IFDC

Developing Agriculture from the Ground Up

IFDC Strategy 2026-2035

FUEL THE FARMER.
FEED THE SOIL.
FOSTER THE FUTURE.

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Acronyms

AECF	Africa Enterprise Challenge Fund
AFAP	African Fertilizer and Agribusiness Partnership
AfDB	African Development Bank
AFFM	Africa Fertilizer Financing Mechanism
AFIDA	Africa Fertilizer Industry Development Association
AFSH	Africa Fertilizer and Soil Health (Summit, Action Plan)
AI	Artificial Intelligence
AIRCA	Association of International Research and Development Centers for Agriculture
ANAPRI	Africa Network of Agricultural Policy Research Institutes
APNI	African Plant Nutrition Institute
AUDA-NEPAD	African Union Development Agency
CA4SH	Coalition of Action for Soil Health
CAADP	Comprehensive Africa Agriculture Development Programme
CABI	CAB International
CASE	Competitive Agricultural Systems and Enterprises
CBD	Convention on Biological Diversity
CIFOR-ICRAF	Center for International Forestry Research and World Agroforestry
CIFSH	Coalition of Implementors for Fertilizer and Soil Health
CIMMYT	International Maize and Wheat Improvement Center
CNFA	Cultivating New Frontiers in Agriculture
COMESA	Common Market for Eastern and Southern Africa
CORAF	West and Central African Council for Agricultural Research and Development
DGIS	Directorate-General for International Cooperation
ECOWAS	Economic Community of West African States
EKN	Embassy of the Kingdom of the Netherlands
FAO	Food and Agriculture Organization of the United Nations
FARA	Forum for Agricultural Research in Africa
FDP	Fertilizer Deep Placement
FEPSAN	Fertilizer Producers and Suppliers Association of Nigeria
GNFIC	Global Network of Fertilizer Innovation Centers
ICBA	International Center for Biosaline Agriculture
ICIPE	International Centre of Insect Physiology and Ecology
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFA	International Fertilizer Association
IFDC	International Fertilizer Development Center
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
IsDB	Islamic Development Bank
ISFM	Integrated Soil Fertility Management
ISRIC	International Soil Reference and Information Centre
IUCN	International Union for Conservation of Nature
IWMI	International Water Management Institute
LUANAR	Lilongwe University of Agriculture and Natural Resources
MCC	Millennium Challenge Corporation
MEL	Monitoring, Evaluation, and Learning
MFW4A	Making Finance Work for Africa
MSU	Mississippi State University
ODA	Official Development Assistance
PAFO	Pan African Farmers Organization
PIP	Participatory Integrated Planning
PLC	Product Life Cycle
R&D	Research and Development
ReNAPRI	Regional Network of Agricultural Policy Research Institutes
ROPPA	West African Network of Peasants and Agricultural Producers
SDG	Sustainable Development Goal
SMEs	Small and Medium Enterprises
SNV	Netherlands Development Organisation
UDP	Urea Deep Placement
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
UNFSS	United Nations Food Systems Summit
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WAFA	West Africa Fertilizer Association
WFP	World Food Programme
WHH	Welthungerhilfe
WUR	Wageningen University & Research

FOREWORD

The world has drastically changed since IFDC released its Strategy 2020-2030. After significant progress from 2005 to 2017, the prevalence of undernourishment has rebounded to 2007 levels and has flatlined to levels well above those prior to the COVID-19 pandemic.

Increased global undernourishment may only be exacerbated by decreased global Official Development Assistance (ODA). Smallholder farmers, constrained by the lack of necessary agricultural resources and training but needing to produce more food, continue mining nutrients from degraded soils and converting more land to sustain yields, as crop response to low fertilizer application increasingly plummets. Climate change continues to threaten the productivity and resiliency of farmers around the world while inefficient farming practices only make matters worse. Further, violence and unrest in many of the regions in which we serve combine with food insecurity to form a destructive cycle. All the while, the global population continues to march toward the nearly 10 billion mark by 2050.

In response, nations have rallied around the call to address one of the underlying factors of global food and nutrition insecurity: poor soil health. Soils are rapidly degrading in many parts of the world, with over one-third moderately to severely degraded. The International Fertilizer Development Center (IFDC) stands prepared to lead this charge to develop and scale solutions such as next-generation integrated soil fertility management (ISFM) and strengthen the delivery of soil health interventions. We aim to accomplish this through an overarching approach that emphasizes systems thinking, sustainability, and farmer-centric solutions operating under the One Health approach.

Our Global Network of Fertilizer Innovation Centers (GNFIC), in partnership with industry and academia, aims to innovate fertilizer and soil health solutions that are science based, inclusive, and scalable – all tailored to smallholder needs. Further partnerships enable the GNFIC to deploy and scale these solutions within smallholder contexts – all the while strengthening global and regional capacity to further develop context-specific fertilizer solutions.

To get these solutions into the hands of farmers, IFDC will link GNFIC solutions with comprehensive farmer support systems, leveraging our established programs and extension partnerships. Innovative upscaling practices ensure widespread adoption, and when combined with market linkage facilitation, these context-specific, sustainable products and practices will enable smallholder farmers to increase yields, incomes, and overall quality of life.

To address barriers of effective scaling of innovations and sustainable practices, IFDC will leverage its GNFIC alongside established methodologies to strengthen market systems, improve regulatory frameworks, and enhance knowledge ecosystems. Coordinated interventions on multiple levels, from local value chains to international policy frameworks, outpace traditional development approaches that focus on single methodologies and contexts, sustaining and scaling innovations through comprehensive institutional changes.

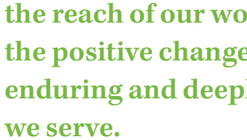
We realize that to be effective is to be a good partner; therefore, we are deepening our emphasis on complementary partnerships. From innovation to scaling, each step of the way, we will match our technical expertise in fertilizers and soil health with local, national, regional, and global partners who can help deliver holistic transformation in global food systems.

Most importantly, we partner with the communities we serve, valuing local knowledge and perspectives combined with our global research initiatives.

This participatory approach magnifies the reach of our work and ensures that the positive changes we pursue are both enduring and deeply felt by those we serve.

IFDC's greatest resource is its people, collaborating as One IFDC from offices around the world. Our workforce comprises a wide variety of cultures, backgrounds, and expertise. We commit to empowering our teams to reach their full potential by providing an enabling and unifying organizational structure. A truly unified global team forms the backbone of an IFDC that sets out to achieve the goals put forth in this document. And it is only together that this is possible. IFDC dedicates itself to our shared values: Collaborate, Innovate, Include, and Act with Integrity. As stewards of public funds, we endeavor to remain accountable, ethical, and transparent in all of our work.

We are thankful to all who have contributed to this new strategy for 2026-2035: our staff, our leadership, our Board of Directors, and many of our global partners. Your insights have sharpened our focus to achieve great things over the next 10 years.



Henk van Duijn

IFDC President and CEO

EXECUTIVE SUMMARY

The International Fertilizer Development Center (IFDC) presents its 2026-2035 Strategy – a bold, science-driven roadmap to restore global soil health, enhance food and nutrition security, and build resilient farming systems. Grounded in over five decades of experience, the strategy reaffirms IFDC's mission to innovate soil and fertilizer solutions to nourish people and protect the planet and envisions a world where resilient farmers thrive on healthy soils, producing abundant, nutritious food for all while safeguarding our planet for future generations.

Responding to a Changing World

Global agriculture faces converging crises – rising food insecurity, accelerating climate change, conflict, and widespread soil degradation. Over one-third of the world's soils are degraded, threatening food production and livelihoods, particularly in sub-Saharan Africa and South Asia. IFDC's strategy directly addresses these challenges through innovation, partnership, and systems transformation that empower smallholder farmers and restore the foundation of food systems: the soil.

KEY SHIFTS IN STRATEGY

The 2026-2035 Strategy marks a pivotal evolution for IFDC, concentrating on:

- **Sharpened Strategic Focus:** Concentrating efforts where IFDC can deliver the greatest value and measurable impact.
- **Systems-Level Transformation:** Addressing root causes of degradation through holistic, integrated approaches that link science, markets, and policy.
- **Research and Innovation Leadership:** Strengthening infrastructure, talent, and global collaboration to accelerate next-generation fertilizer innovation.
- **The Global Network of Fertilizer Innovation Centers (GNFIC):** A worldwide platform connecting research, policy, markets, and farmers to develop locally adapted, climate-smart solutions.
- **The 8R Framework:** Expanding beyond traditional 4R nutrient stewardship to integrate recycle, rebuild, record, and resilient – embracing nutrient recirculation for sustainable soil management.

STRATEGIC GOALS

- **Fertilizer Innovation:** Advance and scale context-specific, climate-smart fertilizer technologies through the GNFIC to improve productivity, profitability, and sustainability.
- **Farmer Impact at Scale:** Empower smallholder farmers – especially women and youth – to adopt integrated soil fertility management (ISFM), regenerative agriculture, and precision nutrient use for higher yields and incomes.
- **Sustainable Systems Transformation:** Strengthen market systems, harmonize policy frameworks, and embed soil health and fertilizer innovation into global and national agricultural agendas.

HOW IFDC DELIVERS CHANGE

IFDC's Theory of Change connects innovation, farmer empowerment, and systems transformation through continuous feedback loops between research, markets, and policy. By leveraging partnerships across public, private, and civil society sectors, IFDC ensures that scientific advances translate into tangible benefits for farmers and communities.

OUR COMMITMENT

Through its One IFDC approach, the organization remains unified, agile, and accountable, with a commitment to global frameworks such as the Sustainable Development Goals (SDGs), the Comprehensive Africa Agriculture Development Programme (CAADP), and the Africa Fertilizer and Soil Health (AFSH) Action Plan.

WHO WE ARE

VISION, MISSION, AND VALUES

IFDC's ambition is clear: to empower millions of smallholder farmers to regenerate soils and boost productivity, reducing pressure to expand farmland, cutting greenhouse gas emissions, and sustainably achieving global food and nutrition security.

VISION

What We Aspire to Achieve

A world where farmers thrive on healthy soils, empowered by fertilizer innovation and sustainable practices, producing abundant and nutritious food for all on less land while restoring our soils and safeguarding our planet for future generations.

MISSION

What We Do and How We Do It

Innovating soil and fertilizer solutions to nourish people and protect the planet.

We advance fertilizer innovation, soil fertility, and soil health solutions with our partners in research and development, empowering farmers to grow more nutritious food, boost productivity, address food insecurity, enhance resilience of food systems, and protect the environment for lasting agricultural transformation.

VALUES

Collaborate

We operate as One IFDC, working across programs and countries to deliver meaningful, lasting impact.

Innovate

We learn continuously and design responsible, adaptive solutions that drive measurable results.

Include

We champion equity and ensure that women, youth, and marginalized groups have meaningful voice and opportunity.

Act with Integrity

We steward resources ethically and transparently, holding ourselves accountable to communities, partners, staff, and donors.

Our Winning Aspiration 2026-2035

Over the next decade, IFDC will be at the forefront of transforming soil fertility systems worldwide – laying the foundation for resilient, productive, and sustainable agri-food systems that address food and nutrition insecurity. We will unlock the full potential of soils by pioneering innovative fertilizer research and addressing the critical challenges of nutrient use efficiency in Africa and Asia. By orchestrating multi-stakeholder networks that unite public, private, and civil society sectors, we will scale solutions and practices that improve soil fertility and farmer productivity. Underpinning our research and development is a core focus on shaping global collaboration, markets, and regulation that support sustainable agriculture and recirculation of nutrients.

Our ambition is clear: to empower millions of smallholder farmers to regenerate soils and boost productivity, reducing pressure to expand farmland, cutting greenhouse gas emissions, and sustainably achieving global food and nutrition security.

STRATEGIC GOAL 1
Fertilizer Innovation

STRATEGIC GOAL 2
Farmer Impact at Scale

STRATEGIC GOAL 3
Sustainable Systems Transformation

APPROACHES
Systems Thinking and Sustainability

OUR WAY OF WORKING
Complementary Global and National Partnerships

A RESILIENT ORGANIZATION

Strategic alignment and strengthened implementation of strategy	Sustainable funding of our work	An enabling structure and empowered teams	A unified, global team – One IFDC

OUR VALUES

Collaborate	Innovate	Include	Act with Integrity

THE WORLD **WE LIVE IN**

The global agricultural landscape faces an unprecedented convergence of challenges that demand urgent and innovative solutions. From mounting food and nutrition security pressures to accelerating climate change impacts, the context within which agricultural development operates is increasingly challenging and requires system-level solutions, underpinned by global collaboration and driven by innovation.

Food and Nutrition Security: A Growing Crisis

The world is confronting a **food insecurity and malnutrition crisis, especially in Africa**. Over 673 million people are affected globally,[1] with **micronutrient deficiencies** – especially in vitamin A, iodine, iron, and zinc – impacting over **2 billion people**,[2] particularly in regions where IFDC operates.[3]

Modern agriculture faces a compounding crisis driven by declining nutrient efficiency and soil degradation. As soils lose their organic matter and essential minerals through intensive farming practices, each kilogram of fertilizer or nutrient added becomes progressively less effective at generating crop yields. This phenomenon of decreasing productivity per unit of input means farmers must apply ever-larger quantities of fertilizers to achieve the same harvest they once obtained with less.

Simultaneously, the soil itself is deteriorating through a process often called "nutrient mining." When crops are harvested and removed from fields year after year, they take essential nutrients with them. Without adequate replenishment through organic matter, crop rotation, or balanced fertilization, the soil loses not only nitrogen, phosphorus, and potassium, but also critical micronutrients and the biological activity that makes nutrients available to plants.

Faced with declining efficiency and reduced yields, agricultural producers confront a stark choice: accept lower total production or expand the area under cultivation.

The **demographic pressures** underlying food security challenges continue to intensify. With the global population projected to reach 9.7 billion by 2050, agricultural systems must substantially increase production within increasingly constrained resource envelopes – a particularly acute problem for sub-Saharan Africa and parts of Asia where IFDC operates. At the same time, rapid urbanization is driving a strong pull toward cities, creating major challenges for urban food systems while leaving rural areas increasingly depopulated and vulnerable.

This shift intensifies the need for integrated solutions that address both urban food security complexities and the economic and social vitality of empty countrysides.[4]

At a time when there is a great need for investment in soils, the global community and national governments are reducing their funding commitments. The international development paradigm is undergoing significant transformation, shifting from traditional global import-driven food security approaches to **comprehensive food sovereignty frameworks** that recognize local production, distribution, consumption, and environmental interconnectedness.[5] However, this evolution now faces severe disruption from **political and funding pressures**, forcing reversion to narrower focuses. **The 2025 terminations of work at the United States Agency for International Development (USAID)** exemplify a broader trend toward funding volatility that has made long-term planning increasingly difficult.[6] Some countries face disproportionate funding gaps: **eight low-income countries relied on the United States for over 20% of Official Development Assistance (ODA), as did eight lower-middle income countries**.[7] The dependency of these low- and lower-middle income countries on external aid relative to their own economic output demonstrates countries' difficulties in advancing development agendas.

Foreign aid has declined sharply over the past five years, with international aid falling 7.1% in 2024 (the first drop after five consecutive years of growth) and projected to decline an additional 9-17% in 2025, driven by major donors like the United States, United Kingdom, Germany, and France cutting assistance due to fiscal pressures, shifting geopolitical priorities toward Ukraine, and domestic concerns – representing what experts call a "generational shift" in development funding that will hit the poorest countries hardest.[8]

1 World Health Organization. 2025. The State of Food Security and Nutrition in the World 2025. https://www.who.int/publications/m/item/the-state-of-food-security-and-nutrition-in-the-world-2025

2 World Health Organization, World Food Programme, and UNICEF. 2006. Preventing and controlling micronutrient deficiencies in populations affected by an emergency. https://www.who.int/publications/m/item/WHO-WFP-UNICEF-statement-micronutrients-deficiencies-emergency

3 FAO, IFAD, UNICEF, WFP, and WHO. 2024. The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms. https://doi.org/10.4060/cd1254en

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5 African Union, CAADP, and AUDA-NEPAD. 2024. CAADP Strategy and Action Plan: 2026-2035. 44323-wd-3._EN_CAADP_Strategy_and_Action_Plan_-_2026-2035_September_15_2024_Final.pdf

6 Devex. 2025. How Trump's US aid stop-work order affects global food aid. https://www.devex.com/news/how-trump-s-us-aid-stop-work-order-affects-global-food-aid-109190

7 Center for Global Development. 2025. Which Countries Are Most Exposed to US Aid Cuts; And What Other Providers Can Do. https://www.cgdev.org/blog/which-countries-are-most-exposed-us-aid-cuts-and-what-other-providers-can-do

8 McKinsey and Company. 2025. A generational shift: The future of foreign aid. https://www.mckinsey.com/industries/social-sector/our-insights/a-generational-shift-the-future-of-foreign-aid

Climate Change: Accelerating Impacts on Agricultural Systems

Climate change has emerged as the world's defining environmental challenge, with direct impacts on agricultural systems and soil health. Studies demonstrate that it increases crop pest incidence, accelerates soil moisture loss, causes nutrient content decline, and undermines crop productivity and yields.[9] The poorest economies are most vulnerable to these cascading effects.

At the same time, agriculture itself is a significant, direct contributor to climate change, responsible for approximately 21-24% of global greenhouse gas emissions, primarily through methane from livestock, nitrous oxide from fertilized soils, and carbon dioxide from land use changes (deforestation) and fossil fuel use in farming. The largest direct cause of deforestation in Africa currently is the clearing of forests to feed a growing population through shifting cultivation. Conversion to cropland dominates forest loss in Africa and Asia, with over 75% of the forest area lost converted to cropland.[10]

Current farming practices that are inefficient in nutrient management and soil conservation exacerbate emissions.[11]

Indirectly, climate change increases soil salinization by raising sea levels, increasing groundwater salinity and causing irregular rainfall, which can all be exacerbated by poor irrigation and drainage practices.[12] A meta-study of soil organic carbon drivers – the principal factors that influence how much carbon is stored in or lost from soils – identified **land management, land use change, and climate change** as the most significant factors, with sustainable land management, mineral fertilization, and organic practices serving as key adaptation strategies.[13]

The three Rio Conventions – the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), and United Nations Convention to Combat Desertification (UNCCD) – have recognized soil health as a critical climate solution.

Meanwhile, the 2021 United Nations Food Systems Summit (UNFSS) resulted in several commitments to improving global soil health, including the formation of the Coalition of Action for Soil Health (CA4SH), a multi-stakeholder coalition focused on facilitating the adoption and scaling of soil health restoration practices.

Research by the International Union for Conservation of Nature (IUCN) indicates that **regenerative agriculture** could sequester over 6 billion metric tons of carbon dioxide equivalent and increase soil organic carbon by 20% in Africa by 2040.[14] Additionally, **agroforestry systems** demonstrate significant soil organic carbon improvements compared to conventional agriculture. Another recent analysis shows that agroforestry can increase soil organic carbon by 10.7% on average compared to other land uses.[15] Climate finance for agri-food systems tends toward adaptation approaches, creating new pathways for degraded soil restoration and soil health interventions that enhance resilience while contributing to carbon sequestration, though **economic barriers** continue to limit adoption of sustainable agricultural practices.[16]

9 Bedeke, S.B. 2023. Climate change vulnerability and adaptation of crop producers in sub-Saharan Africa: a review on concepts, approaches and methods. *Environment, Development, and Sustainability,* 25:1017-1051. https://doi.org/10.1007/s10668-022-02118-8

10 FAO. 2021. COP26: Agricultural expansion drives almost 90 percent of global deforestation. https://www.fao.org/newsroom/detail/cop26-agricultural-expansion-drives-almost-90-percent-of-global-deforestation/en

11 Intergovernmental Panel on Climate Change (Eds.). 2023. Agriculture, Forestry and Other Land Uses (AFOLU). IN: Climate Change 2022 - Mitigation of Climate Change: Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. pp. 747-860. Cambridge University Press. https://doi.org/10.1017/9781009157926.009

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13 Eekhout, J.P.C., and de Vente, J. 2022. Global impact of climate change on soil erosion and potential for adaptation through soil conservation. *Earth-Science Reviews,* 226:103921. https://doi.org/10.1016/j.earscirev.2022.103921

14 Africa Regenerative Agriculture Study Group. 2021. Regenerative Agriculture: An opportunity for businesses and society to restore degraded land in Africa. https:iucn.org/sites/default/files/2022-06/regnererative_agriculture_in_africa_report_2021_compressed.pdf

15 Pan, J., Chen, S., He, D., et al. 2025. Agroforestry increases soil carbon sequestration, especially in arid areas: A global meta-analysis. *CATENA,* 249:108667. https://doi.org/10.1016/j.catena.2024.108667

16 World Economic Forum. 2024. How regenerative agriculture can make climate solutions more resilient. https://www.weforum.org/stories/2024/11/regenerative-agriculture-climate-solutions-resilient/

Conflict and Fragility: Undermining Agricultural Development

The **global security landscape** has deteriorated dramatically, with **conflict instances doubling since 2020**.[17] In Africa and Asia, regions critical to IFDC's work, conflict and political instability have intensified, with violence and unrest increasing in multiple countries. This deteriorating security environment is expected to continue worsening over the next decade, exacerbated by complex factors such as insurgencies, resource competition, and weak governance.[18] Such escalation profoundly impacts agricultural development and soil health through direct and indirect effects that compound existing challenges.

Food and soil security has emerged as a legitimate national security concern, with poor soil health and lack of access to productive soils threatening national and global food supply chains and affecting broader security challenges in areas such as water, climate, energy, and health systems.[19] Poor recognition of the situation in policymaking creates dangerous blind spots.

Land degradation and conflict are interlinked. Land degradation fuels conflict, and conflict accelerates land degradation. Land degradation leads to reduced productivity and increased food prices, which can contribute to social unrest, conflict, and migration.[20]

The **relationship between conflict, food insecurity, and poor soil health** forms a destructive cycle. Research indicates that **war undermines food security and soil health and decreases soil availability for productive agricultural use** more than urbanization, disrupting long-term planning essential for soil health improvements.[21] Armed conflict prevents access to productive land, disrupts input supply chains, destroys agricultural infrastructure, and displaces farming populations. The ensuing soil degradation and reduction in available farmland contribute to food insecurity and resource competition that can ignite further violence.

Donor priorities increasingly emphasize mutual benefits and national security concerns, fundamentally altering traditional development assistance models. This instrumentalization of aid constrains traditional funding while potentially attracting new forms of support for interventions with clear security implications.

17 Raleigh, C., Kishi, K. 2024. December 2024: Palestine, Myanmar, Syria, and Mexico hold the highest positions in the Index (ACLED Data). https://acleddata.com/series/acled-conflict-index

18 Raleigh, C. 2025. African Conflict in 2025. https://futures.issafrica.org/blog/2025/African-Conflict-in-2025

19 Basset, C. 2024. Soil security: The cornerstone of national security in an era of global disruptions. Soil Security, 16:100154. https://doi.org/10.1016/j.soisec.2024.100154

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Global Soil Health Situation: Implications for Food and Nutrition Security

Soil health is not just an agronomic concern; it is a strategic lever for food system resilience, productivity, and economic transformation. Yet today, soils in many parts of the world are rapidly degrading. According to the Food and Agriculture Organization of the United Nations (FAO), over one-third of global soils are moderately to severely degraded.[22] This crisis undermines agricultural output, fertilizer efficiency, and the long-term nutritional value of food.

In sub-Saharan Africa, soil nutrient depletion remains severe. Farmers lose an estimated 40 kilograms per hectare of nitrogen, phosphorus, and potassium annually without adequate replenishment.[23] The AFSH Action Plan, endorsed in 2023, names this nutrient imbalance as a key constraint to agricultural transformation and resilience.

AGRA's regional analysis shows that over 70% of Africa's arable land suffers from poor fertility, soil acidity, or low organic matter. These conditions restrict fertilizer responsiveness and limit yield potential – a fundamental barrier to food and income security.[24]

In South Asia, particularly in India and Bangladesh, excessive and imbalanced fertilizer use has led to soil acidification, micronutrient deficiencies, and declining soil structure.[25] In the United States, intensive monoculture practices have contributed to erosion, soil carbon loss, and compaction, particularly in the Midwest.

Degraded soils reduce the quantity and quality of food produced. Crops grown in micronutrient-poor soils often lack essential nutrients such as zinc and iron, contributing to hidden hunger, particularly among children and women in low-resource settings. For IFDC, these stark implications reaffirm soil health as a strategic priority. Without healthy soils, the value of fertilizers, seeds, and extension systems diminishes. Reversing soil degradation is foundational to improving yields, enhancing farmer profitability and resilience, and achieving sustainable impact at scale. For example, application of ISFM practices that restore soil health can double farm productivity and result in farm incomes increasing up to 50%.[26]

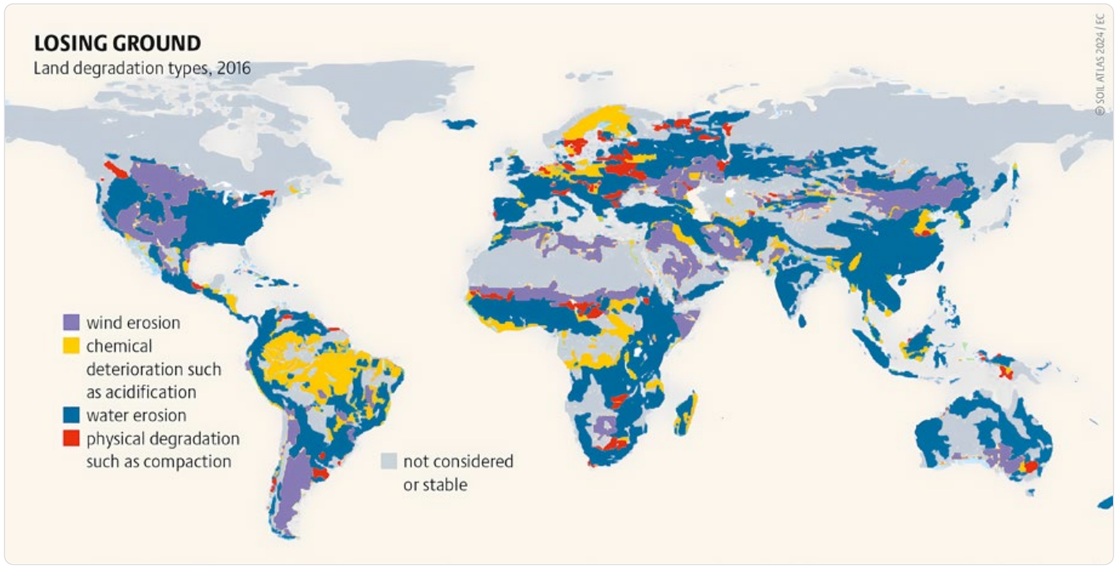

Figure 1. Global Land Degradation ***Source:*** *Soil Atlas 2024, Heinrich-Böll-Stiftung and others*

22 Food and Agriculture Organization of the United Nations (FAO). 2015. Status of the World's Soil Resources (SWSR): Main Report. Rome, Italy. Available at: https://www.fao.org/documents/card/en/c/c6814873-efc3-41db-9026-daa002c3cdd3/.

23 Vanlauwe, B., Amede, T., Bationo, A., et al. 2023. Fertilizer and Soil Health in Africa: The Role of Fertilizer in Building Soil Health to Sustain Farming and Address Climate Change. https://ifdc.org/wp-content/uploads/2023/02/Fertilizer-and-Soil-Health-in-Africa-The-Role-of-Fertilizer-in-Building-Soil-Health-to-Sustain-Farming-and-Address-Climate-Change.pdf

24 Sanchez, P., et al. 2008. Building an Alliance for a Green Revolution in Africa. *Annals of the New York Academy of Sciences*, 1136: 233-242. https://www.un.org/millenniumgoals/pdf/nyas_building_agra.pdf

25 Ryan, J., and Singh, B. 2022. Managing Fertilizers to Enhance Soil Health. https://www.fertilizer.org/wp-content/uploads/2023/01/2015_ifa_singh_ryan_soils.pdf

26 CCARDESA. https://www.ccardesa.org/integrated-soil-fertility-management-isfm

Soil Health: The Critical Nexus

Soil health represents the critical nexus where food security, climate, conflict prevention, and sustainable agricultural innovation intersect. As a fundamental enabler of agricultural productivity, soil health directly impacts food security while serving as a critical climate adaptation and mitigation component.

Global frameworks increasingly acknowledge explicit linkages between soil health and the United Nations SDGs, climate change, biodiversity conservation, water management, and pollution control.[27] Yet translation into action faces significant obstacles. Soil governance remains fragmented globally, lacking legally binding frameworks and relying on outdated policy instruments. The persistent gap between scientific understanding and policy implementation represents a critical bottleneck.[28]

Financial innovation presents mixed prospects. Blended finance in agriculture is expanding: a total of 2-3% of ODA is currently catalyzing such mechanisms, with agriculture's share growing faster than average. Despite this growth, innovative instruments such as green bonds and carbon credits remain largely inaccessible to smallholder farmers.[29]

The urgency of global challenges in food security and climate change and their convergence with conflict crises have created an unprecedented window for soil health innovation. Organizations capable of positioning soil health as a foundational solution to interconnected challenges while developing practical implementation pathways are positioned to drive transformative impact. This context demands approaches that integrate scientific rigor with practical applicability and are responsive to the complex political and economic realities that shape contemporary agricultural development.

27 FAO. 2022. Global Soil Partnership Action Framework 2022-2030. https://openknowledge.fao.org/handle/20.500.14283/cc0478en

28 Ruppel, O.C. 2022. Overview of international soil law. *Soil Security*, 6:100056. https://doi.org/10.1016/j.soisec.2022.100056

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ADVANCING TOWARD SOLUTIONS

This strategy directly addresses the critical challenges facing global agriculture through IFDC's three strategic goals: fertilizer innovation, farmer impact at scale, and sustainable systems transformation.

At its core, the strategy advances ISFM as a proven pathway to improve soil health and increase productivity by combining mineral fertilizers, organic inputs, and improved cropping practices tailored to local agroecological conditions. A key change for IFDC, the focus on co-developing and scaling climate-smart, site-specific fertilizer innovations through the Global Network of Fertilizer Innovation Centers (GNFIC) ensures that solutions are scientifically sound, inclusive, and responsive to farmer needs.

To translate these innovations into widespread impact, IFDC combines comprehensive farmer support systems – leveraging participatory approaches and evidence-based field methodologies – with strengthened market systems that enhance input access, affordability, and enabling policies. The strategy embeds systemic transformation by addressing market barriers, regulatory constraints, and institutional capacity gaps, thereby creating an environment where fertilizer innovation can thrive and adoption is economically viable for smallholder farmers, particularly women and youth.

Together, these interconnected pathways position IFDC to contribute to restored soil health, address food insecurity, raise farmer livelihoods, and build resilient food systems. Through collaboration across public, private, and civil society sectors and a commitment to evidence-driven, locally adapted solutions, IFDC aims to lead sustainable agricultural transformation that meets the urgent needs of the communities it serves now and in the future.

Global Network of Fertilizer Innovation Centers

Unlike traditional research and development platforms, the centers involved in the GNFIC make up a multi-functional consortium of partners that connects science with society, policy, markets, and farmers, aiming to deliver context-specific, sustainable, and replicable solutions for soil health and nutrient management. (see page 27)

KEY SHIFTS IN STRATEGY **2026-2035**

For over 50 years, IFDC has advanced soil fertility solutions, continually adapting to meet the changing needs of the communities we serve, the shifting priorities of our partners, and the new opportunities emerging in the fertilizer and sustainable agriculture sectors.

With Strategy 2026-2035, we are taking the next step in this evolution.

The strategy identifies a set of key shifts that will guide our work over the coming decade, strengthening IFDC's impact on restoring soils and soil fertility, contributing to national food security and nutrition, and ensuring our approaches remain relevant, innovative, and transformative.

Sharpen Strategic Focus for Maximum Impact

Sharpen our strategic focus and concentrate IFDC's efforts where we can add the most value, guided by a clear ambition, measurable goals, and our unique ability to leverage private sector engagement for public good.

Drive Systems-Level Transformation

Embed systems thinking into our Theory of Change and program design, ensuring our interventions address root causes and deliver transformational change across all levels of agricultural systems to restore degraded soils, improve soil fertility, and increase global food and nutrition security.

Strengthen Research and Innovation Leadership

Invest in infrastructure, talent, and capabilities to lead cutting-edge research and innovation, delivering solutions tailored to the needs of smallholder farmers worldwide.

Catalyze the Global Network of Fertilizer Innovation Centers

Position the GNFIC at the heart of our strategy, using global collaboration and regional expertise to generate locally adapted solutions that drive sustainable agricultural transformation.

Ensure an Integrated Approach Across Research and Development

Ensure research and innovation are fully integrated into IFDC's Theory of Change, strategic goals, and systems and processes, creating coherence, synergies, and stronger knowledge-sharing for greater impact.

Move Beyond Mineral and Organic Fertilizers Toward Recirculation

IFDC is advancing beyond the traditional reliance on mineral and organic fertilizers by embracing nutrient recirculation as a cornerstone of sustainable soil health management. IFDC's signature approach to soil health builds on the traditional 4Rs of Nutrient Stewardship framework (right product, right rate, right time, right place) by integrating four additional Rs that embody circular economy principles – recycle, rebuild, record, and resilient – to reflect planetary boundaries. The 8R approach, unique to IFDC, integrates the recycling of nutrients within farming systems, leveraging organic matter, crop residues, and waste streams, to restore soil fertility and reduce dependency on external inputs. By fostering circular nutrient flows, IFDC aims to enhance nutrient use efficiency, lower environmental impact, and promote resilient, regenerative agricultural systems that sustain productivity and ecosystem health simultaneously.

Soil Health for a Thriving Future

Beyond Mineral and Organic Fertilizers Toward Recirculation

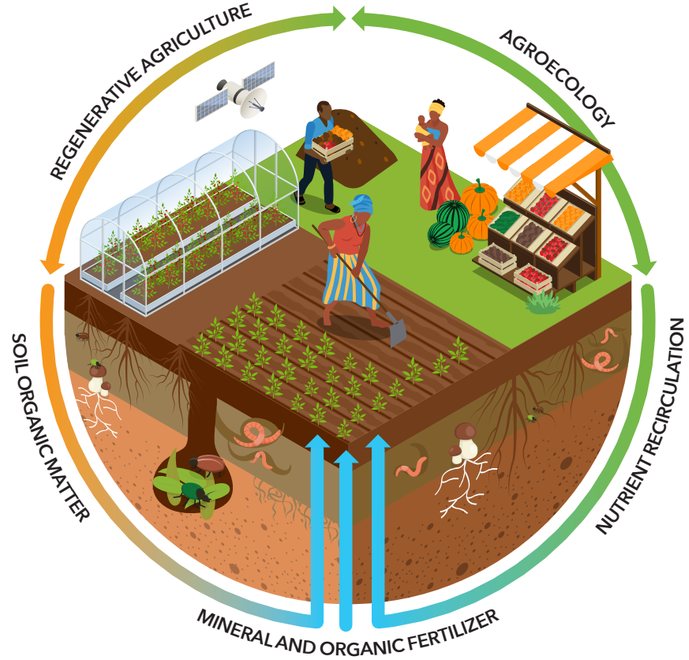
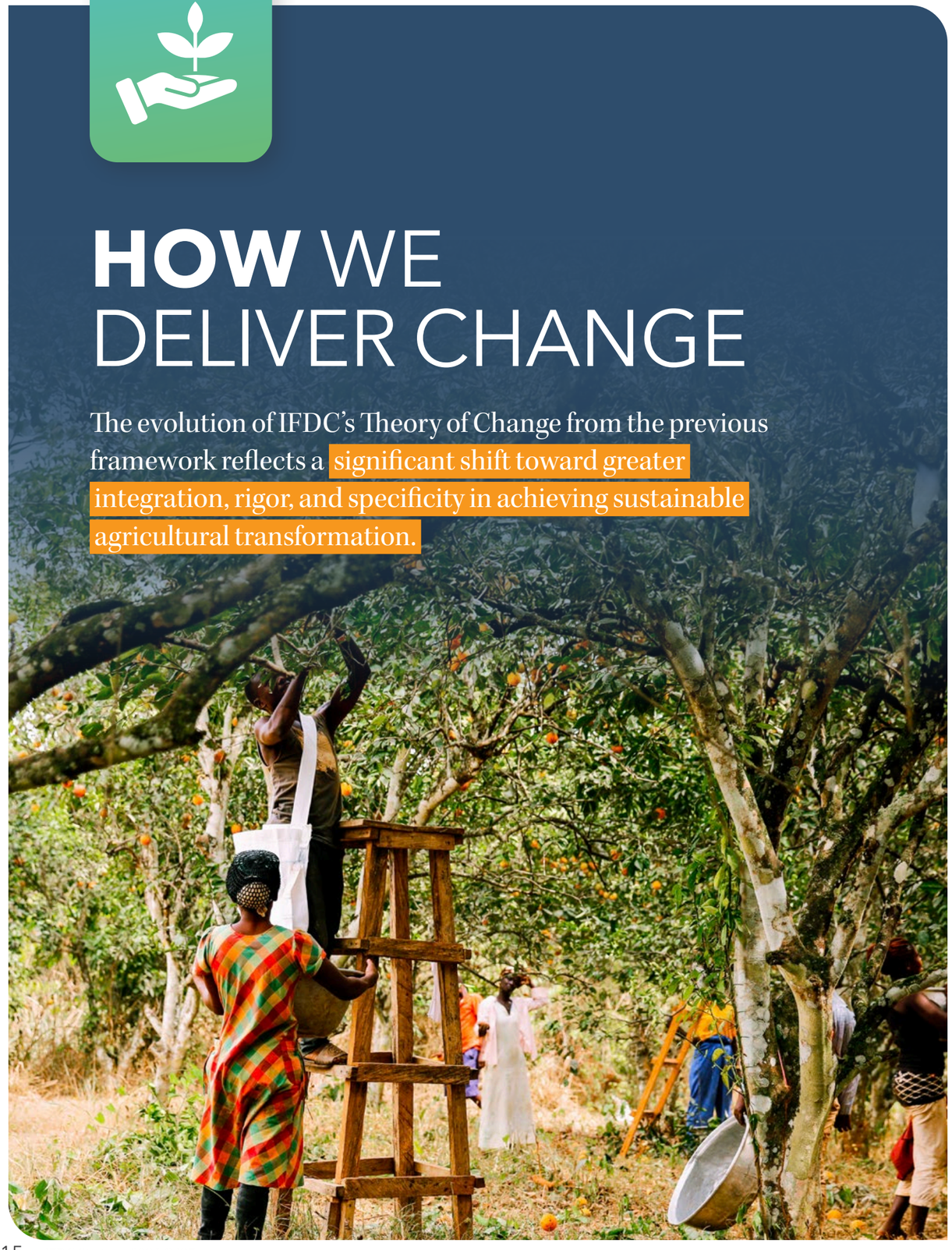


Figure 2. Integrated Soil Health for Resilient Farming Systems: Beyond Mineral and Organic Fertilizers Toward Nutrient Recirculation

HOW WE DELIVER CHANGE

The evolution of IFDC's Theory of Change from the previous framework reflects a significant shift toward greater integration, rigor, and specificity in achieving sustainable agricultural transformation.



Introduction

The earlier Theory of Change (2020-2030) centered on developing and scaling promising technologies, catalyzing farm productivity, and strengthening markets through broad outputs such as balanced fertilization, climate adaptation strategies, and the creation of evidence for policy and market improvements. This approach was generalized, focusing on technological advancements and scaling best practices. In contrast, the new Theory of Change for 2026-2035 sharpens its focus by explicitly connecting scientific research with farmer impact by applying a Product Life Cycle (PLC) approach (see page 28), deepening partnerships, and prioritizing localized and inclusive pathways, especially for women, youth, and marginalized groups.

The updated Theory of Change also advances systems transformation by embedding fertilizer innovation and climate-smart practices into national and regional policy efforts and investment platforms. This evolution demonstrates a move from broad technology and market interventions to a more holistic, research-driven, and systemically anchored strategy designed to deliver lasting soil health, improved farmer livelihoods, and resilient food systems.

Our Theory of Change

If we develop and scale climate-smart fertilizer innovations **AND** empower farmers with sustainable practices **AND** transform market systems to be more inclusive, **THEN** soil health will be restored, farmer livelihoods will improve, and food systems will become more resilient.

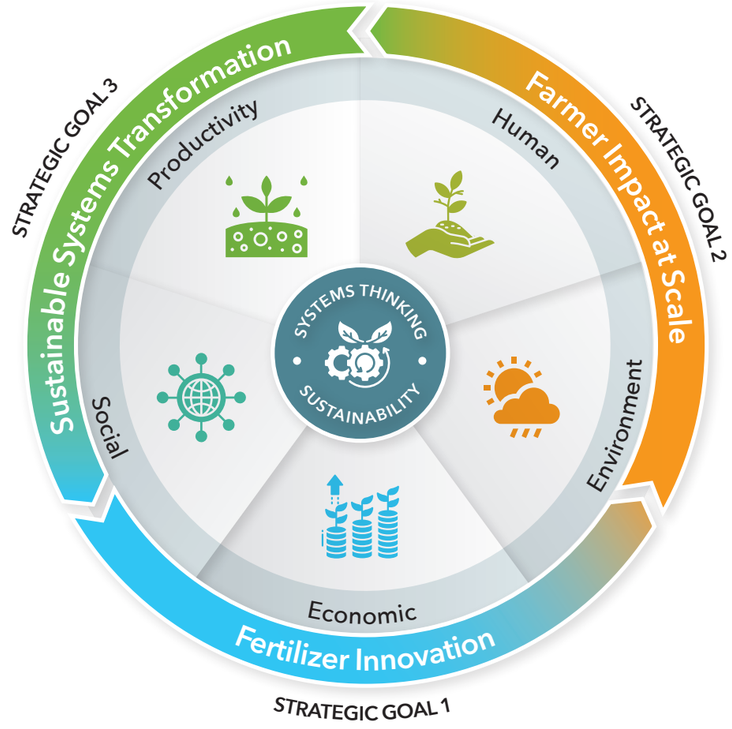


Figure 3. IFDC's Theory of Change Visualized

Figure 4. IFDC's Theory of Change Illustrated

Three Interconnected Pathways

How They Reinforce Each Other:

INNOVATION > FARMERS

The GNFIC develops climate-smart fertilizers that reach farmers through adoption of solutions by IFDC's scaling partners.

FARMERS > SYSTEMS

Successful farmer adoption creates market demand and provides evidence for policy advocacy and value chain investments.

SYSTEMS > INNOVATION

Supportive policies and inclusive markets create enabling environments where innovations can be scaled and sustained, yielding resilient food systems.

Continuous Feedback Loops Between Research & Development and Markets:

Feedback informs new research priorities, while policy changes enable broader innovation adoption, creating a self-reinforcing cycle of improvement.

The GNFIC represents IFDC's approach to connecting research, policy, markets, and farmers through regional innovation hubs.

Key Assumptions Underpinning IFDC's 2026-2035 Theory of Change

The following key assumptions form the foundation of IFDC's Theory of Change for 2026-2035. They reflect the essential conditions and collaborative efforts required to support sustainable agricultural development and ensure successful outcomes throughout the program period.

- **Enabling Environment:** Governments maintain supportive regulatory frameworks that allow new fertilizer products and sustainable practices, while policy incentives such as carbon markets and favorable pricing reward sustainable agriculture. The enabling environment is backed by sustained public and private investment in the agriculture sector and long-term policy commitments that outlast political cycles.
- **Private Sector Engagement:** Industry partners demonstrate genuine commitment to joint innovation over transactional relationships, profitably serve smallholder markets while staying globally competitive, support local development alongside their operations, and make long-term investments in soil health and sustainable practices beyond short-term financial gains.
- **Knowledge Systems:** Effective transfer mechanisms reach farmers through extension networks, farmer feedback actively informs research and innovation priorities, knowledge-sharing functions well between regions and integrates traditional and scientific systems, and cross-learning platforms enable effective collaboration across different knowledge frameworks.
- **Market Infrastructure:** Functional market systems provide quality inputs and technologies with reliable rural logistics, financial services and credit effectively reach smallholder farmers, transparent market information and pricing data are accessible to farmers, and market prices reward and incentivize sustainable production practices.

Contribution to Food Security and Alignment with Global, Continental, and Regional Frameworks

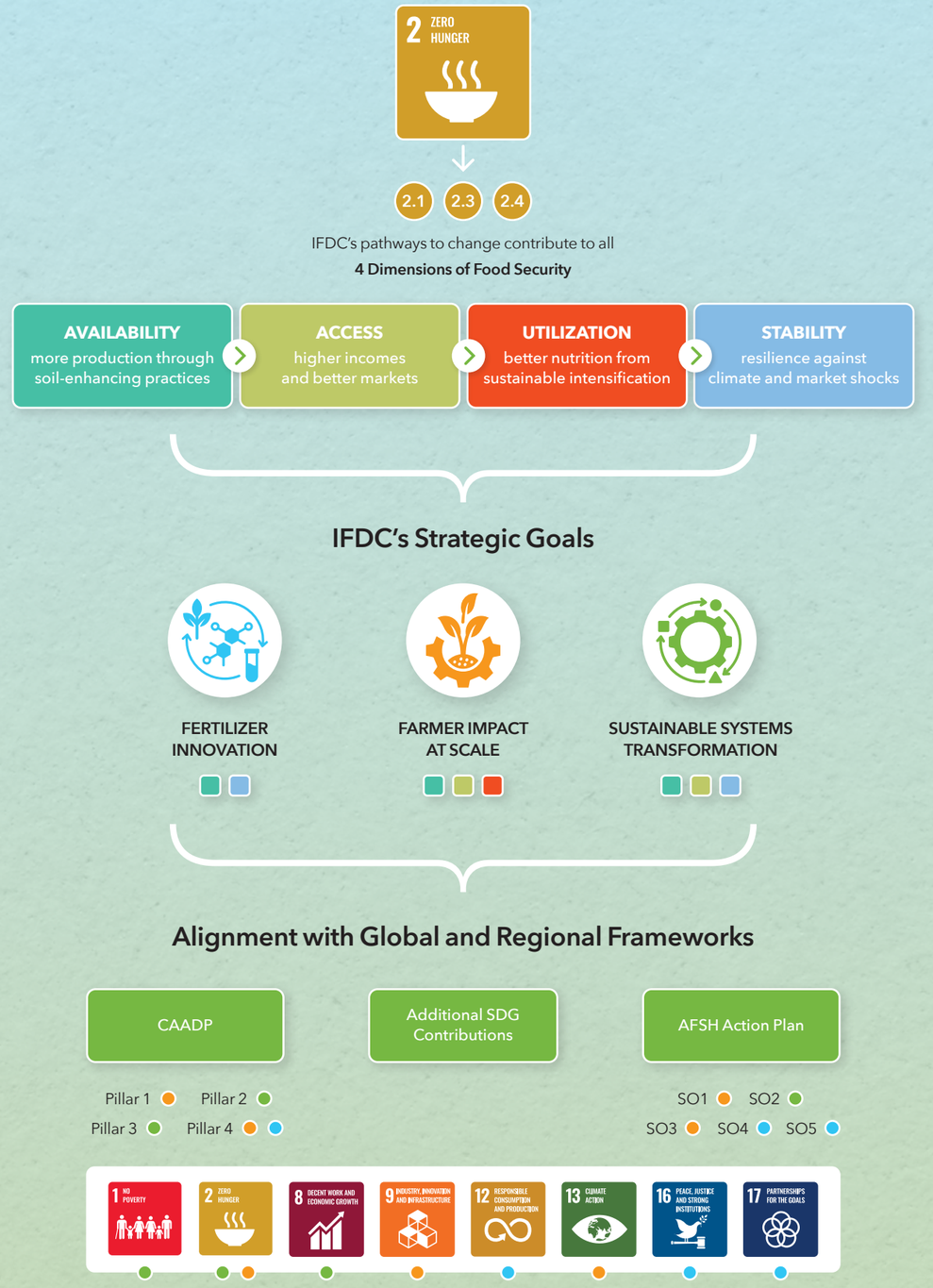


Figure 5. Strategic Alignment with Global and Regional Frameworks

IFDC's strategic goals contribute to food security in three interconnected ways.

CLIMATE-SMART FERTILIZERS AND INNOVATION:

Make farming more productive and sustainable. Climate-smart fertilizers are innovative nutrient technologies that improve crop nutrient use efficiency while reducing greenhouse gas emissions and environmental losses. They achieve this through controlled-release formulations and additives that optimize nutrient availability to match crop needs, supporting climate resilience and sustainable agricultural intensification. These fertilizer technologies contribute to lower soil acidification risks and enhanced soil health when applied properly.[30] By improving soil health and nutrient efficiency, farmers can grow more food on less land while building resilience to droughts, floods, and climate shocks. This ensures stable availability of nutritious food.

EMPOWERED FARMERS ADOPTING SUSTAINABLE PRACTICES:

Such as ISFM and regenerative agriculture not only increase yields but also diversify production systems. IFDC's signature 8R soil health approach strengthens this transformation by expanding the traditional 4R nutrient stewardship framework – right product, right rate, right time, right place – with four additional Rs that reflect circular economy principles: recycle, rebuild, record, and resilient. This integrated framework promotes nutrient recycling within farming systems by leveraging organic matter, crop residues, and waste streams to restore soil fertility, reduce reliance on external inputs, and enhance nutrient use efficiency. Together, these practices foster resilient regenerative agricultural systems that sustain productivity, ecosystem health, and food security. Higher productivity raises incomes, enabling farmers to buy food in lean seasons, while regenerative practices safeguard long-term soil fertility. Resulting improvement in market access ensures that food surpluses reach consumers efficiently, reducing hunger and volatility.

INCLUSIVE POLICIES AND INSTITUTIONS:

Create an enabling environment for resilient value chains. By mainstreaming soil health and fertilizer innovations into national and regional frameworks, countries can scale adoption. Climate-resilient value chains also ensure food can move from surplus to deficit regions, improving stability, affordability, and access.

IFDC's strategic goals contribute directly to global commitments on agriculture and food systems transformation, particularly, the CAADP, the SDGs, and the AFSH Action Plan 2023-2033.

- Access to **climate-smart fertilizers and innovations** strengthens soil fertility management and enables farmers to adopt efficient, sustainable practices. This outcome advances **CAADP Pillar 1 (Sustainable Land and Water Management)** and **Pillar 4 (Agricultural Research, Technology Dissemination, and Adoption)**. It also directly supports **SDG 2 (Zero Hunger)** by boosting productivity, **SDG 9 (Industry, Innovation, and Infrastructure)** by building innovation systems, and **SDG 13 (Climate Action)** through low-emission, climate-smart inputs. In alignment with the **AFSH Action Plan**, this work contributes to **Strategic Objective 1 (Enhancing Sustainable Soil Management)** and **Strategic Objective 3 (Innovation, Research and Capacity Building)** by ensuring farmers access next-generation fertilizers tailored to African soils.
- When **empowered farmers adopt sustainable practices**, including ISFM and regenerative agriculture, they increase their yields, improve resilience, and boost their incomes. This outcome supports **CAADP Pillar 2 (Improved Market Access)** and **Pillar 3 (Increased Food Supply and Hunger Reduction)**, while driving progress toward **SDG 1 (No Poverty), SDG 2 (Zero Hunger)**, and **SDG 8 (Decent Work and Economic Growth)**. From a food security perspective, it enhances **availability** (through higher yields), **access** (through better incomes and markets), **utilization** (through diversified diets), and **stability** (through resilient practices). In the **AFSH Action Plan**, this outcome advances **Strategic Objective 2 (Strengthening Fertilizer and Soil Health Value Chains)** by ensuring that innovations translate into farmer adoption and real productivity gains.
- **Inclusive policies and enabling institutions** create the foundation for scaling. This outcome reinforces CAADP's cross-cutting commitment to **policy harmonization and institutional reform** while embedding fertilizer innovation and soil health into national and regional strategies. Globally, this aligns with **SDG 12 (Responsible Consumption and Production), SDG 16 (Peace, Justice, and Strong Institutions)**, and **SDG 17 (Partnerships for the Goals)**. Within the **AFSH Action Plan**, IFDC's work contributes to **Strategic Objective 4 (Policy, Institutional Strengthening and Harmonization)** and **Strategic Objective 5 (Financing and Investment)**, ensuring that fertilizer and soil health interventions are mainstreamed into agricultural planning and resourced at scale.

30 IFA. The Role of Fertilizers in Climate-Smart Agriculture. 2016. https://www.fertilizer.org/wp-content/uploads/2023/01/2016_The_Role_of_Fertilizers_in_Climate-Smart_Agriculture-edited.pdf

OUR CURRENT GEOGRAPHIC FOCUS

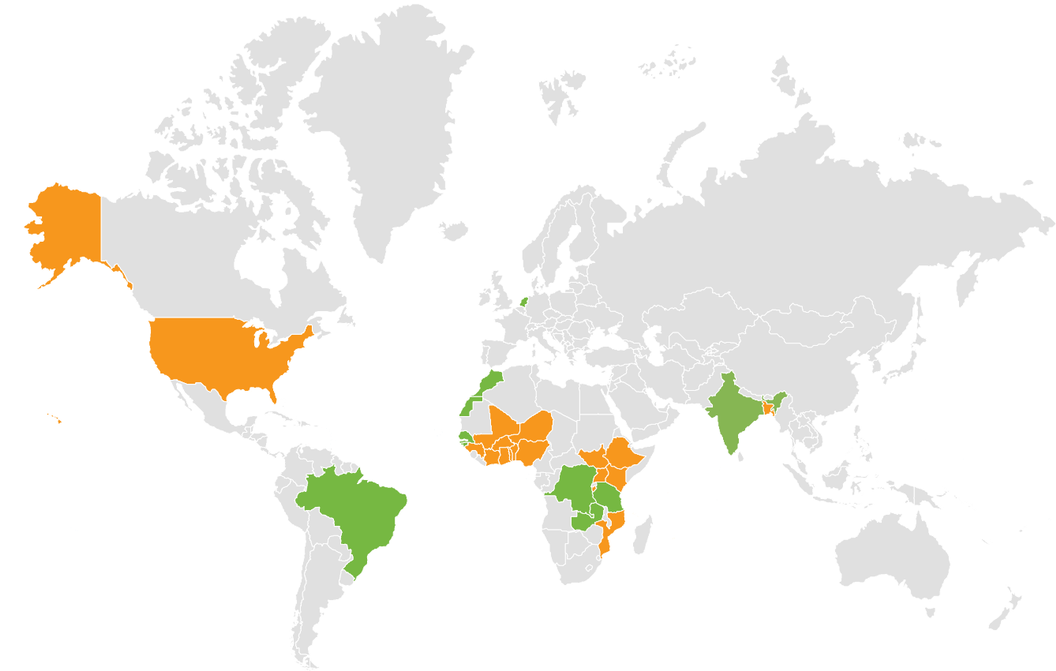


Figure 6. IFDC's Current Geographic Focus

Over the next 10 years, IFDC will aim to deepen and expand our geographic focus. Geographic focus will be determined by a clear and transparent process, guided by key criteria aligned with IFDC's positioning to maximize impact.

Criteria include:

- Food and nutrition security indicators
- Environmental and climate shock indicators
- Soil health indicators
- Nutrient use efficiency indicators
- Level of fertilizer use (access and affordability)
- Environmental pollution indicators
- Agroecological diversity (tropical, temperate, acidic/alkaline soils)
- Innovation and policy readiness
- Existing research and development infrastructure
- Public-private eagerness
- Investment opportunities
- Enabling policies
- Complementary and supplementary partnerships (public and private sector players)

WHERE IFDC WILL PLAY

STRATEGIC FOCUS AREAS

IFDC's strategic positioning for 2026-2035 focuses on high-impact zones and value chains where soil health innovation can drive systemic change and eradicate hunger. Our strategy emphasizes agroecological relevance, market opportunity, and alignment with national and regional priorities.

FOCUSED FERTILIZER RESEARCH AND INNOVATION

Establishing dedicated Research and Development (R&D) hubs focused on green and blue ammonia, biologicals, organo-mineral fertilizers, and nano-fertilizers, while also co-developing and testing site-specific fertilizer blends in partnership with regional stakeholders. Scaling up inhibitor-based, slow-release, and coated fertilizers through public–private pilot programs will be critical to accelerating adoption.

ACIDIC SOIL ZONES

Targeting areas with high prevalence of acid soils, where lime application is essential to unlock productivity. Focus crops include maize, rice, coffee, and cassava.

HORTICULTURE AND HIGH-VALUE CROPS

Emphasis on vegetables, legumes, roots and tubers, and plantation crops in regions with strong market demand and potential for circular input systems.

RICE SYSTEMS AND AQUACULTURE INTERFACES

Focus on rice production zones benefiting from fertilizer deep placement (FDP) and urea deep placement (UDP) technologies. Scaling will be supported through digital subsidy reform and e-voucher delivery.

CEREAL AND OILSEED PRODUCTION ZONES

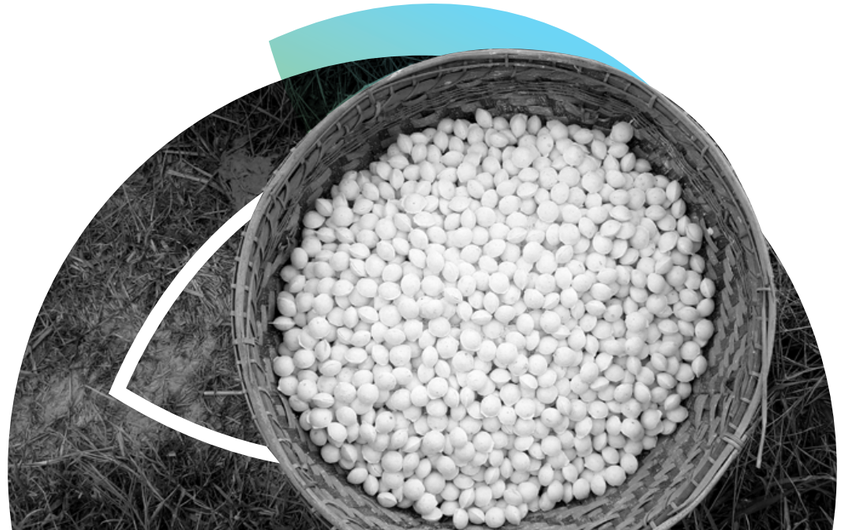
Targeting maize, wheat, sorghum, millet, and oilseeds in regions with strong policy alignment and subsidy reform momentum. These areas offer opportunities for ISFM and market systems development.

LAND RESTORATION AND SOIL FERTILITY HOTSPOTS

Emphasis on degraded landscapes where cereals, cash crops (coffee, cotton), and rice are grown. Interventions will focus on restoring soil functionality and building resilience through biologically based solutions. Strategic partnerships with small and medium enterprises (SMEs) will support biofertilizer scale-up and innovation.

FOOD AND NUTRITION SECURITY CORRIDORS

Prioritizing maize, beans, rice, coffee, bananas, and horticulture in zones critical to household nutrition and regional food systems. Soil health interventions will be linked to nutrition-sensitive value chains.



WHERE IFDC WILL NOT PLAY

IMPLICATIONS FOR STRATEGIC PARTNERSHIPS

In domains outside this core mandate, IFDC will not duplicate efforts or dilute our strategic value. Instead, we will collaborate with partners best positioned to lead, ensuring a coherent and complementary ecosystem that delivers systemic change.

- **No Programs without Soil Health Connection:** IFDC does not lead on the development or implementation of programs that are not explicitly connected to soil health.
- **No Direct Policy Lobbying:** IFDC refrains from direct policy lobbying, leaving this function to partners and regional bodies.
- **No Trading or Distribution:** IFDC avoids acting as a trader or distributor of agricultural inputs, but rather, focuses on private sector involvement.
- **No Financial Product Provision:** IFDC does not offer credit or financial products, but instead supports financial institutions with data and partnerships.
- **No Humanitarian Relief Leadership:** Humanitarian relief efforts are led by specialized organizations, outside IFDC's direct activities.
- **Avoiding Large-Scale Infrastructure:** IFDC excludes involvement in large infrastructure like irrigation and roads, delegating these to governments and banks.
- **Fertilizer Subsidy Programs:** IFDC does not manage national fertilizer subsidy programs but provides evidence to support reform efforts.
- **Development of Artificial Intelligence (AI) Models:** IFDC will not lead the development of AI approaches and platforms but rather will focus on the use of AI and improved integration of crop and soil data for relevant applications.
- **Fertilizer Synthesis:** IFDC will not lead the development of new approaches to synthesize nitrogen fertilizers more efficiently (e.g., green ammonia) but will focus on how to more efficiently utilize such approaches for crop nutrient needs.
- **Mining for Crop Nutrients:** IFDC will not own, operate, or support more efficient mining of crop nutrient products but will support the valorization of mined materials for crop nutrition applications.
- **Avoiding Short-Term and Exclusionary Actions:** IFDC steers clear of one-size-fits-all, short-term fixes, and exclusionary approaches that marginalize vulnerable groups.
- **Preventing Duplication and Ensuring Focus:** IFDC avoids duplicating existing efforts without added value to maintain strategic discipline and long-term change.

By clearly defining where IFDC will not play, we reinforce our strategic discipline and ensure that every intervention adds distinct value. These boundaries are not limitations – they are commitments to partnership, coherence, and impact. Through collaboration with trusted institutions across the agricultural ecosystem, IFDC will continue to deliver results that are scalable, inclusive, and sustainable.

OUR 2026-2035 STRATEGIC GOALS

Strategic Goal 1: Fertilizer Innovation

Fertilizers fueled the Green Revolution and remain vital for global food security, but 21st-century challenges demand a new wave of innovation that is transformative, sustainable, climate-smart, and farmer-centered. Current barriers include stagnation in low-energy production technologies, limited region- and crop-specific formulations, delayed product development timelines, and lack of standardized outcomes data, leading to confusion for farmers about the real benefits of new products and weak market systems that constrain smallholder adoption. Knowledge gaps around fertilizer-soil-environment-nutrition interactions hinder integrated, evidence-based solutions, while conventional fertilizers drive soil degradation, water pollution, and greenhouse gas emissions.

Fragmented partnerships, insufficient investment, policy inefficiencies, poor infrastructure, and limited farmer access to finance further restrict progress, especially in low- and middle-income nations. To address these challenges, IFDC will strengthen and expand the GNFIC, which will drive science-based, inclusive, and scalable innovations in the fertilizer and soil health sectors. Unlike traditional research and development platforms, the centers involved in the GNFIC make up a multi-functional consortium of partners that connects science with society, policy, markets, and farmers, aiming to deliver context-specific, sustainable, and replicable solutions for soil health and nutrient management.

IFDC'S APPROACH TO INNOVATION AND THE PRODUCT LIFE CYCLE

IFDC is committed to accelerating the development, validation, and deployment of next-generation fertilizer and soil health innovations that improve productivity, profitability, and environmental sustainability. To achieve this, IFDC applies a PLC approach, ensuring that promising technologies move systematically from invention to adoption and impact at scale.

INNOVATION THROUGH CORE COMPETENCIES AND PARTNERSHIPS

- **Source of Invention:** In areas where IFDC has deep technical expertise (e.g., fertilizer formulations and process engineering), we will serve as an originator of innovations, leveraging our research and development capacity and global field presence to generate novel solutions.
- **Collaborative Commercialization:** When IFDC is not the inventor of the solution, we will act as an innovation enabler, partnering with start-ups, research groups, and technology providers to accelerate their pathway to market.

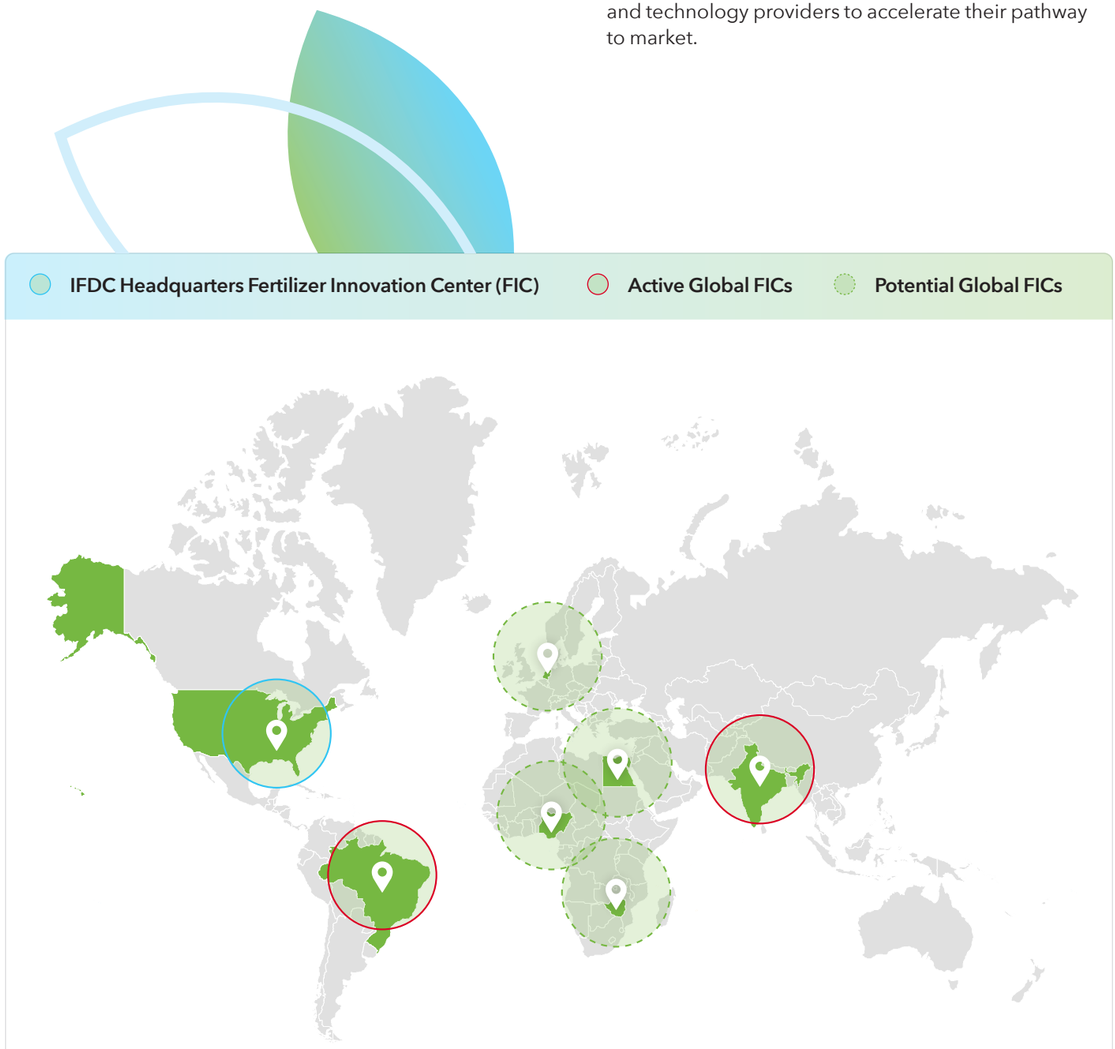


Figure 7. IFDC's Global Network of Fertilizer Innovation Centers

Market Research Blue-Sky R&D Adaptive R&D Delivery (Public/Private)

Target product profile (TPP) developed based on market research and segmentation
IFDC's Role: We conduct market analysis and farmer needs assessment to guide TPP development

Data demonstrates significant multi-year decline
IFDC's Role: We provide market intelligence to inform new product development cycles

Identification and selection of product components based on TPP
IFDC's Role: We support both direct invention and innovation identification through strategic partnerships with academia and start-ups

Adoption has plateaued
IFDC's Role: We are informed by impact data; identify opportunities for product improvement or adaptation

Development of pre-products or prototypes
IFDC's Role: We provide lab and greenhouse testing; offer technical guidance on prototype development; develop prototypes directly

Confirmation of widespread adoption
IFDC's Role: We support scale through public-private partnerships and capacity building; conduct monitoring and evaluation

Efficacy evaluated through small plot trials/greenhouse trials
IFDC's Role: We conduct independent validation through field trials; provide pilot plant services for production testing

Resources, commitment, and incentives for widespread adoption identified
IFDC's Role: We connect innovations to distributors, policymakers, and financing partners; develop farmer engagement strategies

Identification of conditions required for high probability of success
IFDC's Role: We conduct adaptive research to refine for local conditions, value chains, and regulatory contexts

Regulatory approval, product release, and registration
IFDC's Role: We support regulatory navigation and establish quality control protocols

***Figure 8.** IFDC's Product Life Cycle Approach*

Product Life Cycle-Aligned Services for Start-Ups and Innovators

Across the PLC, IFDC provides a suite of services that help de-risk and advance new technologies:

- **Early-Stage (Concept and Design):** Support in defining target product profiles to guide development toward farmer needs, market potential, and sustainability standards.
- **Validation (Prototype and Development):** Independent lab, greenhouse, and field trials to assess productivity, environmental impacts, and profitability; pilot plant services to support commercial scale production.
- **Adaptation (Pre-Commercialization):** Tailored guidance to refine technologies for local conditions, value chains, and regulatory contexts.
- **Market Entry (Commercialization and Growth):** Support with market analysis, farmer engagement, and connections to distributors, policymakers, and financing partners.

Partnering Across the Ecosystem

Recognizing that no single actor can deliver innovation alone, IFDC collaborates with a consortium of partners across the PLC. In domains beyond our in-house expertise (e.g., advanced materials, digital tools, or financing mechanisms), we will engage universities, research labs, private sector actors, development organizations, and key regional partners to ensure comprehensive support for innovations from lab to field to market. This is a core function of our GNFIC.

Driving Impact

By combining IFDC's core strengths in fertilizer science and agronomic systems with a PLC-based innovation framework, we position ourselves as both a source of invention and a catalyst for commercialization. This approach ensures that promising fertilizer and soil health technologies are rigorously validated, adapted, and scaled and will ultimately help farmers achieve higher yields, improve profitability, and safeguard the environment.

IFDC WILL CONTRIBUTE TO THE FOLLOWING RESULTS:

RESULT 1: GLOBAL AND REGIONAL CAPACITY TO GENERATE CONTEXT-SPECIFIC FERTILIZER SOLUTIONS IS STRENGTHENED THROUGH IFDC'S GLOBAL FERTILIZER INNOVATION NETWORK.

IFDC will establish and support the GNFIC as a key mechanism to strengthen regional capacity for fertilizer innovation. These efforts will be supported by the following approaches: target collaboration of key stakeholders, capacity-strengthening programs, and facilitation of global innovation initiatives.

RESULT 2: INDUSTRY AND ACADEMIA PARTNERS CO-DEVELOP AND SCALE FERTILIZER INNOVATIONS THAT DELIVER CLIMATE-SMART SOLUTIONS TAILORED TO SMALLHOLDER FARMER NEEDS.

IFDC will co-create fertilizer innovations tailored to specific regions, soils, crops, and climates through advanced research and development to increase nutrient use efficiency, crop productivity (with reduced environmental impacts), and affordability for smallholder farmers. Research activities will be driven and informed by IFDC's research priorities and a life cycle framework for low-emission products. By applying these models, IFDC will tailor and target soil health and fertilizer advisory across heterogeneous biophysical and socioeconomic conditions.

RESULT 3: SMALLHOLDER FARMERS ACCESS AND APPLY SOIL- AND CONTEXT-SPECIFIC, NEXT-GENERATION FERTILIZER INNOVATIONS.

IFDC will work with the GNFIC's extension partners and within our global programs to make innovations affordable, accessible, and scalable for smallholders, especially women and youth, helping close yield gaps for smallholder farmers. Deploying smallholder-centric, evidence-based models to test, adapt, and refine will enable IFDC to get affordable fertilizer innovations and proven technologies into smallholder farmers' hands. IFDC's 8R model (see pages 14 and 20), specifically principles of circular economy, sets the context for the work of the GNFIC and partners.

IFDC's Partners for Fertilizer Innovation

- Fertilizer industry and innovation start-ups
- Governments
- Research institutions
- Agribusinesses
- Farmers

Strategic Goal 2: Farmer Impact at Scale

Smallholder farmers, particularly those in sub-Saharan Africa and South Asia, face an interconnected web of challenges that perpetuate cycles of low productivity, poverty, and environmental degradation. Decades of unsustainable land use, inappropriate fertilizer application (overuse or underuse), and limited soil management have led to widespread soil degradation, nutrient depletion, and erosion, undermining productivity and food security while creating ecological stress. Current barriers include inadequate access to context-specific, climate-smart agricultural technologies, limited technical capacity among extension services and farmer organizations, and weak market systems that constrain smallholder adoption of sustainable practices. Knowledge gaps around ISFM and precision nutrient use limit evidence-based solutions, while traditional farming approaches continue to drive soil degradation and declining yields. Access constraints are particularly acute for women and youth farmers, who face additional barriers including limited access to credit, high transaction costs, and insufficient collateral for financing. Poor infrastructure, weak distribution systems, and fragmented value chains further restrict technology access and market opportunities, especially in remote rural areas.

To address these challenges, IFDC will implement an integrated approach that connects innovative fertilizer solutions from our GNFIC with comprehensive farmer support systems.

This strategy leverages IFDC's established global programs and extension partnerships to deliver context-specific, sustainable soil and nutrient management practices directly to smallholder farmers. This integrated model combines cutting-edge fertilizer innovations with participatory, evidence-based field methodologies, digital advisory support, and market linkage facilitation to ensure sustainable adoption and scaling of climate-smart agricultural practices.

IFDC'S APPROACH TO SCALING

There are many "proven" biophysical fertilizer and soil health innovations that improve productivity, but few are moving to scale and impact in Africa and beyond. A key driver to this issue is the economic yield gap; for example, in Africa only 27% of the "ecological yield gap" (the difference between possible total yield in the context of environmental conditions and available technologies and the current total yield) is profitable, which results in the "economic yield gap" (the difference between the current yield and profit-maximizing yield).[31]

31 Bonilla-Cedrez, C., Chamberlin, J. & Hijmans, R.J. Fertilizer and grain prices constrain food production in sub-Saharan Africa. 2021 *Nature Food* 2, 766–772. https://doi.org/10.1038/s43016-021-00370-1

IFDC's approach to scaling is informed by systems thinking and recognizes the importance of being farmer-centric, leveraging and supporting systems to support adoption and using partnership as the primary model to achieve scale. Key steps in our scaling approach include:

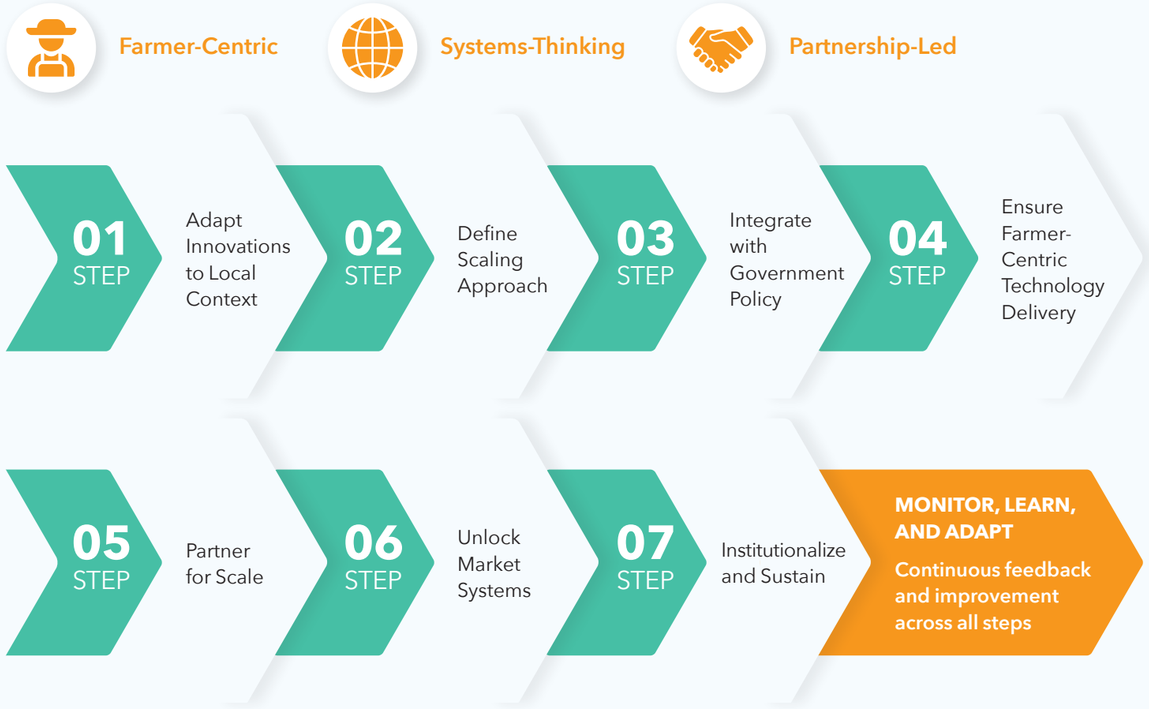


Figure 9. IFDC's Approach to Scaling

Step 1: Ensure innovations are adapted to the local context

- Ensure strong feedback loops between the GNFIC and programs.
- Ensure soil intelligence is the foundation in diagnostics and design with high-resolution soil maps and fertility diagnostics identifying constraints such as acidity, nutrient depletion, and erosion.

Step 2: Define scaling approach for each innovation

- Scale up, scale out, scale deep: decisions to be informed by type of innovation and potential for scale, evidence from adaptive research testing, and feedback from programs.
- Climate risk integration in deployment planning.

Step 3: Integrate with government policy frameworks where possible

- Integration with existing government programs and policy frameworks.
- Capacity building for national institutions to maintain and update soil data systems with dedicated financing and staffing plans.
- Establishment of quality control protocols for soil diagnostics linked to regulatory oversight.

Step 4: Ensure Farmer-Centric Technology Delivery

- Caravan approach for rapid deployment of innovations and best practices.
- Mechanized FDP/UDP to improve nutrient efficiency and reduce losses.
- Participatory Integrated Planning (PIP) approach to empower farmers in co-designing resilient farming systems.
- Training ecosystems (ISFM, trainings of trainers, extension agents, farmer leaders) to drive adoption.
- Digital extension platforms for real-time learning, feedback, and advisory services.
- Digital literacy programs for farmers.
- Peer-to-peer learning networks.

The Caravan Approach

Originally developed in Mali under the FDP MD project, the Caravan approach addresses challenges in making agricultural technologies more accessible to rural farming communities. The model operates as a mobile, itinerant service system that brings technology closer to end users, ensuring timely access and informed application. It relies on strong collaboration among private sector actors, technical experts, and communication teams to organize production and demonstrations at central market locations, with equipment and teams moving strategically from village to village.

Step 5: Employ an effective portfolio of partners to achieve scale

- Develop partnership models based on the scaling approach.
- Use existing channels where appropriate, e.g., government extension workers.

Step 6: Unlock market systems to enable adoption

- Reform input subsidies toward nutrient-responsive models based on soil diagnostics.
- Strengthen SMEs, cooperatives, and agro-dealers as last-mile delivery agents.
- Expand access to finance and insurance linked to soil-smart practices.
- Support input market sectoral reforms, especially for organic amendments, to reduce transaction costs and improve affordability and accessibility for smallholder producers.
- Link farmers to premium markets through agribusiness clusters, connecting them to buyers, processors, and nutrition-sensitive value chains.

Market system interventions will be prioritized based on government commitment to reform, presence of private sector partners to serve smallholder markets, and existence of farmer organizations with sufficient capacity to engage in markets. Thus, IFDC's interventions ensure that adoption is economically viable, socially inclusive, and market driven.

Step 7: Institutionalize and sustain – building systems for long-term impact

IFDC will support the development of institutional capacity and incentive systems necessary to embed scaling into national institutions and learning systems while building sustainable financing mechanisms that reduce dependence on external funding:

- Regional soil health innovation hubs to serve as centers for testing, validation, and scaling.
- Curriculum integration in universities, vocational schools, and extension networks.
- Policy alignment with national fertilizer strategies, climate resilience plans, and food security frameworks.
- Stakeholder training at scale, targeting 90% coverage of input sector actors in priority regions.

Step 8: Monitor, learn, and adapt – measuring what matters

IFDC will build robust monitoring systems to track:

- Quality of adoption and behavioral change.
- Resilience and environmental outcomes.
- Contributions to nutrition and household income.
- Farmer feedback and adaptive learning.
- Integration with national monitoring and evaluation platforms and digital dashboards.

Learning mechanisms will include cross-regional learning exchanges to share experiences and innovations, academic partnerships for evaluation and research, farmer feedback mechanisms, private sector engagement in monitoring to ensure market relevance, and integration with global knowledge platforms to contribute to international learning. This method ensures accountability, continuous improvement, and evidence-based decision-making.

IFDC WILL CONTRIBUTE TO THE FOLLOWING RESULTS:

RESULT 1: FARMERS ADOPT SUSTAINABLE SOIL AND NUTRIENT MANAGEMENT PRACTICES (SUCH AS ISFM, REGENERATIVE AGRICULTURE, AND PRECISION NUTRIENT USE), RESULTING IN HIGHER YIELDS AND HOUSEHOLD INCOME.

IFDC will support farmers, especially youth and women, through participatory, evidence-based field approaches, including Smart Diagnostics for soil testing and customized fertilizer recommendations; the PIP approach for bottom-up, farmer-led co-design of resilient farming systems; and the Caravan approach for rapid upscaling of technologies and best practices. These approaches will be integrated with next-generation fertilizer innovations from the GNFIC to ensure farmers have access to both improved technologies and the knowledge to apply them effectively.

RESULT 2: FARMERS ACCESS AND APPLY INNOVATIVE INPUTS, TECHNOLOGIES, AND TRAINING TO SUSTAINABLY INCREASE PRODUCTIVITY AND INCOMES.

IFDC will deploy smallholder-centric, evidence-based models to test, adapt, and refine innovations through field trials, demonstration plots, innovation incubators, and learning exchanges.

Delivery models will incorporate layered technologies coupled with holistic supports, such as microfinance and digital advisory services. IFDC will develop and promote precision and mechanized application tools specific to agroecologies and crops, ensuring farmers have comprehensive support for technology adoption and sustainable intensification.

RESULT 3: FARMERS SECURE IMPROVED ACCESS TO REMUNERATIVE AGRICULTURAL MARKETS, ENHANCING PROFITABILITY AND RESILIENCE.

IFDC will facilitate market linkages that connect smallholder farmers to value-added opportunities and remunerative agricultural markets. This includes supporting the development of inclusive, climate-resilient agricultural value chains, strengthening agro-processing capabilities, and reducing post-harvest losses. Market access support will be integrated with productivity improvements to ensure farmers can capitalize on increased yields through profitable market opportunities, creating sustainable pathways out of poverty while supporting rural economic development.

IFDC's strengthened approach to Strategic Goal 2 recognizes that scaling requires more than technical solutions; it demands institutional capacity, aligned political interests, sustainable financing mechanisms, and fostering of trust between farmers, governments, and private sector partners. Success will depend on IFDC's ability to adapt this framework to diverse contexts/environments while maintaining the focus on measurable outcomes for the betterment of farmer livelihoods and food security.

The PIP Approach

The Participatory Integrated Planning (PIP) approach empowers farming communities to take ownership of their own development through inclusive household-level engagement and collective action. It facilitates a structured process where families analyze their challenges, identify opportunities, and develop shared visions for improving livelihoods and resource management. By combining participatory tools with technical guidance, PIP builds motivation, accountability, and collaboration among households, extension agents, and local institutions.

This approach has proven effective in mobilizing communities for sustainable agricultural transformation, strengthening local leadership, and encouraging long-term behavioral change toward more resilient and productive farming systems.

Strategic Goal 3: Sustainable Systems Transformation

Agricultural transformation requires more than technological innovation and farmer-level interventions; it demands systemic change in the market systems, regulatory environments, and knowledge ecosystems that govern soil health and input systems. Current challenges include poorly regulated fertilizer markets where outdated, fragmented, or misaligned national policies undermine regional frameworks like CAADP and the AFSH Action Plan. Weak port infrastructure, customs delays, poor road quality, and limited warehousing capacity drive transaction costs that can account for 30-50% of final retail fertilizer prices, compared to just 10-15% in developed markets. This results in farmers paying two to six times more per kilogram of fertilizer than their counterparts in Asia or Latin America. Innovation ecosystems are fragmented due to limited coordination among the public sector, the private sector, producers, policymakers, and investors, with limited investment in fertilizer innovations mostly diverted to subsidies. Access to accurate, timely, and site-specific knowledge about climate-resilient fertilizer technologies is limited at all levels. Farmers cannot make informed decisions, agro-dealers and extension agents lack up-to-date guidance, and policymakers face information asymmetry on market dynamics, resulting in inefficiencies and suboptimal investment. These barriers severely constrain the effective scaling of innovations and sustainable practices. To address these barriers, IFDC will deploy an integrated systems transformation approach that leverages our GNFIC alongside established methodologies to strengthen market systems, improve regulatory frameworks, and enhance knowledge ecosystems. This approach recognizes that sustainable impact requires coordinated interventions across multiple levels, from local value chains to international policy frameworks. IFDC will embed constraint analysis into country strategies, project design, and monitoring, evaluation, and learning (MEL) frameworks to identify and address:

- Degraded soils and low fertilizer responsiveness.
- Fragile input markets and last-mile delivery gaps.
- Fragmented policy environments and regulatory bottlenecks.

Research will be reframed to respond to these constraints, focusing on scalable, field-ready solutions such as ISFM, precision dosing, UDP, and the 8Rs. Feedback loops between field programs and research teams will be formalized to ensure continuous learning and relevance.

Unlike traditional development approaches that focus on single interventions, IFDC's systems transformation strategy creates enabling environments that sustain and scale both innovations and farmer improvements through comprehensive institutional change.

IFDC WILL CONTRIBUTE TO THE FOLLOWING RESULTS:

RESULT 1: INCLUSIVE, CLIMATE-RESILIENT AGRICULTURE VALUE CHAINS ENHANCE FOOD SECURITY AND NUTRITION AND INCREASE FARMER PROFITABILITY.

IFDC will deploy the Competitive Agricultural Systems and Enterprises (CASE) approach to develop agribusiness clusters and strengthen value chains that reduce post-harvest losses, improve nutrition outcomes, and increase farmer profitability. CASE involves building inclusive, climate-resilient agricultural value chains through market-oriented cluster development that collectively builds capacity and connects farmers with buyers, processors, and financial services. This approach facilitates the establishment of competitive value chains that ensure farmers can access remunerative markets while building resilience against climate shocks and market volatility. Market intelligence platforms will be expanded to improve transparency, competitiveness, and decision-making across the input and output value chains.

RESULT 2: HARMONIZED POLICY FRAMEWORKS ARE ADVOCATED AND IMPLEMENTED, INCLUDING FERTILIZER SUBSIDY REFORMS AND INVESTMENT PLANS TO ENABLE FERTILIZER INNOVATION AND SUSTAINABLE USE IN ALIGNMENT WITH REGIONAL STRATEGIES.

IFDC will support fertilizer policy reform, regulatory strengthening, and quality control by working with and learning from the GNFIC to develop regional evidence-based policies, harmonize standards, and advocate for sustainable fertilizer incentives. This includes co-developing regulatory frameworks with the GNFIC's partners for new product registration, facilitating public-private-producer partnerships for commercialization, supporting smart subsidy reforms (e.g., digital vouchers, geotargeting, and private sector-friendly models), and supporting market intelligence systems and agro-dealer networks to bridge gaps in distribution and affordability. These efforts will be aligned with continental frameworks including CAADP, the Kampala Declaration, and the AFSH Action Plan.

RESULT 3: GLOBAL PARTNERSHIPS LEAD TO MAINSTREAMING FERTILIZER INNOVATION, SOIL HEALTH, AND CLIMATE-SMART AGRICULTURE INTO NATIONAL AND INTERNATIONAL SYSTEMS, EDUCATIONAL CURRICULA, AND INVESTMENT FRAMEWORKS.

IFDC will establish and lead global partnership platforms that mainstream nutrient use efficiency and climate-smart agriculture into national and international systems, educational curricula, and investment frameworks. These efforts will involve leveraging IFDC's unique position to convene strategic partnerships that unite public, private, and civil society sectors; promoting market intelligence platforms to improve transparency and competitiveness; and facilitating knowledge exchange that transforms how fertilizer and soil health innovations are integrated into broader development and climate adaptation strategies. Additionally, IFDC will integrate nutrient use efficiency and climate-smart agriculture into educational curricula and investment frameworks; establish regional soil health innovation hubs for testing, validation, and scaling; and develop signature knowledge products (e.g., policy notes, technical briefs, and position papers) that reflect IFDC's integrated voice.

These efforts will ensure that soil health becomes a core pillar of national and international agricultural strategies.

BUILDING THE BLUEPRINT FOR SYSTEMIC CHANGE

The constraints vulnerable areas face – soil depletion, market volatility, fragmented policy, and more – are not just operational hurdles; they are structural signals pointing to where transformation must occur. IFDC is uniquely positioned to respond, not only through technical expertise, but by connecting field realities to research labs, policy rooms, and regional markets.

This next chapter of IFDC's history will be shaped not by individual projects, but by how IFDC aligns our knowledge, partnerships, and design principles toward system-level impact. Constraints are not obstacles to work around – they are the blueprint for what we must build next.

HOW WE WORK

Throughout the world, in all IFDC offices and with all our staff and project beneficiaries, IFDC maintains principles that are woven through everything we do.

These big ideas underscore our commitment to ensuring sustainable growth – whether in agricultural systems, last-mile communities, or even our staff's professional development. These serve as the foundation on which our work is built.

SCIENCE-BACKED INNOVATION

IFDC embraces new discoveries – our own or others' – and works with public and private partners to test their applicability in smallholder systems. We deliver scientific evidence that provides a foundation for the adaptation and responsible scaling of technologies and innovations. We use evidence and data to make decisions, learn from results, and share our knowledge.

ENVIRONMENTAL STEWARDSHIP

IFDC prioritizes improving soil fertility and crop nutrition practices, technologies, and policies to reduce agriculture's environmental impact. We strive to strengthen the resilience of farmers to cope with increasing climate volatility.

LOCALLY DRIVEN SOLUTIONS

IFDC adapts technologies and innovations to meet local requirements and ensures they are profitable for farmers. In all activities, we focus on training and strengthening the regional and local institutions and actors who are ultimately responsible for scaling up adoption and making sustainable agricultural transformation a reality.

GENDER AND YOUTH EQUITY

We are committed to improving the lives of women, youth, and other vulnerable populations involved in agriculture so that they reap the economic and social benefits of development. Empowering women and youth with the tools, knowledge, household parity, and training to pursue agriculture as a business is essential to achieving social equity.

PRIVATE SECTOR ENGAGEMENT

IFDC believes an engaged private sector is the key to sustainable development. We prioritize building private enterprises' capacity and facilitating public-private partnerships. The objective is to increase investment, strengthen markets, and improve the policy enabling environment to scale up innovations for smallholder farming systems.

IMPACT-DRIVEN APPROACHES

Our impact is consistently measured, documented, and reported through research and development project indicators. Progress is reviewed on a regular basis, and data and intermediate findings are used to revise project approaches as needed.

COMPLEMENTARY PARTNERSHIPS

LEVERAGING ALLIANCES FOR ACCELERATED IMPACT

To achieve our mission of improving soil health, increasing smallholder productivity, and transforming input systems, IFDC strategically partners with a diverse range of stakeholders across global, continental, regional, national, and local levels. These partnerships are central to co-creating solutions, aligning efforts, scaling innovations, and strengthening enabling environments. In our 2026-2035 strategy, IFDC will continue to:

- Deepen alliances with key continental and regional bodies to position soil health and fertilizer systems as central to food system transformation.
- Co-develop investment plans and aligned country strategies with national governments and donors.
- Broker cross-sectoral platforms that connect science, finance, markets, and local action.
- Foster mutual accountability and learning through transparent, data-driven engagement.

PURPOSE OF PARTNERSHIPS

- **Co-Creation and Innovation:** Engage scientific and technical partners to develop next-generation fertilizers, improve soil diagnostics, and localize agronomic innovations.
- **Policy Influence:** Work with continental and regional bodies to shape and harmonize fertilizer and soil health policy reforms.
- **Scaling and Delivery:** Partner with public institutions, private companies, and farmer organizations to expand reach and ensure sustainability.
- **Finance Mobilization:** Collaborate with banks, donors, and coalitions to unlock blended finance and investment in soil health and agro-input systems.
- **Evidence and Learning:** Jointly generate, share, and apply data and insights to inform adaptive programming and strategic leadership.

Table 1 demonstrates a landscape of potential complementary partnerships.

Table 1. Partnership Landscape

Category	Key Organizations/Platforms	Main Role/Contribution
Global and Continental Platforms	World Food Forum, CIFSH, private sector coalitions, African Union, PAFO, FARA, AGRA, ANAPRI	Amplify global advocacy, coordinate interventions, shape investment agendas; contribute to continental frameworks (AFSH, CAADP, Green Revolution)
Regional Bodies	ECOWAS, COMESA, CORAF	Harmonize regional policies, facilitate fertilizer trade, scale research, transfer knowledge
Research and Academic Institutions	CIMMYT, IFPRI, ISRIC, IITA, ICRISAT, CIFOR-ICRAF, AKADEMIYA2063, AIRCA (ICIPE, ICBA, CABI, WorldVeg)	Co-develop technologies, tools, recommendations
	National Agricultural Research Systems (Brazil, Senegal, Ghana, Bangladesh, others)	Country-specific trials, soil mapping, technology validation
	Universities: Wageningen, MSU, Florida State, Alabama, Mississippi, Kansas State, LUANAR, Univ. of Ghana, Univ. of Cape Coast	Strengthen knowledge, innovation, youth engagement in agri-research
National Partners	Ministries of Agriculture, regulatory agencies, ROPPA, farmer platforms	Policy dialogue, public sector reform, national program delivery; ensure local relevance and ownership of initiatives
Private Sector	OCP, Indorama, India's fertilizer consortium, FEPSAN, IFA, WAFA, local agribusinesses and input dealers	Strengthen supply chains, invest in local production, support fertilizer quality; key agents for input and innovation delivery
Development Partners and NGOs	SNV, Agriterra, KIT Institute, WUR, IFPRI, ReNAPRI, CORAF, FARA, CGIAR centers (ICRISAT, IWMI), other implementing partners	Co-implement inclusive, market-driven programs (CASE, PIP models)
Donors and Financial Institutions	Multilateral/bilateral donors (AfDB, World Bank, IsDB, Rabobank, DGIS, EKN, Gates Foundation); regional development hubs (West Africa hubs)	Support program financing, sector reforms, innovation pipelines; coordination, implementation, and policy engagement

To ensure that IFDC's strategic boundaries are reinforced by strong collaboration, the following partners are a partial list of those recommended across key domains.

Table 2. IFDC's Partners and Recommended Key Domains

Domain	Lead Partners
Policy Advocacy	AFIDA, AFSH, AUDA-NEPAD, ANAPRI, TrustAfrica, AGRA, CA4SH
Input Trading and Distribution	OCP Africa, national agro-dealer networks, CNFA, AECF-supported platforms
Agricultural Finance	AFFM, AFAP, MFW4A, Equity Bank, Ecobank, farmer cooperatives
Humanitarian Relief	WFP, FAO, UNICEF, Africa Humanitarian Action, Embrace Relief
Infrastructure Development	AfDB, World Bank, MCC, National Ministries, public-private partnerships (e.g., Vumelana, PepsiCo Kgodiso Fund)
Fertilizer Subsidy Reform	World Bank, AGRA, Sustain Africa, Dalberg, Purdue University, ministries of agriculture
Plant Nutrition	APNI, CABI, ICBA, WorldVeg, ICIPE, national agronomic research bodies
Phosphate Sector Collaboration	OCP Group, OCP Africa, Global Phosphate Institute, Phosphea, Solevo Group
Inclusive Development and Resilience	WHH, Farm Africa, CARE, SNV, Heifer International, local cooperatives

STRENGTHENING OUR ORGANIZATION

To strengthen IFDC's organizational resilience, we make the following commitments.

STRATEGIC ALIGNMENT AND STRENGTHENED IMPLEMENTATION OF STRATEGY

At the heart of IFDC's strategic shift to **sharpen our focus** is the need to align our organization with the strategy while empowering teams to design and apply context-specific solutions. We commit to strengthening our structure and processes to ensure full alignment with strategic priorities and to establishing robust systems to **measure, manage, and report** on implementation.

This approach will enable us to seek resources more effectively, track progress consistently, and reflect systematically on changes in the external environment, ensuring that IFDC can adapt, course-correct, and remain responsive in pursuit of our goals. Furthermore, these commitments will strengthen trust and accountability for staff and our partners.

SUSTAINABLE FUNDING

To secure IFDC's long-term financial resilience, we will evolve our funding model to better withstand global shocks and shifts in the development finance landscape.

Building on our strong partnerships with governments and ODA streams, we will diversify and strengthen our revenue base to ensure stability and flexibility.

Going forward, IFDC will:

- **Expand private sector engagement**, particularly with the fertilizer industry in support of **Strategic Goal 1**, where market-driven solutions are critical.
- **Deepen collaboration with trusts, foundations**, impact investors, and other innovative funders, who will play an increasingly important role in advancing **Strategic Goal 2** and **Strategic Goal 3**.
- **Pilot new income-generating initiatives** that leverage IFDC's technical expertise and regional/national capabilities – including fee-for-service activities and digital tools – helping cover core organizational costs while enabling greater investment in innovation.

Through this diversified approach, IFDC will reinforce our financial sustainability and create the space to innovate, adapt, and maximize impact for global food security and nutrition.

AN ENABLING STRUCTURE AND EMPOWERED TEAMS

IFDC recognizes that our teams have experienced several structural changes in recent years. However, to deliver on this strategy, IFDC must realign our resources to ensure we can perform at our best.

Our redesigned structure will be guided by the following principles:

- **Agility and Efficiency:** Streamlining processes to reduce complexity and accelerate decision-making.
- **Clarity and Accountability:** Defining roles and responsibilities with greater precision to strengthen performance.
- **Flexible Resourcing:** Introducing adaptable staffing models to enable quicker, more effective allocation of talent.
- **Regional Empowerment:** Strengthening the authority and decision-making rights of regional teams and ensuring they have the support needed to achieve excellence.

Through this redesign IFDC will build a structure that empowers our people, enhances collaboration, and enables us to deliver greater impact.

A UNIFIED, GLOBAL TEAM: ONE IFDC

With operations across nearly 20 nations, IFDC brings together a workforce reflecting a wide range of cultural, ethnic, and religious backgrounds. This diversity is one of our greatest strengths. Through this strategy, we commit to fostering a truly unified global team – One IFDC – by aligning our shared vision, impact goals, and core values. At the same time, we will celebrate and embrace the diversity of perspectives and experiences that enrich our work, fuel innovation, and make IFDC a great place to work.

SYSTEMS THINKING ACROSS IFDC'S OPERATIONS

IFDC's global programs structure enables cross-functional integration of soil health, market development, and enabling environments. To fully realize this potential, IFDC will:

- Align planning and goal setting across departments.
- Develop unified MEL systems that track progress on constraint reduction.
- Engage field staff, young professionals, and local researchers as active contributors to learning and strategy.
- Integrate policy foresight and risk mitigation into program design to anticipate shocks and political volatility.

Success will be measured not just by adoption or yield, but by the extent to which structural barriers have been dismantled.

ACCOUNTABILITY

Accountability is central to how we work. IFDC is committed to enacting our mission with professionalism and integrity. We strive to do business ethically, honestly, and legally and expect the same of our employees and partners.

IFDC's work focuses on the most basic of human needs – food. As an organization devoted to this human right, we have established policies and codes of conduct that reflect our values as an organization and that enable us to do the most good for our beneficiaries. All IFDC employees and representatives are subject to our Code of Business Ethics and Conduct to make sure how we work lives up to what we do. IFDC is accountable to numerous stakeholders, particularly to the communities we serve and the partners we work with. Any concerns about IFDC's accountability may be submitted to https://ethicspoint.ifdc.org.

We will continue to strengthen our accountability behaviors and mechanisms throughout this strategic cycle with specific commitments outlined below:

COMMUNITIES AND INDIVIDUALS

- **Participatory Decision-Making:** We commit to ensuring farmers, especially women and youth, actively participate in co-designing resilient farming systems by methods such as our PIP approach, making sure their voices directly shape our interventions and innovations.
- **Measurable Impact Delivery:** We commit to improving soil health for millions of farmers while achieving measurable yield increases in sub-Saharan Africa and South Asia, with transparent reporting on our progress toward these specific targets.
- **Individual Feedback and Complaint Mechanism:** We commit to maintaining accessible and confidential channels for all communities and individuals to provide feedback or raise complaints, ensuring their voices are heard and issues are addressed promptly in line with IFDC's ethical standards.

PARTNERS

- **Due Diligence:** We commit to conducting thorough due diligence and structured assessments of potential partners early in the proposal development stage, ensuring alignment with IFDC's mission and reviewing their past performance to select credible strategic partners.
- **Implementation Monitoring:** We monitor partner accountability continuously through deliverable reviews and reporting during implementation, using established frameworks to address issues transparently and guide decisions on continued collaboration or reassessment.
- **Feedback and Learning:** We maintain a feedback mechanism that channels partner performance insights back to business development and donors, fostering transparency, mutual accountability, and continuous improvement throughout the partnership cycle.
- **Knowledge Sharing and Capacity Building:** We commit to facilitating effective knowledge transfer and strengthening regional innovation capacity through our global network, ensuring partners have access to evidence-based insights and technical expertise.
- **Partner Feedback and Complaint Mechanism:** We commit to maintaining accessible and confidential channels for all partners, including local partners, to provide feedback or raise complaints, ensuring their voices are heard and issues are addressed promptly in line with IFDC's ethical standards.

DONORS AND SUPPORTERS

- **Financial Transparency and Diversification:** We commit to maintaining rigorous financial accountability while diversifying our funding base to reduce dependence on any single source. This commitment includes expanding private sector engagement and foundation partnerships.
- **Evidence-Based Impact Reporting:** We commit to providing comprehensive monitoring and evaluation data demonstrating our contributions to food security, climate resilience, and sustainable agricultural transformation, with clear metrics aligned to donor priorities.

HOST GOVERNMENTS

- **Policy Alignment and Reform Support:** We commit to supporting evidence-based fertilizer policy reforms and regulatory frameworks that align with national agricultural strategies and continental frameworks, such as CAADP and the AFSH Action Plan.
- **Capacity Strengthening and Institutional Support:** We commit to building local institutional capacity through curriculum integration, stakeholder training programs, and support for regional and national soil health innovation hubs that strengthen government capabilities.

OUR PLANET

- **Climate-Smart Agriculture:** We commit to reducing greenhouse gas emission intensity while promoting regenerative agriculture and ISFM practices that restore soil health and enhance carbon sequestration.
- **Environmental Stewardship:** We commit to developing and scaling fertilizer innovations that reduce environmental pollution, improve nutrient use efficiency, and protect water resources while supporting biodiversity conservation and ecosystem resilience.


Fuel the Farmer.
Feed the Soil.
Foster the Future.

IFDC

Developing Agriculture from the Ground Up

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