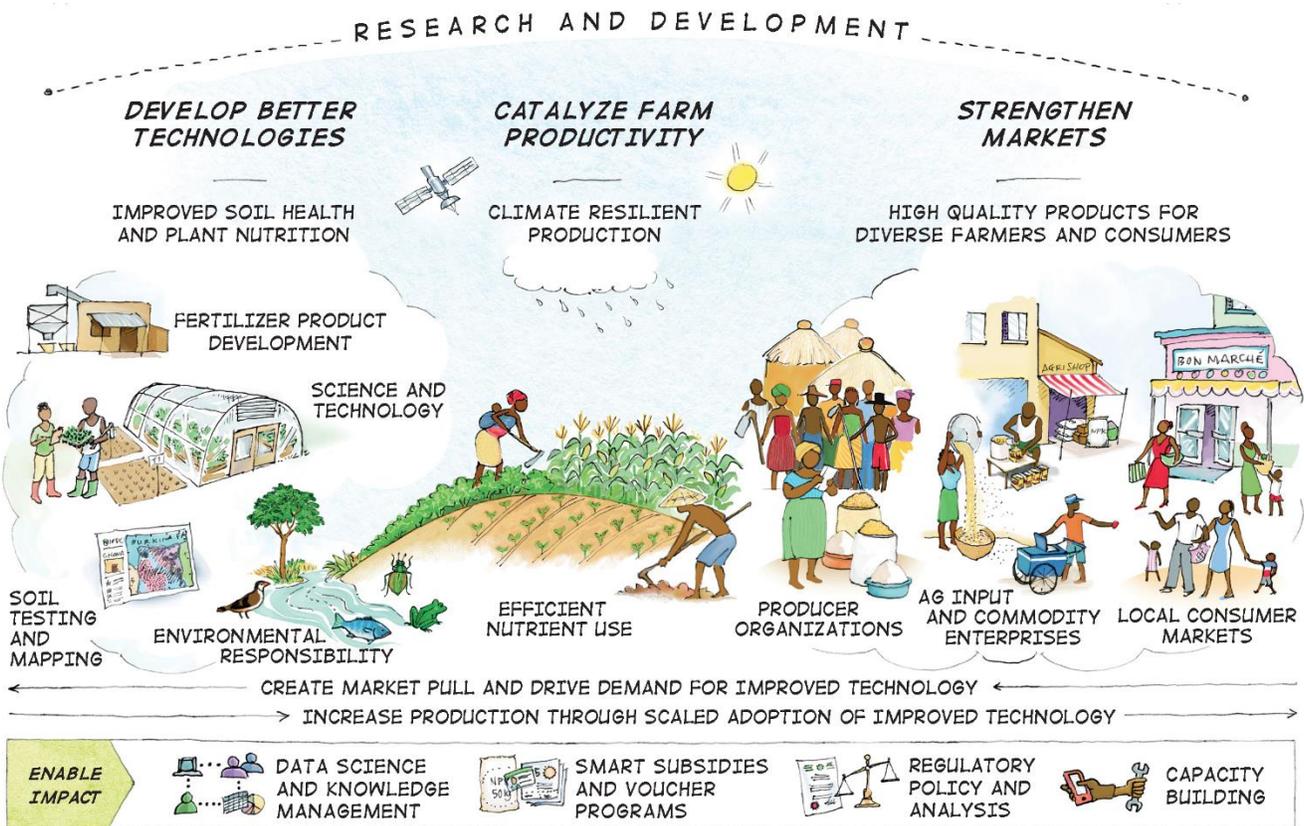


IFDC North and West Africa Regional Capabilities and Core Competencies

Market Systems for Agribusiness • Resilience, Climate Adaptation, and Mitigation • Last-Mile Input Delivery • Scaling Technologies • Soil Fertility Management • Seed and Fertilizer Sector Development • Enabling Environment • Collaborating, Learning, and Adapting

Established first office in West Africa, Lomé (capital city of Togo) in 1987. IFDC has 35 years' experience in the region developing fertilizer data management, visualization, and dissemination methods; increasing the adoption of efficient and targeted fertilizer techniques; supporting seed sector development and professionalization; building more inclusive farm-to-market agribusiness clusters; and enhancing interactions between scientific, financial, and government bodies.

Our Mission in Action



Our Experiences in the Region

Toward Sustainable Clusters in Agribusiness Through Learning In Entrepreneurship (2SCALE) - Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, Nigeria

2012-2023 – €50 million, Netherlands Directorate- General for International Cooperation (DGIS)

The 2SCALE program incubates and accelerates inclusive business through partnerships with companies, mainly African small- and medium-size enterprises [SMEs] and some Dutch/international companies, that want to build commercially viable African food industries through sustainable sourcing, based on mutually beneficial relations with smallholder farmers and by serving local and regional base-of-the-pyramid (BoP) markets. These companies are seen as the drivers of inclusive business; they are called inclusive business champions.



2SCALE entered its second phase in 2019, focusing on establishing agribusiness clusters built around business champions. Champions are either entrepreneurial producer organizations or local SMEs that trade or process the produce of farmers. By providing support to these clusters, 2SCALE is developing products and local consumer markets, preferably at the base of the pyramid.

In Ghana, 2SCALE supported the scaling of two innovations, DryCard and Aflasafe, that had already been introduced to different partnerships in 2019. DryCard is a cost-effective solution to measure the moisture content of grains and other foods before storage to prevent spoilage, and Aflasafe is a natural product that can cut aflatoxin levels in maize and groundnuts by 80-100%. Nearly a thousand farmers were introduced to the use of DryCard through community-level trainings and radio campaigns.

Cumulative Achievements

- 53 partnerships have been formed, eight of which are in Ghana.
- 627,422 farmers have been reached (36% women).
- 1,891 agribusiness enterprises have been supported, mostly small local firms, many of which are headed by women.
- 24 pilots were implemented. €55 million was leveraged by the private sector and €40 million in credit facilitated for farmers and SMEs.
- Gender-inclusive mobile money payments have been facilitated by ASI and BoP pilots with Yedent.
- New clusters were created to enhance access to markets.

Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) West Africa - Côte d'Ivoire, Ghana, Mali, Nigeria, Niger, Senegal

2018-2023 – \$14 million, U.S. Agency for International Development (USAID)

EnGRAIS aims to increase the availability and use of fertilizers that are appropriate and affordable for smallholder farmers in West Africa. The project seeks to promote a competitive, inclusive, and private sector-led, regional fertilizer market and works particularly with African-led institutions to develop well-functioning private sector-led fertilizer markets at regional and national levels, primarily through support to private sector associations.

Cumulative Achievements

- A comprehensive study of Ghana's fertilizer value chain was conducted.
- The project was awarded an \$8 million buy-in to implement the Feed the Future Senegal Dundël Suuf project and build the capacity of the West African Fertilizer Association (WAFA).
- The West Africa Fertilizer Business Information Map and the online Fertilizer and Seed Recommendations for West Africa Map were published and updated.

Fertilizer Research and Responsible Implementation (FERARI) - Ghana

2019-2024 – \$5.78 million, Consortium of OCP, UM6P, and partner institutions

FERARI is a public-private program in Ghana that integrates an on-the-ground implementation program to develop the fertilizer value chain with transdisciplinary research by Ph.D. and postdoctoral researchers, supervised by internationally renowned universities, and build the research capacity at the involved institutions. The overall objective of the program is to develop the evidence base for the need of a systematic approach to support widespread adoption of balanced fertilizers by farmers in the less developed markets of sub-Saharan African countries – specifically, Ghana – as a means to improve their food and nutrition security.

Cumulative Achievements

- Activities align with the Ghanaian governmental programs Planting for Food and Jobs and the Fertilizer Expansion Programme.
- Through stakeholder surveys, a Ghana Fertilizer Platform has been designed and is being established.
- 6 public universities and 2 research institutions in Ghana have been engaged in the execution of the program, involving more than 30 MSc students.
- 225 on-station and on-farm fertilizer response trials of maize, rice, and soybean were conducted in collaboration with two research centers; these were demonstrated to about 1,000 farmers.
- A baseline survey of 1,450 farmers was completed to understand farm livelihoods.
- Soil mapping expertise has been developed as a step toward an IT platform.

Feed the Future Nigeria Rural Resilience Activity (RRA) - Nigeria

2019-2024 – USAID

RRA, implemented through a consortium led by Mercy Corps and including IFDC and Save the Children, is benefiting 90,000 households across the four Nigerian states of Adamawa, Borno, Gombe, and Yobe. IFDC, with a budget of U.S. \$1.9 million, oversees the interventions related to Community Seeds Production Development, Livestock Feeds Development, On-Farm and Post-Harvest Handling, Contract Farming, Mechanization, and Producer Organization Development.

IFDC's role serves to improve farm practices for increased productivity and income of farming populations by engaging with public/private extension service providers and input network actors, among others, to ensure appropriate technologies and practices are mainstreamed into their primary activities. RRA works within selected value chains that have the potential to drive economic expansion, expand inclusion of vulnerable groups (especially youth and women), and build resilience of individuals, households, and communities.

HortiNigeria - Nigeria

2021-2025 – Embassy of the Kingdom of the Netherlands in Nigeria

The HortiNigeria project aims at facilitating the development of a sustainable and inclusive horticulture sector that contributes to food and nutrition security in Nigeria. The project will enhance the social capital and contribute to the empowerment of smallholder farmers and value chain actors, with a particular focus on women and youth. It will incentivize value chains and support the sustainable integration of entrepreneurial farmers into profitable markets that contribute to nutritional security in Nigeria. Currently, the project is supporting the tomato, pepper, onion, and okra value chains in Kaduna, Kano, Ogun, and Oyo States. The program intends to boost the productivity and income of 60,000 smallholder farmers (50% youth and 40% women) by



introducing eco-efficient agronomic practices; increase acreage under sustainable cultivation by 15,000 hectares; and reduce seasonal risks by promoting innovations and regional diversifications to 2,000 entrepreneurial farmers. Additionally, the program will increase access to finance for 50 agricultural-related small- and medium-size enterprises and enhance sector coordination, which will facilitate 200 business-to-business linkages in all four states.

Cumulative Achievements

- More 12,000 smallholder farmers and 30 agro-dealers trained on eco-efficient, good agronomic practices and business management,
- Identification of 20 innovations to scale up among over 500 entrepreneurial farmers in Ogun and Oyo states and facilitation of business linkages and partnerships has ignited change within the sector.
- The focus on stimulating business-to-business linkages and partnerships gained momentum.
- Over 2,000 smallholder farmers connected to input and output markets.

Transforming Irrigation Management in Nigeria (TRIMING) Extension Service Supervision

2016-2022 – World Bank in collaboration with the Federal Ministry of Water Resources

TRIMING is being implemented in northern Nigeria with a cumulative budget for IFDC of U.S. \$1.8 million. The project is improving access to irrigation and drainage services while strengthening institutional arrangements for integrated water resource management and agriculture service delivery in selected large-scale public schemes in northern Nigeria. IFDC is promoting improved technologies and building the capacity of farmer organizations, which is key to enhancing productivity in the rehabilitated schemes and improving farmer participation in selected crop value chains. A total of 283 farmer groups have been trained on productivity-enhancing technologies and extension strategies, including more than **7,000 farmers** in the tomato and rice value chains; **3,644 clients** have adopted improved agricultural technologies; and over **120,000 smallholder farmers** have been reached by project interventions.

Integrated Seed Sector Development in the Sahel (ISSD/Sahel)

2020-2024, €11 million, Embassy of the Kingdom of the Netherlands

ISSD/Sahel seeks to increase rural incomes, improve rural employment, and ensure household food and nutrition security in Mali and Niger. The project focuses on developing new commercial seed producers, professionalizing seed traders, mobilizing Netherlands and international private sector expertise for the seed sector, and promoting quality seed on a large scale to grow the market toward a stable and self-sufficient commercial agriculture sector. The overall objective of ISSD/Sahel is to ensure the availability and use of high-quality seed by establishing a commercially sustainable and self-sufficient seed sector, supported by customer-oriented seed services. The most crucial crops for the population – comprise cereals and legumes, including millet, sorghum, maize, rice, groundnut, and cowpea, as well as well-adapted vegetable crops whose nutritional value and income are important to producers and consumers, such as okra, onions, tomatoes, cabbage, potatoes, and eggplant.

Cumulative Achievements

- 69,350 households reached through the promotion of quality seed production and use in Mali and Niger.
- 85 tons of early-generations produced to satisfy the demand.
- 134 private seed enterprises benefited from technical and commercial assistance of the project.
- 55 fixed and 33 mobile seed sales points installed for seed marketing and distribution.
- 377 young people and women got rural jobs.
- Strategic partnerships between four (4) Dutch and five (5) Sahelian seed companies.

Support for Fertilizer Sector Reform Project (PARSEN) - Niger

2018-2022, \$2,783,000, Millennium Challenge Corporation (MCC)/Millennium Challenge Account (MCA)

In 2017, the Government of Niger launched a process to reform the fertilizer sector in Niger, implemented through PARSEN. Within this framework, a Fertilizer Sector Reform Plan was developed with technical support from IFDC, validated by stakeholders, and adopted by decree of the President of the Republic in January 2018.

Cumulative Achievements

- The Niger Fertilizer Market Observatory (OMEN) and the Niger Fertilizer Technical Committee (COTEN) guide, supervise, and technically support the implementation of the reform and all fertilizer-related issues.
- Fertilizer Technical Committees were installed by the governors in the eight regions of the country.
- A Directorate of Fertilizer Inspection and Control (DICE) was established to strengthen the General Directorate of Agriculture in its role of monitoring and controlling fertilizers. A total of 60 fertilizer inspectors have been appointed, trained, and located at the central level, within the regional directorates and in strategic border posts.
- A Common Fertilizer Fund was created under the supervision of the Ministries of Agriculture and Finance.
- A law on fertilizer infractions and five decrees were adopted on the terms and conditions for obtaining and renewing approval for the import and export of fertilizers;
- The private fertilizer sector in Niger was strengthened. The Government of Niger adopted a policy framework that opened the market to private suppliers for the importation and distribution of fertilizer.
- The private fertilizer sector was organized into the Niger Association of Fertilizer Importers and Distributors (ANIDE) and relationships with fertilizer-using farmers, finance and credit institutions, and the regional fertilizer industry were strengthened.
- As a result, the private sector has brought more than 63,000 metric tons (mt) of fertilizer into the country.
- The formalization of the fertilizer trade has progressed rapidly: the Ministry of Agriculture has already issued 42 import licenses, 36 distribution licenses, and 35 retail licenses.
- A targeted fertilizer subsidy system, based on vouchers, has been tested and validated in 10 pilot rural communes. This system was used to distribute 1,400 mt of fertilizer to 7,211 targeted beneficiaries. Lessons learned from the pilot phase will be used by the Ministry of Agriculture to expand the system in 2021/22 to approximately 25,000 beneficiaries in 35 communes (rural districts) across the eight regions of the country.
- PARSEN is working closely with the ECOWAS regional Feed the Future Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) Project for West Africa to harmonize regional fertilizer regulations and promote the private fertilizer sector, with the involvement of the West African Fertilizer Association (WAFA).

Regional Rice Value Chain Development Program (RRVCDP) - Niger

2020-2024, \$730,125, Islamic Development Bank

The objective of RRVCDP is to contribute to improved economic growth through enhanced production, processing, marketing, and private sector participation. As a technical partner, IFDC assists with implementation by training farmers in good rice practices, organizing farmer field schools in the context of urea deep placement, mapping soil fertility, and promoting ISFM.

Communal Approach To The Agricultural Market (ACMA3) - Benin

(2017-2022), Budget: €21.1 million, CARE International Benin-Togo and KIT Royal Tropical Institute

Phase 2 (ACMA2) program is being implemented in four departments of Benin Ouémé, Plateau, Zou, and Collines. The program seeks to improve the food and nutritional security of rural populations in Benin by increasing the incomes of direct economic actors (men, women, and young people) Phase 2 (ACMA2) program is being implemented in four departments of Benin: Ouémé, Plateau, Zou, and Collines. The program seeks to improve the food and nutritional security of rural populations in Benin by increasing the incomes of direct economic actors (men, women, and young people) To achieve this, three specific objectives have been defined improve the agricultural productivity of producers and processors increase the trade of agricultural products by the actors organized in agribusiness clusters, and reduce barriers to the trade of agricultural products within Benin and with neighboring countries, including Nigeria ACMA2 has impacted 93 farmers, processors, and traders (43% men, 57% women, and 33% young people) The program has made good agricultural practices and strategic information accessible on its Information and Communications Technology for Agriculture (ICT4Ag) platform, and nearly 10 900 people (47.35% women and 46.72% young people) have subscribed on a fee-for-service basis Sales of more than 83 300 mt of agricultural products have been recorded at a value of almost US \$31 5 million Loans of more than US \$6 3 million, including nearly US \$300 000 through digital finance, have been made available to stakeholders to support their production, processing, and marketing activities.

Cumulative Achievements

- Nearly 9,500 people : farmers, processors, traders, have been impacted by ACMA2. (57% women, 33% youth and 43% men). Facilitation of the adoption of good agricultural practices and promotion of strategic information on its ICT4Ag platform.
- Approximately 29,000 people (43.7% women and 44.4% youth) have subscribed to these services, some of which are fee-based.
- More than 75,000 hectares cultivated in an eco-efficient manner; More than 100,000 tons of agricultural products marketed by the actors for a sales value of more than 27 billion.
- Nearly 4.1 billion CFA francs of credit facilitated, including about 370 million through digital finance, for the benefit of actors to support their production, processing and marketing activities.

Dundël Suuf - Senegal

2019-2023, U.S. \$8,500,000, Institut Senegalais de Recherches Agricoles (ISRA), Agence Nationale pour le Conseil Agricoles et Rural (ANCAR), Directorate of Agriculture, producer organizations, and the private sector.



Feed the Future Senegal Dundel Suuf is being implemented in five agroecological zones of Senegal to address the use of inappropriate fertilizer formulas, lack of adoption of enhanced fertilizer technologies, poor enforcement of fertilizer quality control, and an inefficient subsidy program. The program supports improvement of soil fertility to increase agricultural productivity in the country. In its second year, 17 partners were selected to establish 3,053 fertilizer deep placement (FDP) and microdosing (MD) demonstration plots on 8.092 hectares (ha) for 87,682 beneficiaries, 900 of whom received agro-input packages (AIPs) for COVID-19 impact mitigation. A total 122,644 participants (55% women and 15% youth) have been

trained on FDP and MD application standards. To contribute to subsidy reform, 8.00 flyers on the smart fertilizer subsidy program guidelines were shared with partners, particularly decision-makers. Fifteen soil fertility maps are being generated for Senegal, the project's flagship activity. A partnership with the University of SINE Saloum El-Hadj Ibrahima Niass (USSEIN) was initiated, resulting in eight student internships.

Cumulative Achievements

- The UDP and MD technologies applied on 8,990.1 hectares (ha).
- 88,091 people reached by the project, of which 32,975 received agricultural input packages (AIPs) to mitigate the impact of COVID-19 and boost yields. 32,996 participants (57% women and 19% youth) trained in the application of the UIP and MD.
- 16 new NPK fertilizer formulas developed by ISRA and tested on 194 plots in station and farmer settings.
- 19 meetings of regional platforms with the private sector organized on the conditions of access to fertilizer.

Our Core Competencies in the Region

Integrated Soil Fertility Management

ISFM is a set of agricultural practices adapted to local conditions to maximize the efficiency of nutrients and water use and improve agricultural productivity. IFDC's flagship approach combines mineral fertilizers, local amendments (such as lime and phosphate rock), and organic matter to replenish depleted soil nutrients, thereby improving soil quality and efficiency of fertilizers and other inputs. ISFM also incorporates improved germplasm, agroforestry practices, crop rotation, and intercropping to improve soil fertility.

Fertilizer Deep Placement

FDP is an innovative, proven fertilizer application technology that consists of placing urea briquettes at a depth of 7-10 cm in the middle of four rice plants seven days after transplanting. FDP achieves average yield increases of

18% while reducing fertilizer use by about one-third. FDP is known as urea deep placement (UDP) when only urea is applied. IFDC began its African FDP initiative in 2009, targeting 13 countries across the continent. Ghana has been among the countries generating the best results with FDP application on rice and vegetables.

Market Systems and Value Chain Development

IFDC has developed a holistic approach to market development. This approach is based on five pillars: policy, human capital, finance, market information systems, and regulatory mechanisms. IFDC also assists smallholder farmers to transition from subsistence farming to commercial farming or agricultural entrepreneurship. Our organization focuses on the development of output markets for the sale of production surpluses, which provide “traction” for the development of input markets. The objective is to give smallholder farmers the knowledge and tools they need to increase the quantity and quality of their agricultural production, facilitating their linkage to profitable markets so that they can sell their products at optimal prices.

Agribusiness Cluster Development

An agribusiness cluster (ABC) is a local network of one or more formal or informal groups of farmers producing the same agricultural product who are linked to nearby actors that trade or process the product. ABCs facilitate the integration of smallholder farmers into target value chains by improving access to agricultural inputs and services, coordination and co-innovation among stakeholders, and bargaining power. These three key roles of ABCs Contribute To Grassroots Empowerment And Thus Pave The Way For Better Conditions For Inclusion Of Smallholder Farmers And Other Rural Entrepreneurs In The Target Agricultural Value Chains.

Inclusive Financial Models

Access to finance is essential to expand entrepreneurial activities and strengthen inclusive agribusiness. Value chain-based financing mechanisms, in which ready markets serve as collateral, are viable options for input credit, pre-financing of sales operations, and investments in infrastructure and equipment. IFDC has helped smallholders’ access profitable markets and created linkages between smallholders and financial institutions for agricultural financing.

Agro-Input Dealer Development

IFDC has built the capacity of thousands of input dealers, facilitating their participation in the input supply market. The group of expert trainers then continues to train new input dealers and provide mentoring. IFDC has empowered input dealers, providing the missing link of an effective private sector input and service provision system that can reach smallholder farmers with improved seeds, appropriate fertilizers, agrochemicals, and extension advisory services.

Micro Dosing (MD) Technology

Micro dosing technology involves the application of very small amounts of fertilizer directly to plant roots. The method increases fertilizer efficiency and can double the productivity of millet and sorghum crops.

Enabling Impact by Improving Policies, Strengthening Capacity, and Sharing Knowledge

Throughout IFDC’s existence in Ghana, it has contributed massively in supporting the development and implementation of national and regional agricultural policies within the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (UEMOA). This includes devoting key resources in 2018 and 2019 in Ghana to facilitate reforms in the Planting for Food and Jobs (PFJ) fertilizer subsidy program.

IFDC, through EnGRAIS and in cooperation with the West and Central African Council for Agricultural Research and Development (CORAF), is promoting the transformation of national-level fertilizer subsidy reform programs to stimulate regional commercial activity and investment to ensure adequate availability of recommendations for seeds and fertilizers to boost agricultural productivity in Ghana and the sub-region.

Through the EnGRAIS project, the following accomplishments have been achieved:

- A tripartite cooperative agreement between ECOWAS, UEMOA, and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) was signed on to harmonize the regulation of fertilizer, seeds, and plant protection products in member states.
- WAFA was supported to develop a two-year joint work plan with the African Development Bank, the African Fertilizer Financing Mechanism (AFFM), the International Finance Corporation (IFC), and the African Fertilizer and Agribusiness Partnership (AFAP) to develop tools, partnerships, and mechanisms to facilitate access to finance for WAFA and relevant member organizations.

IFDC is also implementing the Feed the Future Sustainable Opportunities for Increasing Livelihoods with Soils (SOILS) Consortium (2015- 2023), funded by USAID at \$3 million. Through the grant, IFDC supports policy reforms and market development, e.g., fertilizer platforms and subsidy policy.

Increasing Farm Productivity, Profitability, and Sustainability

IFDC assesses the performance of emerging technologies under smallholder conditions, working with national research agencies, the private sector, and local stakeholders, with a focus on expanding the participation of women and youth across all activities. IFDC engages smallholders through research and on-farm demonstration to promote new technologies, including new fertilizers, certified seed, pest management, and post-harvest technologies.

Between 2013 and 2018, ATT targeted 3,070 agro-dealers for inputs and extension services and 1,783,000 smallholder farmers for improved access to inputs, technologies, markets, finance, and good agricultural practices.

Resilience to Climate Change

As farmers around the world experience the challenges of a changing climate, identification and transfer of technologies that help farmers adapt their practices to as well as mitigate the harmful effects of climate change is key. With this in mind, the ATT project established trials to train farmers on the principles and practices of ISFM, including composting, improved fertilizer blends and delivery methods, and conservation agriculture. ATT also identified the economic and environmental necessity to harvest water. An analysis suggests that the cycle of poverty in the north of Ghana cannot be broken without having two cropping cycles per annum – a strategy known as Double Cropping, Dual Income. As with all of our transferred technologies, methods of water harvesting are selected based on their potential to be environmentally sound and socioeconomically appropriate.

Gender and Youth Inclusiveness

Studies have shown that sub-Saharan African women comprise 60-80% of the labor force yet are faced with persistent social and economic constraints. Therefore, IFDC ensures that its projects address the constraints that limit access to productive resources and services by the vulnerable, women, and youth. Its programs are gender inclusive rather than gender specific. Experience has shown that it is more effective to include gender-sensitive interventions right from the planning phase rather than during the implementation phase, so that sufficient time, resources, and effort are incorporated into the program.

SMaRT Approach

IFDC integrates novel and innovative fertilizer products into application practices that are tailored to specific agroecological conditions and cropping systems to promote efficient uptake of nutrients by plants and soils. IFDC’s **Soil testing, Mapping, Recommendations development, and Transfer to farmers (SMaRT)** approach improves understanding of the multiple steps involved in getting appropriate fertilizers to farmers at an accelerated pace through effective coordination of multiple actors across the fertilizer value chain.

