward, **SI should be communicated as a system-based, pluralistic approach that respects regional agronomy and culture, balances yield with resilience, pairs innovation with tradition, and couples sustainability with national food sovereignty.** Farmers need to recognize SI as a practical path to stronger livelihoods rather than a top-down model, and policymakers and NGOs should see its value for food security and climate adaptation. The narrative, they argued, must shift from ideology to evidence-led implementation, judged by outcomes in fields and communities.

2. The Strategic Role of Sustainable Intensification to Overcome Geopolitical Risks

Speakers linked food insecurity to wider instability, noting that hunger fuels conflict, and displacement. **In that light, SI is more than an agricultural program; it is a stabilizing strategy that can expand food access, create economic opportunity, and strengthen rural resilience**. The discussion also surfaced the geopolitics of fertilizer supply: concentrated production, sanctions, and trade disruptions have exposed import-dependent countries to price spikes and unpredictability. Participants argued that SI should be pursued within a broader strategic frame that includes diversification of trade, principled engagement in high-risk geographies, and the development of more localized innovation. Ensuring that SI is resilient to geopolitical turbulence was framed as a national interest priority.

3. Policy and Financial Incentives to Enable SI at Scale

There was strong agreement that predictable, science-based policy and basic infrastructure are preconditions for SI. At the same time, current public and climate finance flows into agriculture were described as insufficient relative to ambition. Participants pointed to blended finance, guarantees, and performance-based incentives as practical ways to crowd in private capital while meeting public goals, provided farmers are at the table and early-years risk is reduced.

Measurement was identified as a bottleneck: without shared definitions and low-cost, credible MRV, programs struggle to reward results. Ongoing work - such as efforts to define sustainable food system investments - was cited as a foundation to accelerate and align around investable

SI metrics that reflect farmer realities. The message was clear: policy and finance must advance together, or SI will remain rhetorical.

4. Cross-sectoral Collaboration for SI Implementation

The group emphasized that SI cannot be delivered in silos. Private companies hold products, distribution, and advisory capacity that many public systems lack, especially in smallholder contexts. Multilaterals and national development banks bring convening power, risk-sharing tools, and the ability to align reforms and investment at the country level. NGOs and producer organizations provide legitimacy, local knowledge, and accountability.

Effective delivery, participants highlighted, requires co-designed mechanisms that are context-appropriate and outcome-oriented, **pairing last-mile agronomy with finance, safeguards, and market access so farmers can adopt with confidence.**

5. Conclusions: SI is a Process

SI was characterized as a continuous process rather than a fixed endpoint: a combination of coherent narrative, shared understanding, and deliberate cooperation. Ambition must be matched by regional realism, scientific evidence, affordable technology, and farmer-first economics. With the right policies, partnerships, finance, and measurement, SI offers a tangible path to deliver more food, on existing land, with greater resilience and lower risk.

CHAPTER 3 — PLAYBOOK: Making Sustainable Intensification Operational and Transformative (MIT)

A. Objectives and target outcomes

- Boost yield and resilience on existing farmland
- Protect high-carbon ecosystems; avoid land-use change
- Improve farmer livelihoods, crowd in private capital
- Measure outcomes credibly (yield, nutrient use efficiency (NUE), water, no-conversion)

B. Priority actions

1. *Agree SI language and metrics*

   Whether SI delivers on its promise depends on how it is framed, communicated, and understood. Too often, key terms like productivity, sustainability, and innovation are interpreted differently across regions and stakeholder groups, leading to confusion and resistance. A shared and inclusive narrative is essential, one that reflects sustainability not as an abstract ideal but as a practical balance between stewardship, sovereignty, resilience, and equity. **The success of SI depends on a common understanding of what is being intensified, for whom, and to what end.**

2. *Position SI as a lever for resilience and food security:*

   SI must be understood not only as an agricultural productivity strategy, but as a stabilizing force in fragile political and economic systems. When embedded within supportive infrastructure and inclusive financial schemes, **SI can contribute directly to food security and national stability, especially in the face of climate and geopolitical volatility.**

3. *Farmer- and producer-focused transition packages*

   Develop farmer-/producer-focused transition packages in which companies, banks, and governments jointly map the top adoption blockers, then roll out rebates, credit enhancements, and embedded advisory work, scaling delivery through their facilities and in cooperation with local financial institutions.

4. *Targeted nutrient and water efficiency*

   Governments and industry should extend farmer digitization - such as soil cards to guide balanced nutrient application and smarter irrigation. Subsidies ought to be tied to verified use of balanced blends and irrigation efficiency, and results should be reported

through low-cost MRV that tracks yield gains and nitrogen losses (see the Kenya example and the India imbalance noted).

5. *Safeguard package*

   Governments, NGOs, and industry need to identify no-go ecosystems and marginal lands, enforce protections, and pair them with incentives that make "forests worth more alive than dead." These safeguards should be written directly into finance covenants so capital flows mostly to compliant projects.

6. *Private–public last-mile trials.*

   Industry and financial institutions (public and private) should pick three priority crops or regions and run trials that are directly linked to finance offers. Results should be published and then replicated through anchor buyers to speed scale-up.

7. *Science acceptance and regulatory enablement.*

   Governments, UN bodies, and others should map the bottlenecks to biotech and digital approvals, launch evidence-based outreach and extension with local institutes, and fast-track approvals where safeguards are in place.

8. *Livestock productivity pathway.*

   Governments, industry, and NGOs should work to provide baseline methane gaps and deploy best-practice packages (health, feed, and genetics) and track emissions intensity per unit of output. **The focus should be on productivity-led reductions**, avoiding blanket taxes that miss context (with Denmark noted as a reference point).

C. Policy and regulatory enablers

Adopt an umbrella SI policy with clear definitions, guardrails, and instruments. Repurpose subsidies toward balanced plant nutrition. Ensure fair trade arrangements and predictable input regimes while avoiding regressive input taxes.

D. Finance and business models

Use blended finance with first-loss tranches and guarantees, and channel capital through facilities managed by local financial institutions. Build value-chain funds and incorporate outcome-based covenants focused on yield, NUE, and no-conversion.

E. Data, measurement & verification (MRV)

Implement low-cost, credible MRV linked to outcomes such as yield, water use, and land-use status. Create geo-tagged farmer registries and soil cards, and apply shared definitions and transparent reporting across programs.

F. Technology and practices

Scale digital agronomy, precision and balanced nutrition, and the use of enhanced-efficiency products and biostimulants. Improve irrigation efficiency, expand conservation agriculture and no-till, and deploy approved biotechnology where accepted by regulators and communities.

G. Partnerships and governance

Leverage platforms such as AgriConnect to align infrastructure investments, policy reform, and capital flows. Enable IFA and member firms to engage with multilaterals on trust-building and data sharing that support adoption at scale.

H. Farmer/community adoption, local context

Co-design solutions with farmers and producers, cover transition costs, and embed advisory services alongside finance. Reward outcomes. **SI must reflect the complexity of farming systems and avoid one-size-fits-all models.** Locally embedded strategies are essential to ensure that solutions respond to unique agronomic, climatic, and socio-political realities.

I. Communications and Public Relations

Reframe productivity as "yield plus resilience" and emphasize that widespread hunger is destabilizing. Normalize pro-SI messaging by highlighting credible evidence and elevating local champions who can speak to results.

Innovation must be accessible, inclusive, and aligned with local needs. Technology plays a critical role, from digital soil diagnostics and early warning systems to climate-resilient seeds and water-efficient irrigation, but only when it is affordable and context-sensitive. Private sector actors have a central role, particularly where public extension systems are constrained.

J. Risks and contingencies

Prepare for continued geopolitical shifts; anticipate policy swings and changes in tariffs. manage supply-chain shocks. Embed safeguards and guardrails - as SI strategies expand, include land-use safeguards, biodiversity protection, and social equity measures.