IITA's 2024 – 2030 Strategy:

Science, Research and Delivery Innovations for African Agrifood System Transformation

Simeon Ehui
Director General, IITA and
Regional Director for Africa, CGIAR

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IITA is the lead research partner in Africa facilitating agricultural solutions for hunger and poverty in the tropics. It is a member of the CGIAR Consortium, a global research partnership that unites organizations engaged in research for sustainable development for a food secure future.

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Foreword

Roel Merckx

On behalf of the International Institute of Tropical Agriculture (IITA)'s Board of Trustees, I am happy to announce the launch of the new IITA strategy—"IITA's 2024-2030 Strategy: Science and Delivery Innovations for African Agrifood System Transformation."

This new strategic framework was designed to guide our efforts as an institution for the next 6 years. This strategy reflects our unwavering commitment to advancing agricultural innovation, enhancing food security, nurturing our environment, and improving the livelihoods of farmers across tropical regions. It reflects IITA's strong commitment to ensuring the continuous and ultimate development of farming communities and uplifting the lives of our smallholder farmers in Africa.

As Africa's lead research institution, IITA continues to be at the forefront of leading the transformation of African food systems through its research and delivery efforts in collaboration with a network of partners and collaborators worldwide.

The new strategy reinforces IITA's strong role in redirecting CGIAR in the continent and emphasizes the need for reorienting our strategic focus to include climate-resilient agriculture and improved health and nutrition. The transformation process requires paradigm shifts that would make food systems more inclusive, more nutritious, more profitable, and more resilient.

In a world facing unprecedented challenges, from climate change to food scarcity, our mission has never been more critical.
The new strategy harnesses cutting-edge research, partnerships, and technology to empower communities and drive sustainable development. By focusing on resilience, inclusivity, and innovation, we aim to transform agricultural practices and empower those who rely on them.

This strategy was shaped through extensive consultation with our stakeholders, ensuring that it is not only ambitious but also grounded in the realities faced by farmers and farming communities. We are determined to foster collaboration, share knowledge, and leverage our collective strengths to achieve lasting impact using more creative arrangements with partners.

As we embark on this journey, I invite each of you—our partners, stakeholders, and community members—to join us in realizing our vision of an Africa that can feed itself. Together, we can cultivate a future where agriculture thrives, ecosystems flourish, and everyone has access to nutritious food.

Thank you to IITA Management led by Simeon Ehui for leading the development of this important document. The Board is grateful for your continued support and commitment to our mission.

Roel Merckx
Chair, Board of Trustees
IITA

Foreword

Simeon Ehui

As we stand at the crossroads of global agricultural challenges and opportunities, I am honored to present this new IITA strategic framework. This important roadmap embodies our Institution's collective commitment to innovation, sustainability, and resilience in addressing the pressing challenges faced by farmers and communities across the tropics.

Our mission in IITA has never been more critical. With the world facing the impacts of climate variability, food insecurity, population growth, and shifting market dynamics, it is imperative that we harness our collective expertise. We are not just reacting to global challenges; we are proactively shaping solutions that empower farmers, enhance agricultural productivity, improve livelihoods, and strengthen food systems.

This strategy reflects our dedication to research excellence and our belief in the power of collaboration.

Through this document, we outline our vision for the future—one where we leverage the integration of cutting-edge research and advanced technologies with practical applications, ensuring that our work is grounded in real-world needs. The strategy document also prioritizes partnerships across sectors—with governments, nongovernmental organizations, and the private sector, recognizing that our impact is amplified through collaboration.

Our goals are ambitious, but together, we can create lasting change that uplifts communities and ensures a sustainable food future. Through this strategy, we emphasize enhanced food and nutrition security, climate-resilient agriculture, agronomic gain, jobs and incomes, increased stakeholder reach, uplifting youth and women, and land stewardship.

IITA will help CGIAR to meet future expectations across Africa by contributing to a shared, knowledge-intensive, problem-solving approach to delivering priority innovations and bringing harmony and synergy to agrifood system transformation. It will accelerate the journey from research to achieving impact at scale, using new tools and mechanisms, and combining the strengths of our research-for-development and partnerships-for-delivery teams.

I invite you to actively engage with the implementation of this strategy. Thank you for your insights and contributions, which are vital in bringing us to this stage. As you delve into the pages of this strategy, I encourage you to embrace the vision it outlines: a resilient agricultural system that nourishes communities, protects our planet, and secures a prosperous future for generations to come.

Let us all move forward together in pursuit of a continent where every individual has access to sufficient, nutritious food—transforming challenges into opportunities for the betterment of all. Together, let us turn this vision into reality.

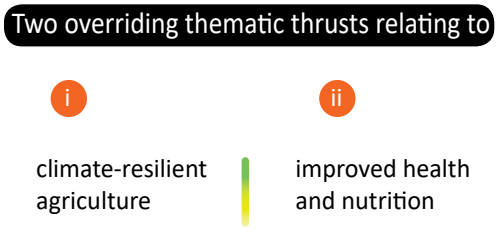
Simeon Ehui
Director General, IITA and
Regional Director, Africa, CGIAR

Executive Summary

Strategy 2024-2030 of the International Institute of Tropical Agriculture (IITA) affirms its commitment to the transformation of African food systems and reinforces the redirection of CGIAR, recognizing IITA as Africa's foremost agricultural research institute. The need exists to complete the transformation of African food systems along effective and efficient commodity value chains, several of which are mandated to IITA. Transforming these systems involves paradigm shifts allowing science and research to become more inclusive, more nutritious, more profitable, and more resilient.

Opportunities for such transformation abound. In this way, IITA's Mission is *'To remain the leading research and delivery partner for Africa that fosters development and facilitates the delivery of solutions that address food insecurity, poverty, malnutrition, environmental degradation, unequal opportunities for youth and women, and the climatic crisis, supported by state-of-the-art science, innovative scaling models and partnerships, and effective capacity strengthening'*.

The Institute's Vision of Success considers gains in terms of food and nutritional security, agronomic gain, living incomes, stakeholder reach, and land stewardship. IITA shall continue to rely upon the combined achievements of the Research-for-Development (R4D) and the Partnerships-for-Delivery (P4D) Directorates, organized around three Science Areas – Genetic Innovation, Resilient Agrifood Systems, and Systems Transformation, and supported by effective Service Units. R4D provides a stream of proven research products. P4D positions them through an array of partnership opportunities across the public and private sectors.



IITA shall continue to operate across the African continent through its network of five regional 'Hubs' that support its activities in Central Africa, East Africa, Southern Africa, West Africa, and the Sahel. IITA will lead in transforming Africa's agrifood systems through its network of partners to deliver demand-driven solutions to a growing number of beneficiaries through strategic association with CGIAR, National Agricultural Research Systems, Regional and Sub-Regional Organizations, African Governments, the private sector, Non-governmental Organizations, Advanced Research Institutes, among others.

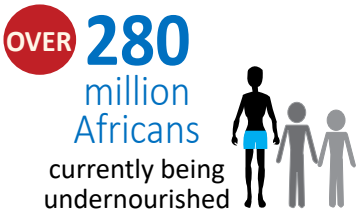
IITA shall assist the larger CGIAR community to meet future expectations across Africa by contributing to a shared, knowledge-intensive, problem-solving vision for delivering priority innovations and bringing harmony and synergy to agrifood system transformation. Achieving the Strategy described in this document requires more creative arrangements with partners, wider access to resources, and inspired approaches to current and new challenges. IITA is fully capacitated and prepared to deliver on these requirements.

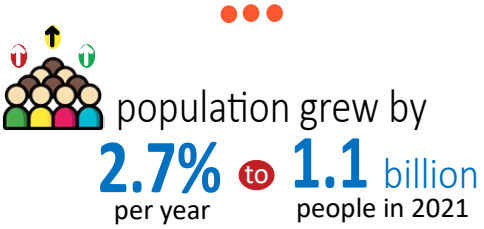
1

Legume seeds maintained in the IITA genebank.

Transforming African agrifood systems: Challenges and opportunities

Despite substantial gains in agricultural development realized over the past two decades, nearly two-thirds of the world's poor live in sub-Saharan Africa (SSA) with over 280 million Africans currently being undernourished. The population grew by 2.7% per year to 1.1 billion people in 2021. Rising populations have led to land scarcity due to a generational decline in the smallholder farm size and land degradation with climate change posing major risks for agricultural production. These trends, aggravated by low investments in agriculture, have resulted in the Continent's high food importation bills. Africa is off-track to meeting the agriculture-related Sustainable Development Goals by 2030.





Feeding an ever-growing population and providing living incomes requires more than helping farmers to better perform as individual households or isolated rural communities. There is need to transform African agrifood systems along effective and efficient value chains with economic opportunities for all actors.

Agrifood systems need to become

i more inclusive, enabling sustainable livelihoods for farming communities and all other stakeholders

ii healthier and more nutritious, providing improved and more affordable diets for rural and urban populations

iii more profitable in ways that generate living incomes following 'farming as a business' principles

iv environmentally sustainable, respecting planetary boundaries and the rights of future generations; and

v more resilient, ensuring that people protect their livelihoods despite extreme climate events, and other shocks

Opportunities for such transformation abound. Decades of effort toward developing better crop varieties, improving soil fertility and land management, and reducing pests and diseases now allow increased yields and greater returns on agricultural investment. Diverse 'omics' and digital solutions that track and diagnose constraints and increase access to markets and services are becoming widely available to farmers and other value chain actors. Smartphones are producing better farmers in ways that overburdened conventional extension systems could not. National systems are important partners in the development, testing, and certification of improved varieties, and the private sector is getting engaged in the production and marketing of seed, fertilizer, and other technologies.

The growing demand for food on the Continent provides the opportunity for increased domestic food production and processing with the continental free trade agreement facilitating regional trade. The dietary transformation associated with urbanization and income growth adds new jobs and products across the agribusiness sector. The growing youth population in Africa can drive the next generation of profitable agribusiness. It is now time to assemble these important components into meaningful interventions. IITA is strategically positioned to lead in several areas of the unfolding agricultural transformation across Africa and to collaborate with other CGIAR centers and its many other partners toward this common goal.

The 2021 UN Food Systems Summit (UNFSS) identified priorities for science-based technological, institutional, and policy innovations to catalyze and accelerate the transformation to healthy, sustainable, equitable, and resilient agrifood systems. This was also highlighted at the Dakar 2 Feed Africa Summit, and its commitments were ratified in presence of 34 African Heads of State. In line with the post-Malabo commitments for accelerated agricultural growth and transformation in Africa, IITA intends to play a major role in transforming Africa's agrifood systems through cutting edge research and delivery innovations. It will focus on areas where it holds strong comparative advantages and will work in close collaboration with CGIAR centers and its many other partners.

Youths using a digital device to collect data in the field for increased yields and greater returns on agricultural investment.

2

Launching the Southern Africa Hub research facilities.

IITA's vision, mission, strategic objectives

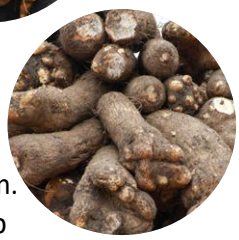
IITA's Vision is '*Sustainably transformed agrifood systems that provide millions of Africans food and nutrition security and a living income, underpinned by equitable economic growth*'.

The IITA 2024-2030 Strategy is aligned to the CGIAR Vision as expressed in its Research and Innovation Strategy – *'A world with sustainable and resilient food, land and water systems that deliver more diverse, healthy, sufficient and affordable diets, and ensure improved livelihoods and greater social equality, within planetary and regional environmental boundaries'*.

IITA will align and engage with CGIAR and other public and private sector partners, based on their respective areas of expertise and roles in agrifood system transformation.

Our Mission is '*To remain the leading research and delivery partner for Africa that fosters development and facilitates the delivery of solutions that address food insecurity, poverty, malnutrition, environmental degradation, unequal opportunities for youth and women, and the climatic crisis, supported by state-of-the-art science, innovative scaling models and partnerships, and effective capacity strengthening*'. IITA's 2024-2030 Strategy serves as a guide for the effective and efficient implementation of its combined Research-for-Development (R4D) and its Partnerships-for-Delivery (P4D) contributions to the transformation of African agrifood systems.

Vision of Success:



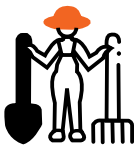
By 2030, we envisage yield increases of IITA's mandate crops (cassava, yam, maize, banana/plantain, soybean, and cowpea) by at least 25% on average in prioritized intervention areas, supported by increased genetic and agronomic gain. Widely adopted soil fertility and crop management practices will result in at least 25% of smallholder agricultural productivity showing improved soil health, enhanced resource use efficiencies, and increased resilience to climate-related hazards, as expressed through agronomic gain. By linking these solutions with private and public partners, these outcomes are expected to raise average farm income and contribute to closing the living income gap for more than 50 million Africans. Also, it is expected that at least 25 million Africans will have access to more diversified and better-balanced diets. Lastly, IITA will influence the creation of more than 10 million decent jobs for youth and women with a focus on agricultural service provision, value addition, and agro-processing. In combination, these impacts result in reduced importation of food and increased agricultural export earnings in ways that are tracked through national statistics and by international development agencies.

Strategic objectives: The 2024-2030 Strategy builds upon the following strategic objectives, fully aligned with the five impact areas of the CGIAR 2030 Research and Innovation Strategy:

- **Improve food and nutrition security and health**
  Agricultural production per unit area of IITA's mandated crops will continue to increase while ensuring that balanced diets are affordable for the growing rural and urban populations. IITA's R4D portfolio will ensure crop varieties are more productive, nutritious, climate-resilient, and stress-tolerant; and more strategically positioned within country and commercial seed systems. Cost-effective accompanying agro-inputs needed to achieve this increased yield potential must be identified, mobilized, and scaled through national programs and commercial interests.

- **Increase income and value chain efficiencies across the continent**
  Reliable agriculture production surpluses allow for more secure investment in processing. Processed foods must target established consumer demand. Commodities intended for export must meet international standards and processes surrounding their certification must not be prohibitively difficult or expensive. Production surpluses satisfying secure markets and supplying commercialized value-added processing provide the basis for economic growth across the agricultural sector, the creation of decent employment in both rural and urban areas, and the generation of export earnings across regional and international markets.

- **Expand opportunities for women and youth in agriculture**



Greater engagement of women and youth in agricultural development is crucial to Africa's future. Decent jobs are created as African agriculture is increasingly targeted to services and markets. Entrepreneurial competence and agribusiness skills of these women and youth must be fostered in ways that generate new agribusiness opportunities that grow with time. Specific emphasis will be placed on appropriate-scale mechanization to counter the drudgery associated with small-scale farming. At the same time, efforts to modernize agricultural production must not bypass the poorest and most vulnerable households, so stepwise transition from subsistence farming to market enterprises must be elaborated.

- **Increase climate resilience of smallholder farmers**

Climate change poses an existential threat to the well-being of Africa's farming households making it essential to boost the resilience of their cropping systems in the face warming trends and weather extremes. Adaptation of proven, climate-smart practices must be considered within all collaborative interventions and technology packages, and at the same time the potential for these practices to address climate trends through the accumulation of above- and belowground carbon and the reduction of gaseous emissions must not be overlooked.

- **Restore and improve soil health and agronomic production efficiencies**

The protection and restoration of Africa's agricultural resources, including its crop and landscape diversity, remain important within IITA's agenda, and a key resource is the health of Africa's soils. Integrated Soil Fertility Management (ISFM) continues to hold the key toward resource-efficient productivity increases and soil health improvement, particularly through increased biological nitrogen fixation. Attention will be given to maximize the use efficiencies of production factors, including plant nutrients, water, capital, and labor, with the latter being done through renewed emphasis on mechanization. ISFM applications will be broadened to integrate large-scale recycling through the biocircular economy.

To achieve these objectives at the organizational level, IITA will develop structures and processes to provide performance and incentive systems that encourage interdisciplinary teamwork and partnerships with other stakeholders, emphasizing mutual learning and effective knowledge management. In this way, agricultural research will fulfill its responsibility to support sustainable development and become an effective contributor to national and global development objectives.

Banana and coffee intercropping is one climate-smart system that contributes to adaptation and mitigation of climate change

3

Researchers at IITA Genetic Resource Center (GRC).

New research and delivery structure backed by effective services

The challenges of African agrifood systems require IITA to accelerate the journey from research to achieving field impact at scale. This entails rapid learning from adjustments, successes, and failures to influence the evolution of new research lines and products, supported by the science of scaling. This experience will set the basis for a renewed process to accelerate the cycle from research to field impact at scale, beginning with selecting research activities using transparent and rigorous criteria. Equally important will be the disciplined review and decision-making for the exit of research activities and product lines, while also recognizing that some innovative areas of research require sufficient time for refinement. In this way, finding ways to discover and/or accept failures faster and learn faster will be essential for IITA and its research team.

To operationalize this new IITA requires structuring around a matrix of five Hubs (West Africa, Sahel, East Africa, Central Africa, and Southern Africa) and three Science Areas (Genetic Innovation – GI, Resilient Agrifood Systems – RAFS, and System Transformation – ST), supported by Service Units (Capacity Development; Monitoring, Evaluation, Learning and Impact Assessment – MELIA; Digitalization; Data and GIS; Gender and youth integration; Product pipeline development; Project Development and Administration – PDAU; and Communication).

R4D priority areas

IITA is committed to fostering innovation and sustaining a robust pipeline for developing and disseminating research products. We remain at the forefront of agricultural transformation by continually upgrading our scientific infrastructure and fostering partnerships with advanced research institutions (ARIs), attracting top talent, and sharing expertise globally.

R4D priorities in Genetic Innovation: By harnessing advanced genomics and new breeding tools, IITA is committed to accelerating the development of crop varieties tailored to achieve genetic gain, measured as year-on-year improvements in key attributes that satisfy the evolving expectations of farmers and consumers and are gender-responsive and socially inclusive. Through innovative phenotyping techniques and the integration of cutting-edge technologies such as remote sensing and machine learning, IITA is revolutionizing trait selection thus enabling faster and more precise breeding outcomes. Our focus extends to conserving genetic diversity, enhancing climate resilience, and harnessing under-utilized legumes for improved nutrition. Our dedication to establishing innovative and diverse seed systems ensures widespread access to high-quality and climate resilient seeds of improved varieties.

R4D priorities in Resilient Agrifood Systems: IITA strives to enhance sustainable agricultural productivity, ensure food safety and nutrition enhancement, reduce threats to human health, and reshape the environmental footprint of agrifood systems. Through scalable agronomy solutions, big data analytics, and sustainable farming practices, we empower smallholder farmers while addressing plant health threats and improving food value chains. The development of digital tools for surveillance, forecasting, monitoring and management of key biotic threats will contribute to improved integrated pest and disease management. Our innovations prioritize climate resilience, inclusivity, and nutrition sensitivity thus shaping a more resilient and sustainable future for the global food system.

R4D priorities in System Transformation: IITA leverages interdisciplinary approaches to assess policy reforms essential for the widespread adoption of transformative technologies. Inclusive strategies are meticulously crafted to ensure gender equity throughout the developmental process. Furthermore, a concerted effort is made to identify and rectify market failures and value-chain inefficiencies, with a particular focus on postharvest management, thus facilitating growth of the agribusiness sector. Our focus on improving nutrition and health, particularly for women and children, complements and aligns with our commitment to strengthening climate resilience.

Regional Hub for Fertilizer and Soil Health for West Africa and the Sahel: In the context of the Action Plan for Fertilizer and Soil Health, accepted by African Heads of States during the African Fertilizer and Soil Health Summit, held in Nairobi in May 2024, the ECOWAS[1] Region has drafted its Roadmap for West Africa and the Sahel. One

1. ECOWAS: Economic Community of West African States

of the priority actions was the establishment of a Regional Hub for Fertilizer and Soil Health, hosted at IITA, Ibadan. The Hub is an ECOWAS sub-program, managed by a consortium of technical partners (OCP-Africa, UM6P[2], APNI[3], IFDC[4], and IITA, representing CGIAR), and meant to provide science-based technical assistance to the development and implementation of the roadmap in the areas of digital soil information, agronomic recommendations, data and knowledge management, capacity development, policy support, and advocacy.

P4D priority areas

The Partnerships for Delivery Directorate (P4D) works with and through a network of partners to improve the quality of food system interventions by facilitating access to proven technologies. Its primary scaling partners are national governments that develop country agricultural investment programs that include technology dissemination activities, and private companies that are prepared to finance production and sales of these technologies. P4D will identify key partners to scale science-based solutions and help plot the journey ahead from research to field implementation at scale. The R4D teams will integrate research components into each of the below and other delivery models.

P4D priorities in Genetic Innovation: In collaboration with public institutions such as extension services, national seed regulatory agencies, seed companies, and agrodealers, IITA aims to facilitate the availability and accessibility of high-quality seeds from improved varieties for small and medium-scale farmers. Additionally, we will introduce cutting-edge innovations for rapidly and efficiently multiplying planting materials for vegetatively propagated crops.

P4D priorities in Resilient Agrifood Systems: Our focus on improving food systems involves sustainable enhancements in agricultural productivity through engagement of public and private scaling partners. Specific attention is given to the delivery of science-based agronomic advisory and other services, mechanization options, agro-inputs, and other production factors, in partnership with the private and public sectors, including Ministries of Agriculture.

P4D priorities in System Transformation: IITA collaborates with governments during the implementation of programs financed by International Finance Institutions (IFIs) to drive policy reforms and scaling. These reforms are essential for catalyzing the adoption of solutions to food system challenges and ensuring successful transformation. Other priority areas

Researcher checking the growth of soybean plants in the field.

2. UM6P: University Mohammed 6 Polytechnic
3. APNI: African Plant Nutrition Institute
4. IFDC: International Fertilizer Development Center

relate to the delivery of healthy diets and food safety through women- and children-targeted interventions, in cooperation with Ministries of Health and Education.

Development and Delivery Unit (D&D): The D&D Unit contributes to the transformation of agrifood systems in partnership with other CGIAR centers by integrating proven technologies and innovations into national and regional agricultural investment programs and providing implementation support to Country programs, International Financial Institutions, and other development partners. The Technologies for African Agriculture Transformation (TAAT) project will continue to work with Governments, the African Development Bank, and other IFIs to realize the Dakar 2 Summit's vision of food system transformation for the Continent.

Youth in Agribusiness (YIA) and Start Them Early Program (STEP): YIA and STEP allow youth 18 – 35 years old and youth in secondary schools, respectively, to assume their rightful place in African agricultural transformation. They provide entrepreneurial opportunities to business-minded youth through the Agripreneur movement and assist African youth to find meaningful participation and careers in agriculture. They also promote skill sets that allow youth to qualify for decent employment within Africa's growing agricultural sector.

Business Incubation Platform (BIP) Ltd: The BIP is a social enterprise that incubates CGIAR technologies, allowing their more rapid commercialization by the private sector. It also provides expertise and training in commercial agriculture and farm management. BIP will partner with TAAT and have a strong presence in each of the five IITA hubs to ensure continent-wide coverage of its activities.

Thematic thrusts operating across R4D and P4D

Two thematic thrusts, involving both R4D and P4D will be operationalized towards greater institutional recognition and impact.

Climate-smart agriculture: This thrust focuses on the compilation of climate-smart practices and their widespread delivery to small-scale African farmers. It identifies ready-to-go and proven climate-resilient varieties and promotes their accelerated release, including through BIP GoSeed. It identifies which climate-smart practices are best applied to which cropping systems, agroecological zones, and client groups; and formalizes them into technology packages, including diversification options. It launches a Youth Climate Core in ways that revitalizes the Agripreneur movement. It redirects our application of ISFM towards climate adaptation goals and practices. Overall, it allows us to understand localized adaptation within the context of larger-scale mitigation.

Health and nutrition: This thrust operates on the assumption that solutions to nutrition security are found in more diversified cropping systems and diets. It recognizes that legumes are important but not able to fully achieve nutritional security without the inclusion of some crops outside of the IITA mandate, thus directing avenues of collaboration. It assumes that the poorer the household, the poorer their diet, and devises direct interventions for specific client groups, agroecological zones, and countries. It does not shy away from indigenous crops as a means toward dietary diversity, but at the same time it recognizes the growing demand from increasingly sophisticated urban markets and unlimited demand for lower-cost nutritional foods among the urban poor. It also reopens IITA's mandate for soybean as a protein powerhouse, something that IITA has underexploited.

4

IITA is about improving nutrition, livelihoods, agricultural productivity, incomes in a sustainable manner and making the farmers proud.

Regional Hubs: Where R4D meets P4D

IITA is organized in a regional, Africa-centered structure through its 'Hubs' that support its more localized R4D and P4D activities. These five Hubs operate in Central Africa from Kinshasa, DR Congo; East Africa from Dar es Salaam, Tanzania; Southern Africa from Lusaka, Zambia; West Africa from IITA HQ in Ibadan, Nigeria; and the Sahel in Bamako, Mali (Figure 1). The Hubs promote collaboration and partnership in the development and implementation of research programs and the scaling of innovations and services through public and private sector partners. Each Hub has its own characteristics based on the agroecological zone, cropping systems, capacities in research development and dissemination of technologies, policies, and level of country commitment to the transformation of their respective agrifood systems. These Hubs

and offices give IITA unique relations with countries, a deep understanding of the challenges and opportunities for research, delivery systems, and the support required for scaling, on-the-ground facilities, and services for efficient in-country operations. The Hubs ensure stronger connection with regional stakeholders and beneficiaries and funders through local Embassies, Ministries, and offices of multilateral and bilateral development institutions. IITA plans to offer the comparative advantages of its regional and local presence to CGIAR Centers working in Africa.

Figure 1. Map of sub-Saharan Africa showing IITA's Hubs, stations, and field offices.

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High quality cassava that are disease- and pest-resistant, more nutritious, with higher protein and other micro- and macronutrient contents.

Delivering agrifood system transformation through partnerships

The complexity of today's challenges to agricultural agrifood systems transformation calls for unified effort and commitment from a wide variety of critical actors working along key commodity value chains (Figure 2). Effective partnerships allow the alignment of priorities, co-design of solutions, the synergy of leveraged capacities, sharing of facilities and resources, and combined platforms for knowledge exchange and action. Over the next decade, IITA will expand its network of partners and collaborate more closely with various stakeholders to provide practical, science-based solutions that meet the needs of a growing number of beneficiaries. By harnessing innovative research solutions, we aim to tackle emerging agricultural challenges together and promote sustainable development to the benefit of all.

CGIAR

IITA will engage with other CGIAR centers to enhance the visibility of CGIAR and facilitate joint fundraising with donors at the country level, joint work programming, and coordinated engagements. Reorganization of CGIAR and its working relations and facilities across Africa is a key factor in IITA's partnership management. IITA intends to bridge the multi-faceted needs of partner countries with the power of a coordinated response by OneCGIAR and the localization of the CGIAR Research and Innovation portfolio.

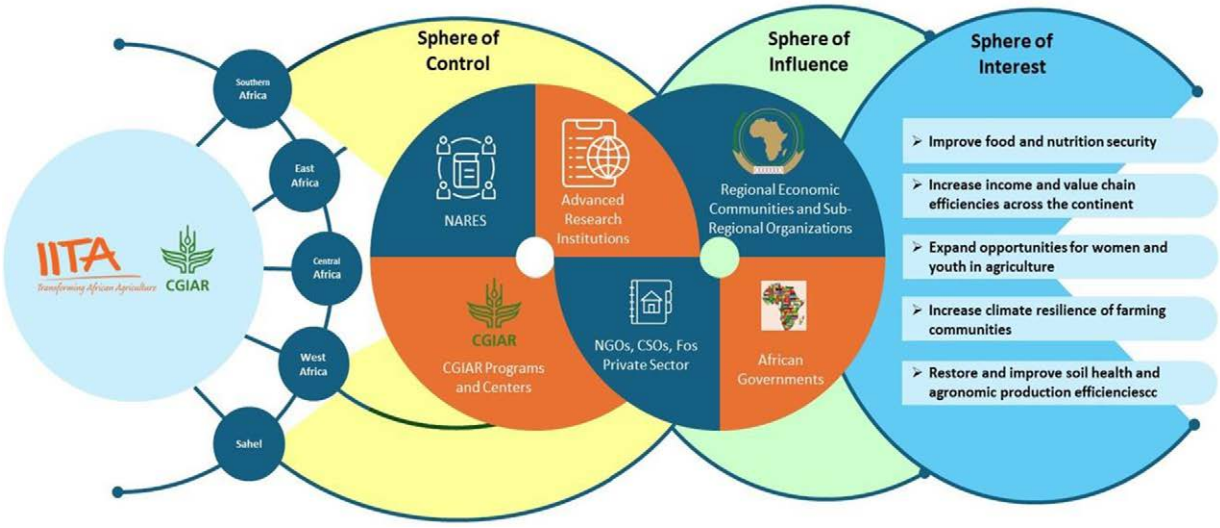

Figure 2. Partnerships are key to the delivery of transformed African agrifood systems, supported by IITA's R4D and P4D directorates, and operationalized through its five Hubs. While some partners can be hosted under IITA's sphere of control, other partners belong to IITA's sphere of influence. NGO, CSO, and FO refer to non-governmental organization, civil society organization, and farmer organization, respectively.

National Agricultural Research Systems (NARS)

The NARS are a primary counterpart of IITA's in-country work. To enhance the working relations with NARS, IITA intends to:

i. move from individual, ad-hoc projects to a programmatic engagement that supports the NARS strategy and implementation

ii. facilitate NARS engagement with the CGIAR and explore ways to localize the CGIAR Programs to country programs

iii. ensure connections across NARS in Africa to leverage cross-country and regional research work for the continent's benefit

iv. jointly mobilize resources from donor agencies, multilateral development finance institutions, and governments

v. activate critical degree- and non-degree-related capacity sharing engagements with a focus on novel research areas

(Sub-)regional Organizations (SROs)

IITA will strengthen its engagement with the regional organizations, including FARA[5] and COMESA[6], the SROs, including CORAF/WECARD[7], ASARECA[8], and CCARDESA[9], and RUFORUM[10] in order to:

i. facilitate the exchange of knowledge, information and technology among African countries within and across its sub-regions

ii. promote partnerships among public and private sector organizations, civil society, policymakers, and international organizations in R&D

iii. improve agricultural technology generation, dissemination and adoption, in cooperation with the Centers of Specialization or Excellence

iv. strengthen research and delivery in Africa by mobilizing human, financial, and technical resources to sustain demand-driven R&D programs; and

v. jointly carry out advocacy for consistent actions towards agrifood systems transformation at continental, sub-regional and national levels

5. FARA: Forum for Agricultural Research in Africa
6. COMESA: Common Market for Eastern and Southern Africa
7. CORAF/WECARD: West and Central Africa Council for Agricultural Research and Development
8. ASARECA: Association for Strengthening Agricultural Research in Eastern and Central Africa
9. CCARDESA: Centre for Coordination of Agricultural Research and Development for Southern Africa
10. RUFORUM: Regional Universities Forum for Capacity Building in Agriculture

African Governments

IITA will continue to provide technical assistance to African Governments and work in the co-design and implementation of agriculture development programs. It will provide demand-driven support to regional and national institutions that implement these programs. To achieve this aim, IITA must strengthen partnerships with multilateral funders, such as the World Bank, IFAD, AfDB, and with national governments across the continent. IITA will align its actions with African agricultural development frameworks including the African Union Malabo Declaration, Comprehensive Africa Agriculture Development Programme, the United Nations Sustainable Development Goals, the African Development Bank's Feed Africa Strategy, and the plans and operations of the various Regional Economic Communities.

Private sector

Partnerships with the private sector are crucial for IITA to accelerate and deliver impact at scale as it brings resources, capacities, and networks crucial to co-developing and deploying proven technologies. At the operational level, IITA will increase engagement with the private sector by consistently asking teams about the potential role of the private sector. While not every IITA activity will include the private sector, the consistent inquiry and search for private sector engagement opportunities will ensure that all available opportunities are mobilized. The connection between R4D and P4D will be reinforced to ensure that opportunities to engage the private sector are considered earlier in the research process. IITA will continue to build private sector-associated skills across its five Hubs to strengthen connections between research and commercial development.

IITAs' research for development helps assure food security and economic gains for Africa's farmers.

Non-governmental Organizations (NGOs) and Farmer Organizations (FOs)

IITA will partner with NGOs and FOs to accelerate the delivery of demand-driven knowledge and innovations. To facilitate technology delivery at scale and accelerate impact, IITA will:

i. improve access to knowledge and information on the available innovations, solutions, products, and tools

ii. strengthen the capacity of local organizations and farmer groups to independently sustain their agricultural activities

iii. promote institutional networking and linkages with other stakeholders working in priority value chains; and

iv. facilitate feedback mechanisms from knowledge and innovation users to develop or refine the innovation pipeline

Advanced Research Institutes (ARIs)

IITA will enhance advanced research programs and state-of-the-art approaches through strong engagements with Advanced Research Institutions (ARIs). ARIs will provide research facilities and services to facilitate basic or upstream research, foster additional skills in areas where IITA has limited capacities such as artificial intelligence, nutrition and climate-related research, as well as provide training to improve skills of IITA scientists. ARIs will benefit from IITA's research, delivery capacity, and its partnerships, and ensure that their research addresses relevant questions. IITA will identify ARIs with relevant skills and formalize the partnerships, including the development of joint R&D and capacity development programs.

A group of farmers demonstrating aflasafe application to fellow farmers. Photo by IITA.

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Farmers appreciating good performance of legume technologies. Photo by F. Baijukya, IITA.

Organizational excellence to deliver the Strategy

Coping with uncertainties and risk mitigation: Achieving the Institute's strategic objectives requires taking advantage of opportunities and managing risks arising within its operating environment. These risks may negatively affect project execution under changing operating circumstances, unrealized productivity targets due to extreme climatic conditions, civil disruption due to socioeconomic pressures, and changes in governmental positions and regulatory environment. IITA has operationalized a Risk Management Committee to develop a systematic framework to anticipate these threats and minimize and mitigate their adverse effects, in close cooperation with CGIAR. In this way, risk awareness becomes an integral part of the institute by embedding its management into decision-making processes. Developing a working risk management culture requires awareness campaigns, mandatory risk training for key project and operations staff, and establishing risk thresholds beyond which mitigative actions are launched.

Sustainability of research and delivery interventions: Foresighted research and delivery interventions in agrifood systems should last beyond project life cycles so that those affected by the interventions will continue to benefit, and those who are less affected can access their advantages. Agricultural research and science are vital for helping communities thrive by providing farmers with innovative tools and sustainable practices that allow them to adapt to changing conditions and secure food for the future. The sustainability of these is achieved initially through alignment with national/regional priorities to ensure ownership of governments and local communities. Catalyzing and building strong partnerships and feedback with IITA's many partners and enhancing capacity building among NARS, NGOs, CBOs, and farmers' groups is crucial. Equally important is internal staff development to better perform ongoing and future research and delivery programs. Essential ingredients of sustainable interventions include mainstreaming of gender and youth; integrating proven technologies and innovations into national and regional agricultural investment programs; and strengthening markets and access to credit facilities that drive productivity enhancement along entire value chains.

Involvement and integration of the private sector in research programs and national/ regional agricultural investment programs is pivotal in any market-driven endeavor for delivering research outputs at scale. Capacity development of the key stakeholders in the value chains must be undertaken to enhance complementarity and synergy in research and delivery outcomes and impacts. Resource mobilization with partners should be conducted as well, and its allocations must be equitable. In this way, NARS partners can upgrade their requisite skills and better contribute to research and delivery programs into the future.

Operationalization of the strategy: Working within a clear framework, with agreed objectives and insightful analyses, activities will be chosen jointly with partners to achieve expected project outputs and program outcomes. As needed, IITA will also produce a series of near-term roadmaps that outline key goals and activities, supported by a real-time Monitoring, Evaluation, and Learning. In this way, IITA offers a strategy that supports the Institute's overall objective to transform agrifood systems, allowing it to better address constraints and embrace opportunities.

Achieving the Strategy's objectives will require creative arrangements with partners, delivery of demand-driven science, wider access to resources, and inspired approaches to old and new challenges. In this way, undertaking this Strategy requires that new and dynamic tools and mechanisms are deployed by knowledgeable and committed staff with the ever-improving ability to design, implement, and bring to fruition challenging research and delivery programs.

IITA's 2024 – 2030 Strategy:

Science, Research and Delivery Innovations for African Agrifood System Transformation

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