



FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) Project for West Africa

FISCAL YEAR 2019 ANNUAL REPORT (OCTOBER 2018 - SEPTEMBER 2019)

USAID Cooperative Agreement No. 720624181000001

October 2019



EnGRAIS Fiscal Year 2019 Fourth Quarterly Report October 2018 - September 2019

USAID Cooperative Agreement No. 720624181000001



P.O. Box 2040
Muscle Shoals, Alabama
35662 USA
www.ifdc.org

DISCLAIMER:

This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Feed the Future initiative. The contents are the responsibility of IFDC and do not necessarily reflect the views of USAID or the United States Government.

Table of Contents

1	INTRODUCTION.....	1
2	SUMMARY.....	2
2.1	HIGHLIGHTS OF FY 2019 PERFORMANCE.....	2
2.1.1	IR 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened	2
2.1.2	IR 2: Comprehensive input packages developed and disseminated in cooperation with CORAF.....	3
2.1.3	IR 3: Fertilizer policy and regulatory systems across West Africa improved and harmonized in accordance with ECOWAS guidance	3
2.1.4	IR 4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins	4
2.2	CHALLENGES AND ISSUES	4
3	MAIN ACTIVITIES AND RESULTS	5
3.1	IR 1: COMPETITIVE, INCLUSIVE, PRIVATE SECTOR-LED, REGIONAL FERTILIZER MARKET STRENGTHENED.....	5
3.2	IR 2: COMPREHENSIVE INPUT PACKAGES DEVELOPED AND DISSEMINATED IN COOPERATION WITH CORAF.....	17
3.3	IR 3: FERTILIZER POLICY AND REGULATORY SYSTEMS ACROSS WEST AFRICA IMPROVED AND HARMONIZED IN ACCORDANCE WITH ECOWAS GUIDANCE.....	22
3.4	IR4: MOBILIZING COMMITMENT AND HARMONIZING ENGAGEMENT FROM KEY STAKEHOLDERS ACROSS WEST AFRICA SUPPORTED BY MISSION BUY-INS	33
4	CROSS-CUTTING ISSUES.....	35
4.1	MONITORING, EVALUATION AND LEARNING (MEL)	35
4.2	INFORMATION AND COMMUNICATIONS TECHNOLOGY/MARKET INFORMATION SYSTEM (ICT/MIS) SUPPORT	36
4.3	COMMUNICATIONS	38
4.4	ADMINISTRATION/FINANCE.....	38
4.7	LOCAL GRANTS AND SUBCONTRACTS AGREEMENT STATUS	39
5	OUTLOOK FOR THE NEXT QUARTER (OCTOBER – DECEMBER 2019)	40
5.1	IR 1: COMPETITIVE, INCLUSIVE, PRIVATE SECTOR-LED, REGIONAL FERTILIZER MARKET STRENGTHENED.....	40
5.2.	IR 2: COMPREHENSIVE INPUT PACKAGES DEVELOPED AND DISSEMINATED IN COOPERATION WITH CORAF.....	41
5.3.	IR 3: FERTILIZER POLICY AND REGULATORY SYSTEMS ACROSS WEST AFRICA IMPROVED AND HARMONIZED IN ACCORDANCE WITH ECOWAS GUIDANCE.....	41
5.4.	IR 4: MOBILIZING COMMITMENT AND HARMONIZING ENGAGEMENT FROM KEY STAKEHOLDERS ACROSS WEST AFRICA SUPPORTED BY MISSION BUY-INS	42
ANNEX 1	SUCCESS STORY	43
ANNEX 2	ECOWAS REGULATORY FERTILIZER FRAMEWORK.....	45
ANNEX 3	TWO-COUNTRY WORKSHOP REPORTS.....	52
ANNEX 4	PERFORMANCE INDICATOR TABLE	55
ANNEX 5	EXPLANATION ON PERFORMANCE INDICATORS 1-2.....	59
ANNEX 6	FY19 STAFF TRAVEL REPORT.....	60

Acronyms and Abbreviations

AEZ	Agro-Ecological Zone
AFAP	African Fertilizer and Agribusiness Partnership
AFFM	Africa Fertilizer Financing Mechanism of the African Development Bank
AFO	AfricaFertilizer.org
AGRA	Alliance for a Green Revolution in Africa
APECI	National Association of Fertilizer Industry of Côte d’Ivoire
CILSS/INSAH	<i>Comité Permanent Inter-Etats de Lutte Contre la Sécheresse dans le Sahel</i>
CONACEN	National Committee for Fertilizer Control in Niger
CORAF	<i>Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles</i> (West and Central African Council for Agricultural Research and Development)
COTEN	Niger Fertilizer Technical Committee
DGPSA	Director General of Crop Production and Food Security, Côte d’Ivoire
ECOWAS	Economic Community of West African States
EnGRAIS	Enhancing Growth through Regional Agricultural Input Systems
FEPSAN	Fertilizer Producers and Suppliers Association of Nigeria
FeSeRWAM	Fertilizer and Seed Recommendations Map for West Africa
FISS	Department of Farm Input Support Service, Nigeria
FTF	Feed the Future
FTWG	Fertilizer Technical Work Groups
FY	Fiscal Year
GFEP	Ghana Fertilizer Expansion Programme
GFVCOS	Ghana Fertilizer Value Chain Optimization Study
GoG	Government of Ghana
ICT/MIS	Information and Communications Technology/Market Information System
IFA	International Fertilizer Association
IFDC	International Fertilizer Development Center
INRAB	National Agricultural Research Institute of Benin
IR	Intermediate Result
LSSEE	Soils-Water-Environment Laboratories, Benin
MEL	Monitoring, Evaluation, and Learning

MINADER	Minister of Agriculture and Rural Development, Côte d'Ivoire
MoA	Ministry of Agriculture
MoFA	Ministry of Food and Agriculture, Ghana
MoU	Memorandum of Understanding
NaCoFeC	National Committee for Fertilizer Control
NaFRA	National Fertilizer Regulatory Agency, Sierra Leone
OMEN	Niger Fertilizer Market Information Network
PAIRED	Partnership for Agricultural Research, Education and Development in West Africa
PEMEFA	Partnership for Enabling Market Environments for Fertilizer in Africa
PPRSD	Plant Protection and Regulatory Services Directorate, Ghana
RECs	Regional Economic Communities
SRC	Sub-Regional Coordinator
SRL	Sub-Regional Liaison
TAAT	Technologies for African Agricultural Transformation
UEMOA/WAEMU	<i>Union Economique et Monétaire Ouest Africain</i> /West African Economic and Monetary Union
USAID	United States Agency for International Development
USAID/WA	USAID West Africa Regional Mission
WACoFeC	West Africa Committee for Fertilizer Control
WAFA	West Africa Fertilizer Association
WAFBIM	West Africa Fertilizer Business Information Map
WAFF	West Africa Fertilizer Forum
WAFFF	West Africa Fertilizer Financing Forum
WAFP	West Africa Fertilizer Program

FEED THE FUTURE ENHANCING GROWTH THROUGH REGIONAL
AGRICULTURAL INPUT SYSTEMS PROJECT FOR WEST AFRICA

ANNUAL REPORT

October 2018 – September 2019

Name of Project: Feed the Future Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) Project for West Africa

Project Duration: 5 years

Life of Project: February 2018 – February 2023

Project Objective: Sustainably increase regional availability and use of appropriate and affordable fertilizers through: Intermediate Result (IR) 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened; IR 2: Comprehensive input packages developed and disseminated in cooperation with West and Central African Council for Agricultural Research and Development (CORAF); IR 3: Fertilizer policy and regulatory systems across West Africa improved and harmonized in accordance with the Economic Community of West African States (ECOWAS) guidance; and IR 4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins.

Geographic Focus: West Africa region, including all 15 ECOWAS Member States and, to the extent possible, two more *Comité Permanent Inter-Etats de Lutte Contre la Sécheresse dans le Sahel* (CILSS) Member States – Chad and Mauritania.

1 INTRODUCTION

On February 19, 2018, the United States Agency for International Development (USAID)/West Africa signed a Cooperative Agreement with the International Fertilizer Development Center (IFDC) for the award of \$10 million to implement the five-year (2018-2023) Feed the Future EnGRAIS Project for West Africa. EnGRAIS aims to support African-led regional institutions to address critical issues that constrain the effective supply and use of agricultural inputs in West Africa. The program is expected to result in strong, positive, and lasting change toward improving the availability of and farmers' access to appropriate, affordable, and quality agricultural inputs.

EnGRAIS is applying a multi-faceted approach, working throughout the fertilizer supply chain as a facilitator and enhancing strategic actors' ability to improve the business environment and transition to a private sector-led fertilizer market that responds to an effective demand for productivity-enhancing inputs in West Africa.

In this fiscal year (FY) 2019 Annual Report, we first summarize and provide highlights of EnGRAIS's progress and accomplishments, followed by a description of challenges and/or issues encountered during the period under review. The report then describes the project's main activities during the FY by IR and Sub-IR, followed by a description of key activities related to cross-cutting issues. This is followed by an outlook on expected activities during Quarter (Q) 1 of FY20.

2 SUMMARY

To accomplish its four Irs related to a competitive and efficient supply system, an effective demand for fertilizer, an enabling environment, and harmonizing and supporting actions at the country level, EnGRAIS focused on the following six sub-Irs during the past year:

- Sub-IR 1.1: West Africa Fertilizer Association (WAFA) and other relevant regional private sector organizations'/associations' management capacity increased and organizations sustainable;
- Sub-IR 1.2: Industry actors collaborating through multi-stakeholder platforms to improve supply chain efficiency and improve fertilizer affordability;
- Sub-IR 2.1: Fertilizer and seed recommendations updated and developed for targeted crops and agro-ecological zones (AEZs) across West Africa;
- Sub-IR 2.2: Comprehensive fertilizer and seed input packages promoted and marketed across West Africa;
- Sub-IR 3.1: Regional Fertilizer Subsidy Guidance endorsed by ECOWAS and disseminated to policymakers and industry stakeholders in Member States; and
- Sub-IR 3.2: ECOWAS regulation for fertilizer quality control published by all Member States and implemented at the regional level.

The project also worked closely with its partners, including CORAF, WAFA, ECOWAS, the *Union Economique et Monétaire Ouest Africaine* (UEMOA), the Alliance for a Green Revolution in Africa (AGRA), and the Ministries of Agriculture of ECOWAS Member States to implement activities under the Irs and their sub-Irs during the period under review. Results achieved during the past FY are highlighted below.

2.1 Highlights of FY 2019 Performance

2.1.1 ***IR 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened***

During FY19, EnGRAIS carried out the following major activities under IR 1:

- Updated the EnGRAIS and WAFA Joint Action Plan, extending it through September 2020.

- Assisted WAFA as they revised and finalized the new constitution and developed their five-year strategy. Both documents were endorsed during the Extraordinary General Meeting (EGM) in April 2019.
- Supported WAFA's facilitation of its successful Annual General Meeting (AGM) in Bamako, February 13-14, 2019. EnGRAIS also helped WAFA and Argus organize and host the third annual West Africa Fertilizer Forum (WAFF) in Lomé, April 24-26, 2019, which was attended by more than 200 delegates.
- Provided assistance to WAFA board members to complete the recruitment of personnel for the association's coordinating unit; three full-time staff were hired and trained.
- Facilitated a five-year partnership agreement between WAFA and AfricaFertilizer.org (AFO) to collect, analyze, and disseminate fertilizer market information and data in West Africa.
- Initiated and supervised cost build-up studies across four major fertilizer trade corridors conducted by Nitidæ. The initial results and recommendations from these studies were presented during the WAFF and the reports were finalized during August 2019 (Q4).
- Supported WAFA through a grant to contract the African Fertilizer and Agribusiness Partnership (AFAP) to undertake a study on WAFA members' access to finance that was a key element in the successful West Africa Fertilizer Financing Forum (WAFFF) co-organized in late September with the African Development Bank (AfDB)/Africa Fertilizer Financing Mechanism (AFFM).

2.1.2 IR 2: Comprehensive input packages developed and disseminated in cooperation with CORAF

During the reporting period, the project carried out the following major activities under IR 2:

- In close collaboration with CORAF/PAIRED, developed and digitized at least 40 comprehensive agri-input packages, including information on improved seeds, appropriate fertilizer recommendations, and good agricultural practices (GAPs) specific to each crop and agro-ecological zone (AEZ), and incorporated them into the Fertilizer and Seeds Recommendations for West Africa Map (FeSeRWAM). To finalize these electronic packages, EnGRAIS and PAIRED organized and facilitated multiple meetings with key stakeholders to review and validate the data that supports the packages and worked with stakeholders to approve the design and dissemination plan.
- Finalized and launched the FeSeRWAM, a web-based interactive platform which provides farmers information on needed agricultural inputs and GAPs to increase their crop production. Presented the FeSeRWAM to stakeholders at the validation workshop in August 2019 in Dakar, Senegal.

2.1.3 IR 3: Fertilizer policy and regulatory systems across West Africa improved and harmonized in accordance with ECOWAS guidance

During the past FY, EnGRAIS carried out the following major activities under IR 3:

- Transformed the Regional Fertilizer Subsidy Program Guide into a draft directive on fertilizer subsidy programs for ECOWAS's endorsement. The directive incorporates all 13 principles and 36 recommended actions from the guide.
- Facilitated a UEMOA-sponsored regional workshop, with representatives from all eight member countries, as well as Chad and Mauritania, to share experiences in implementation of the regional

fertilizer regulations. A similar event was sponsored and facilitated by OCP Côte d'Ivoire to review the status of the regional regulations in the country and fast-track implementation.

- Collaborated with various regional/international partners to develop policy briefs on the implementation of ECOWAS fertilizer regulatory framework and quality of fertilizers traded in West Africa.
- Surveyed ECOWAS, UEMOA, and CILSS or Regional Economic Community (REC) Member Countries' on the status of adoption of Regional Fertilizer Regulation C/REG.13/12/12. Produced a summary report for the REC Members and requested their political support to expedite implementation.
- Facilitated implementation and enforcement of ECOWAS fertilizer regulations and/or reforming their subsidy programs using the validated Regional Subsidy Program Guide in Benin, Chad, Côte d'Ivoire, Gambia, Ghana, Niger, Nigeria, Sierra Leone and Togo.
- Organized training programs on the new regional and national legal frameworks, procedures, and techniques for fertilizer inspection, sampling, and quality control for 62 fertilizer inspectors in Niger.
- Finalized the baseline assessments of fertilizer quality in Benin, Burkina Faso, Liberia, and Mali.
- Provided key inputs for and feedback on the draft five-year strategic plan for an improved subsidy program and improved quality of blended products being promoted nationwide under the Ghana Fertilizer Expansion Programme (GFEP).

2.1.4 IR 4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins

During FY19, the project conducted the following activities under IR4:

- Completed the Ghana Fertilizer Value Chain Optimization Study (GFVCOS), with OCP support. This included a presentation to the Ghana GFEP Task Force and subsequent presentations to the Minister of Food and Agriculture.
- Developed a fact sheet on the buy-in mechanism which includes updated buy-in and cost-share menus to make it easier for Missions to consider and identify buy-in opportunities.
- Designed and negotiated a Senegal buy-in for an \$8 million, three-year activity, called the Dundal Suuf Fertilizer Project. This was approved at the end Q4 and project start-up will begin during FY20.

2.2 Challenges and Issues

Major challenges and issues encountered during the implementation of planned activities during the period under review are included in the following:

- Several activities planned in the FY19 Work Plan and in the WAFA/EnGRAIS joint plan were delayed or ineffective due to the delayed constitution of a full-time coordination unit that focused on the smooth implementation of the agreed work plans and seeking timely feedback from the WAFA Board on key documents. For example, the AGM was postponed twice before it was held in Bamako in February, and the five-year strategy and draft constitution were finally endorsed by the Board in April 2019. The appointment of the WAFA Coordinator in March 2019, expansion of the WAFA Board to nine members, and the recruitment of two additional EnGRAIS Sub-Regional Coordinators (SRCs) in Q2 helped to mitigate this challenge during the remaining two FY quarters.

- It was a challenge to collect and integrate information from WAFA members for several input case studies (for example, the cost build up studies, access to finance study, price collection, and market analysis) despite efforts from EnGRAIS, the Board, and consultants to collect contributions. It is expected that the WAFA coordinating unit, that is now fully identified and on-board, will be able to inform and engage members on a more regular basis and be able to gather market information from members in the future.
- There were difficulties that came up in the collaboration with PAIRED. These included scheduling for meetings and joint workshops, coordination of the hiring consultants, working with different policies and procedures within IFDC and CORAF, as well as identifying roles, responsibilities, and costs for each partner at the joint workshops. While working on these challenges took additional time, issues were generally amicably resolved because both EnGRAIS and PAIRED knew they needed to work together to produce the best possible agro-input packages and the FeSeRWAM.
- ECOWAS' approval of the Portuguese translation of Regulation C/REG.13/12/12 (fertilizer quality control) was still not completed by the end of the FY. This approval is the critical next step to enable publication of the Regulation in the Official Gazettes in Cape Verde and Guinea-Bissau, and will allow these countries to move forward with enforcement of fertilizer quality control. EnGRAIS submitted the Portuguese-translated Regulation to ECOWAS in November 2018, and it has been under review since then. In addition, ECOWAS is hesitant to establish the West African Committee for Fertilizer Control (WACoFeC) before Nigeria, the biggest producer and consumer of fertilizer in the region, publishes the regional regulation in their gazette.
- Despite progress made during the past FY, Member States are delaying adoption of country-specific supporting regulations and taking appropriate measures to enforce them, which seriously constrains implementation of the harmonized ECOWAS fertilizer legal and regulatory framework at national levels. EnGRAIS requested political support from the RECs through the recent survey report submitted to them on individual country status/implementation and advocated for initiation of an aggressive policy dialogue with Ministers of Agriculture. The policy dialogue option was recently accepted by the ECOWAS Commissioner and, if the promised action is taken, will likely accelerate implementation in Member States during FY20.

3 MAIN ACTIVITIES AND RESULTS

3.1 IR 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened

The objective of this IR is to contribute to the development of a sustainable fertilizer market that provides appropriate and high-quality fertilizer at affordable prices to West African farmers. To achieve this objective, the industry must take steps to become more competitive, efficient, and successful in meeting the growing demand for affordable quality inputs delivered on time.

Sub-IR 1.1 WAFA's and other relevant regional private sector organizations/associations capacity strengthened and made sustainable

1.1.1 Facilitate and support WAFA capacity building activities according to the two-year work plan

WAFA has seen significant momentum and capacity changes since July 2018 when the first version of the WAFA/EnGRAIS joint work plan was developed (see Annex 1. Success Story). Given this, during the past FY, EnGRAIS staff met WAFA Board Members, first in Ouagadougou, Burkina Faso, in November 2018, and then in Abidjan, Côte d'Ivoire, in June 2019. During these sessions the organizations revised the joint work plan (Click on [WAFA-EnGRAIS Joint Workplan, June 2019 – September 2020](#) to read document)

with regard to the final grant planned from EnGRAIS (July 2019 – September 2020), aligned the work plan with WAFA's five-year strategy (Click on [WAFA Strategic Plan 2019 – 2023](#) to read document), and ensured that EnGRAIS will continue to provide adequate and necessary support to WAFA to develop the association's capacity to perform its major tasks of advocacy and development.

EnGRAIS Strengthening WAFA Capacity and Leadership Role

WAFA has taken great strides toward building its capacity and providing better services to its members. Since the development of the initial work plan in 2018, the Board has developed strategies to improve revenue and finances, strengthen the organization's structure, and expand partnerships with regional and international associations. Additionally, EnGRAIS has taken a market systems approach by aligning its activities with WAFA's objectives and giving higher visibility to WAFA's efforts to engage with USAID and ECOWAS.

During the reporting period, WAFA also worked on expanding opportunities for its members by organizing the West Africa Fertilizer Forum (WAFF) with Argus in April 2019 and the West Africa Fertilizer Financing Forum (WAFFF) with the African Development Bank in September 2019. The WAFA Board has also taken it upon itself to draft strategies on gender and youth integration, conduct training and capacity building programs for members, and leverage bulk purchasing contracts among members.

In order to best understand WAFA's current capacity and identify further support needed, the Executive Board confirmed (at the June Abidjan meeting) that WAFA will facilitate an organizational capacity review (OCR)¹ with its members and leadership. The OCR will help WAFA in assessing the critical elements for effective organizational management and identifying those areas that need strengthening or further development. While the OCR was originally planned to be completed during the reporting period, scheduling conflicts forced its delay until immediately after the West Africa Fertilizer Financing Forum (WAFFF) in early October 2019, but it now will be completed during Q1 of FY20. The results will be used to develop the WAFA five-year capacity building strategy and corresponding work plan during Q1 of FY20.

¹ Per a discussion in Abidjan on October 3, 2019, between the project Agreements Officer's Representative (AOR) and the Chief of Party (COP), EnGRAIS agreed to change the name of this assessment from an Organizational Capacity Assessment (OCA) to an OCR because the OCR would be more limited and the facilitator contracted to perform the OCR, though familiar with OCA, was not certified as an OCA facilitator.

1.1.2 Facilitate the design of a five-year strategic plan, work plan, and corresponding budget for WAFA

With grant funding from EnGRAIS, WAFA hired Knowledge & Skills (K&S), a Ghana-based consulting firm, in October 2018 to assist in developing its five-year strategic plan (2019-2023). WAFA and K&S used a phased approach to develop a plan supporting seven objectives (finance, quality, stewardship, availability, trade information, and dialogue) and this five-year strategic plan and corresponding budget was formally adopted by the WAFA Board at the EGM in April 2019. The WAFA board and its members can now rely on a well-structured plan as the foundation that will guide and drive the association, as they did during the preparation and organization of key activities such as WAFF and WAFFF.

1.1.3 Assist WAFA to revise its by-laws, constitution, and revenue structure

WAFA held its first AGM (click on [WAFA AGM Report, Bamako, 2019](#) for detailed report), February 13-14, 2019, in Bamako, Mali. This successful event gathered 93 participants from 10 ECOWAS countries. Participants included current and prospective WAFA members and EnGRAIS staff. During the AGM, the 2017-2018 activities and financial reports, the 2019-2023 strategic plan, and the 2019 action plan were presented and reviewed by the members. The members also decided to call an EGM in April to, among other things, adopt the new WAFA constitution drafted by a legal advisor hired by WAFA that combined the three previous legal documents: the WAFA bylaws, rules of procedure, and code of conduct. A new nine-member Board was elected for a three-year term (February 2019 – January 2022).



Figure 1: WAFA-Elected Board

WAFA held the EGM in Lomé, Togo, on April 24th just before the WAFF. The EGM was an occasion for WAFA members to formally approve of the final version of the five-year strategic plan and the new constitution. The final step will be to provide the final documents in English and French and share them among the membership.

1.1.4 Facilitate WAFA's set up of a coordination unit

EnGRAIS assisted WAFA in the recruitment of a full-time coordinating team of three staff, which was completed at the end of Q4. This process took place during Q2-Q4 and included EnGRAIS' feedback on the recruitment, interviews, and selection of the candidates. Mr. Kossi Koudjega was appointed on March 1, 2019 as the WAFA Coordinator based in Lomé. During the last days of

September, WAFA hired the Administration and Finance Officer, Mr. Ibrahim Touré (based in Bamako), and the Communications Specialist, Ms. Ada Nimazulem (based in Abuja). Both the Administration and Finance Officer and Communication Specialist are hosted by WAFA members. The personnel costs of the coordination unit were initially covered by an EnGRAIS grant, but this financing will progressively phase out until June 2020 when WAFA will take on full financial responsibility for the unit.

1.1.5 Assist in WAFA's design of a communication strategy

During the FY, the WAFA Coordinator, AFO, and EnGRAIS updated their respective websites and social media with current information on WAFA and produced a series of joint publications, such as *FertiNews*, reports by the Fertilizer Technical Work Groups (FTWGs, supported by IFA and EnGRAIS), technical reports, and meeting reports. The first task assigned to the new WAFA Communication Specialist was to design a WAFA communication strategy that aligns with the five-year strategy.

WAFA internal communication has also greatly improved with the creation of a dedicated WhatsApp group and email address (board@wafafertilizer.org). During the reporting period, the Board held monthly calls and met in person, when applicable, to regularly discuss WAFA business.

1.1.6 Assist WAFA to build sustainable partnerships and alliances

Throughout the reporting period, EnGRAIS continuously worked to facilitate the building of sustainable partnerships and alliances between WAFA and her sister associations, regional bodies, and regional institutions supporting agricultural development. This process included introducing WAFA to key organizations and institutions including, but not limited to the Alliance for Seed Industry for West Africa (ASIWA), the AfDB's program staff under AFFM, and the Technologies for African Agricultural Transformation (TAAT) project. These meetings were an opportunity to align all the organizations' strategies and discuss potential activities.

Notable outcomes of these meetings/partnerships include the following:

- **African Development Bank:** Through EnGRAIS facilitation, WAFA engaged AfDB's AFFM, and together WAFA and AfDB organized and facilitated the WAFFF in Abidjan, on September 30-October 1, 2019. Additionally, WAFA met with the project leader of TAAT in November 2018. During the meetings, WAFA and TAAT identified activities at the country level that involved and leveraged local WAFA members in Burkina Faso and Nigeria.

- **ECOWAS:** Following continuous facilitation/coordination by EnGRAIS between WAFA and ECOWAS, the teams prepared a Memorandum of Understanding (MoU) that will be signed by the ECOWAS Commissioner of Agriculture and the President of WAFA on October 1, 2019. This MoU will leverage WAFA as a strategic partner to ECOWAS on regional fertilizer and input policy and implementation, particularly in areas of joint interest (i.e., financing, agriculture, environment, and quality).



Figure 2 VP WAFA, Minister Agric Sierra Leone, ECOWAS commissioner, President WAFA, Minister of Agric Mali, Vice Minister of Agric Liberia – Abidjan 01 Oct 2019

- **National Private Sector Associations:** Following a request from fertilizer actors in Côte d'Ivoire, WAFA organized a one-day meeting in Abidjan in October 2018 with 44 participants (including private sector actors, public sector representatives, and technical and financial partners). The meeting, sponsored by OCP Côte d'Ivoire triggered the creation of the National Association of Fertilizer Industry of Côte d'Ivoire (APECI) in December 2018. WAFA and EnGRAIS supported development of the new association, including helping with the constitution, bylaws, and legal registration with local authorities. APECI's first objective was to assist and partner with the government and specifically the Ministry of Agriculture and Rural Development (MINADER) to finalize, pass, and implement ECOWAS-compliant fertilizer laws and regulations in Côte d'Ivoire that include a specification that a representative of APECI will sit on the National Committee for Fertilizer Control (NaCoFeC).

Following meetings between WAFA Board Members, the Fertilizer Producers and Suppliers Association of Nigeria's (FEPSAN's) Chairman, and the Executive Secretary at the Argus Africa Fertilizer Conference (February 2019), WAFA and EnGRAIS

participated in national stakeholders' meetings organized by FEPSAN in April 2019 in Kaduna, Nigeria. This provided a good opportunity for WAFA to publicize and bolster attendance at the WAFF in Lomé, and to recruit 14 new members among Nigerian fertilizer companies, particularly local blenders and distributors.

1.1.7 Liaise with international fertilizer sector actors to provide key information

During the reporting period, EnGRAIS worked with WAFA to consolidate and strengthen its alliances, partnerships, and contracts to access, use, and provide key business and strategic information to its members.

In particular, WAFA and AFO signed a five-year partnership agreement (2018-2023) in December 2018. This agreement included a joint action plan for 2019 with eight key areas of intervention:

1. Monitoring monthly retail fertilizer price and market information;
2. Annual validation of national fertilizer statistics with FTWGs;
3. Studies on fertilizer use by crop and by product;
4. Studies on fertilizer cost buildup and import process maps along trade corridors in West Africa;
5. Annual updates and publications of information on fertilizer production and blending plants in West Africa;
6. Monthly contributions to *FertiNews*, an electronic bulletin published by AFO;
7. *Ad hoc* joint contributions/participation in selected events and conferences; and
8. Data and information dissemination and sharing.

This Partnership Agreement represents a major step towards the implementation of WAFA's plan to promote information sharing and dissemination on fertilizers.

WAFA and AFO validate 2018 West Africa Fertilizer Statistics

In March 2019, the FTWGs met through two workshops to validate fertilizer statistics for the anglophone (Ghana and Nigeria) and francophone (Burkina Faso, Côte d'Ivoire, Mali, and Senegal) countries that consume the bulk of fertilizer in West Africa. The two workshops were co-organized by WAFA and AFO with technical and financial support from EnGRAIS and IFA. A total of 87 stakeholders (24% female) contributed to the 2019 statistical review; 40% of participating stakeholders represented private fertilizer companies.



Figure 3. FTWG Delegates in Burkina Faso

Results showed that total apparent fertilizer consumption for the six largest consuming countries in West Africa decreased overall from 3,470,701 mt in 2017 to 3,276,409 mt in 2018 (5.6% reduction). While there were increases in fertilizer consumption in Mali (+1%), Burkina Faso (+8%), and Senegal (+8%), there were decreases in Nigeria (-6%), Ghana (-29%) and Côte d'Ivoire (-14%). See [Figure 4](#) for details.

The final reports, corresponding presentations, and online publications were shared during the WAFF in Lomé. The data was also used to update a series of country fact sheets.

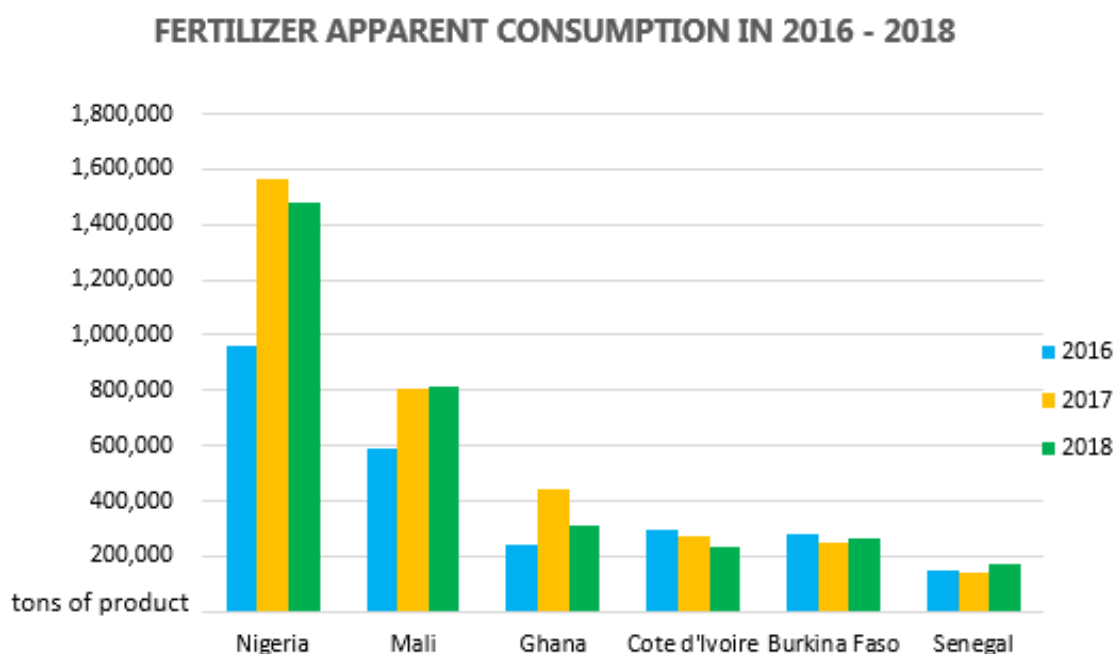


Figure 4. 2016-2018 Apparent Consumption of Fertilizer

Additional publications produced by AFO and WAFA with EnGRAIS's facilitation during the reporting period included:

- Twelve monthly issues of *FertiNews*, an e-bulletin in both English and French, sent to partners and over 3,500 subscribers, which consists of fertilizer prices and fertilizer market information.
- The third, updated edition of the West Africa Fertilizer Business Information Map (WAFBIM), which was completed before the WAFF, was printed in 500 hard copies in both French and English, and distributed during WAFA and EnGRAIS events throughout the year.
- During Q4, two studies on fertilizer use by crop were conducted in Senegal and Ghana, which complement the previous series of studies conducted in 2017 and 2018 in Nigeria, Côte d'Ivoire, Mali, and Burkina Faso.

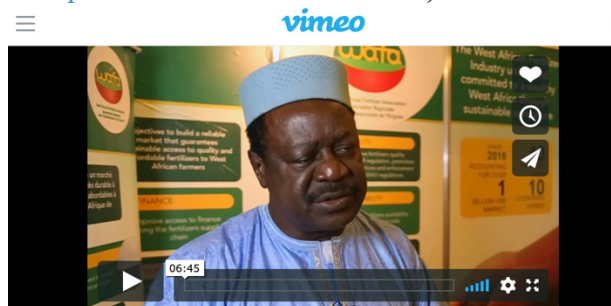
1.1.8 Design and implement capacity building programs for WAFA members

Providing capacity trainings to members is an integral part of WAFA's overall membership services development strategy. During the past FY, in addition to the OCR (see activity 1.1.1), WAFA's Board determined its needs through an assessment of members' training needs and will coordinate with EnGRAIS on the development of training programs in FY20. The Board prioritized training activities for members on laboratory testing, implementation of the ECOWAS regulations and subsidy guideline (in coordination with IR 3 activities), product stewardship (with IR2), access to finance, and improving distribution efficiency based on the cost build-up study (with IR1). During the reporting period, a working group also was created to develop a gender and youth strategy for WAFA, led by Board Member Sinkarie Ceesay, of Sierra Leone.

1.1.9 Promote WAFA through organization of and/or participation in industry events

Argus Africa Fertilizer Annual Meeting (February 2019)

EnGRAIS provided a grant to WAFA to send four Board members to the Argus Africa Fertilizer Meeting held in Marrakech, February 27-March 1, 2019, and host an exhibition booth at the conference. Through EnGRAIS facilitation, WAFA prepared and disseminated updated promotional materials and publications to the more than 350 participants at the 10th annual meeting. (See interview at <https://vimeo.com/324158253>.)



**Argus Africa Fertilizer 2019 -
Interview with Moussa Diabate**

International Fertilizer Association (June 2019)

During the IFA General Meeting at their Annual Fertilizer Conference, WAFA and the Fertilizer Producers and Suppliers Association of Nigeria (FEPSAN) were elected as affiliate members by IFA's Board. EnGRAIS facilitated the membership process, connecting the WAFA President and FEPSAN Executive Secretary with IFA's Secretariat and helped prepared their formal registration applications. As a result of their IFA membership, WAFA and FEPSAN will benefit from unlimited participation in all IFA events and committee activities and will have access to the members-only section of their website.

IFDC/Argus MOU Signed: Better Access to Market Information and Industry Events

In June 2019, IFDC and Argus Media signed an MoU establishing a five-year partnership covering key areas of common interest in Africa, such as fertilizer conferences and events, market information and research, and trainings. Thanks to this MoU, EnGRAIS can offer opportunities for its partners, particularly WAFA members, to participate in key Argus events at preferential rates. These events include the next Argus Africa Annual Fertilizer Meeting in Cape Town (February 19-21, 2020). The MoU also secured free access to relevant fertilizer market information and weekly bulletins on AFO's website for WAFA members.

West Africa Fertilizer Forum (April 2019)

EnGRAIS worked closely with WAFA and Argus to prepare for the 3rd Annual WAFF held in Lomé, April 24-26, 2019, which represents about a third of WAFA's current annual revenue stream. The 2019 WAFF (Click on [WAFF 2019 Trip Report](#) for details) brought together approximately 200 participants from more than 30 countries. Fifty-nine percent of the registered participants represented private companies operating across the fertilizer supply chain in West Africa. Additional participants included representatives from ECOWAS (including the Commissioner of Agriculture, Rural Development, and Water Resources) and UEMOA, national governments (including the Togolese Minister of Agriculture and technical staff from 14 countries), and development partners (including CORAF, AGRA, AFAP, and USAID). Topics during the plenary and breakout sessions included market updates, improving the enabling environment, fostering a competitive fertilizer sector, as well as logistical and financial challenges of the sector.



Sub IR 1.2 Industry actors collaborate through multi-stakeholder platforms to improve supply chain efficiency and improve fertilizer affordability

1.2.1 Collaborate on cost build-up and fertilizer corridor studies with WAFA

Nitidæ (www.nitidae.org) was contracted by EnGRAIS at the beginning of Q2 to undertake a series of cost build-up studies and fertilizer process maps along four main corridors (Abidjan, Dakar, Lomé, and Tema) and for two Sahelian/landlocked countries (Burkina Faso and Mali). These represent some of the major fertilizer-consuming hubs/destinations in West Africa.

The main objectives of the study (click on [Nitidæ Cost Build Up Study final reports](#) for full reports) were to i) determine the cost build-up of fertilizer from port to the farmgate level; ii) compare costs and processes for different ports; and iii) create a tool to support corridor selection and opportunities for advocacy on infrastructure/logistics improvement with the private sector, national governments and the RECs, and donors. During Q2-Q3, Nitidæ finalized the data collection for the study, including surveying ports and customs authorities to identify official costs and procedures. Another series of interviews were held with importers and other stakeholders to gather data on current prices and constraints faced by the sector. Finally, Nitidæ conducted six validation workshops at the country level with key stakeholders.



Nitidæ presented a summary of initial outcomes from the study during the WAFF in April 2019, including the status of the fertilizer importation process and a comparison of different expenses throughout the supply chain. The study found that although the port of Tema, Ghana offers the lowest costs, logistic efficiency, and a significant comparative advantage to supply Ghana and Burkina Faso, the current cost differences among the four ports are quite insignificant. This allows each importer to be competitive in several of the six markets studied. Overall, the study showed that 62% of fertilizer cost is spent leading up to entry at the ports. Other key findings/recommendations from the study are the following:

- In order for importers to optimize their import strategies, prevent any major risk of cost increases, and avoid losses when importing and distributing fertilizers, WAFA and its partners should **publish a monthly report on the logistics situation** in West African ports. The report, which can complement the existing *FertiNews* bulletin, should monitor waiting times, traffic, administrative changes, sea freight rates, storage capacities, land transport costs, among other parameters that cause congestion and increase logistics costs.
- Invest in better port logistics for bulk cargo, by (i) negotiating with the port authorities two priority seasons of one month each, during which fertilizer importers would have priority of

berthing, in line with the recommendations of the 2006 Africa Fertilizer Summit; (ii) negotiating priorities and dedicated quays with secondary ports, such as San Pedro in Côte d'Ivoire and Takoradi in Ghana; (iii) encourage group purchase and shipment among WAFA members; and (iv) promoting the implementation of a barge system to unload 30,000-ton vessels into several 5,000 ton-sub barges, which can be used as short-term buffer storage and unloaded as quickly as possible.

- Advocate for **policies** that promote more efficient fertilizer import logistics and supplies. In particular, fertilizer subsidy programs should promote mechanisms for better logistical planning, such as pre-ordering mechanisms and vouchers. A complementary role for WAFA is to partner with producer organizations to advocate for more ambitious and productive agricultural market regulation policies, such as guaranteed minimum price for food crops.

This set of recommendations will be promoted and shared by WAFA and EnGRAIS with the new EU/GIZ/WB funded West Africa Trade Facilitation Program implemented with ECOWAS, as well as with the Africa Transport Policy Program of the World Bank, for possible collaborations and joint activities.

1.2.2 Support WAFA's role in quality control enforcement and trade facilitation

WAFA is interested in taking a role in promoting ECOWAS lab testing protocols among its members. The aim is to have every WAFA member implement the ECOWAS lab testing protocol as part of its routine operations to be eligible for WAFA-facilitated deals. As a first step, during the June meeting in Abidjan (mentioned under Activities 1.1.1 and 1.1.8), WAFA's Board worked with EnGRAIS to develop a plan to enforce fertilizer quality among its members. EnGRAIS will continue to support WAFA as it builds on that plan during FY20.

1.2.3 Improve access to finance for the fertilizer private sector

WAFA intends to improve access to finance for its members by facilitating the creation of agribusiness-friendly financial mechanisms focused on fertilizer in West Africa and assisting its members to effectively use these mechanisms. In December 2018, WAFA signed a consultancy agreement with AFAP to conduct (i) a financial needs assessment of each member, (ii) an assessment of financial instruments available, (iii) matching needs and instruments available to WAFA members, including trainings, and (iv) a guarantee fund proposal developed on behalf of WAFA. EnGRAIS provided guidance to prepare the terms of reference, as well as financial and contractual support, and funded the study through a grant agreement with WAFA.

Initial study findings were presented by AFAP during WAFF. AFAP highlighted several recommendations to finance WAFA needs:

- Credit guarantee to suppliers to facilitate intraregional fertilizer trade;
- Trade finance support through commercial banks to reduce importers', manufacturers', blenders', or distributors' lending costs and ensure a timely supply of fertilizers; and
- An agri-flex fund to support the fertilizer industry growth by improving competitiveness and reducing production costs while improving environmental sustainability.

Additionally, EnGRAIS continued to facilitate meetings and interactions between WAFA and AfDB/AFFM in order to prepare the WAFFF. This included an update in Marrakech in February 2019 in the margins of the Argus Africa Meeting with high-level officials of the respective

organizations to discuss progress made and next steps for the WAFFF. Follow-up meetings were held in Q2-Q4 in Abidjan.

Based on the findings and recommendations mentioned above in AFAP's study (click on [WAFA-AFAP Financial Needs Assessment Report, June 2019](#) for report), and in preparation for the WAFFF, EnGRAIS assisted WAFA to develop a business proposal to the AfDB during Q4. The proposal aims to improve and increase access to finance for the West African fertilizer industry in general and for WAFA members in particular. Fourteen WAFA members submitted concept notes for financial support from the AfDB. Their total financing needs are estimated at \$430 million, including \$250 million for capital investment and \$180 million for working capital (equivalent to 420,000 tons of fertilizers). Additionally, the overall financing need for regional fertilizer supply is estimated to be \$1.58 billion for 2020 to ensure the growth of the fertilizer market to reach the targeted rate of 50kg of nutrients/ha in 2025.



Furthermore, EnGRAIS supported WAFA's efforts to facilitate trade credit internally. WAFA's Board held several meetings to develop a financing strategy with that objective in mind. Implementation of the strategy is already underway as WAFA has invited its members to visit OCP Africa, Indorama, and Notore (fertilizer producers and WAFA members) to negotiate consolidated purchases and increased sales within the region.

1.2.4 Encourage creation of the National Fertilizer Platforms and development of Fertilizer Roadmaps

During the reporting period, EnGRAIS and WAFA encouraged the creation of national fertilizer platforms and the development of fertilizer roadmaps in Ghana and Senegal that will set the stage for the sustainable development of the fertilizer sector, in collaboration and in partnership with private industry. EnGRAIS and WAFA promoted existing and newly created national fertilizer associations in West Africa who are or will be key promoters, implementers, and beneficiaries of national fertilizer platforms and roadmaps (see details in 1.1.6).

In Ghana, one of the main recommendations EnGRAIS made to the Government of Ghana (GoG) and its Ministry of Food and Agriculture (MoFA) in a December 5th presentation was to encourage the fertilizer industry to create a national fertilizer association. This association would be expected to promote inclusive participation of fertilizer suppliers, importers, blenders, and major distributors in consultations and decision-making processes regarding the design and implementation of the national fertilizer subsidy program and further optimization of the fertilizer value chain. It was also recommended that the current National Task Force, initiated by the GoG, transitions to a National Fertilizer Platform that would be responsible for coordinating the design and implementation of the GFEP. EnGRAIS adapted the IFDC fertilizer platform development roadmap it used successfully in Mozambique and Kenya to Ghana and will arrange a study tour to Kenya sometime during FY20 for the GoG, if funding permits, to visit the national platform (KeFert) established in late 2018.

In Senegal, as part of the collaboration process for the “Dundël suuf” buy-in awarded to IFDC on September 30, 2019, EnGRAIS highlighted the opportunities of a national fertilizer platform to stakeholders. The Government of Senegal (GoS), *Ministère de l’Agriculture et l’Équipement Rural* (MAER), and other stakeholders were invited to the co-creation workshop held on June 7, 2019 to design the buy-in and provide inputs to the project description, endorsed the concept of creating a national fertilizer platform. Consequently, EnGRAIS and Dundël suuf will jointly facilitate this goal early in FY20.

1.2.5 Facilitate participation of GoG in Argus Africa Fertilizer Meeting

During Q2, EnGRAIS provided a grant to the GoG to send two technical staff to the Argus Africa Fertilizer Meeting primarily so they could learn more about the regional and international private fertilizer sector and consult with possible service providers and partners who could help in implementing the GFEP. The GoG participants met with CropNuts, OCP, Edenred, AfDB, and others and, with their help, moved forward with implementation of different aspects of the GFEP later in the FY.

3.2 IR 2: Comprehensive input packages developed and disseminated in cooperation with CORAF

The objective of this IR is to facilitate the development and dissemination of comprehensive agro-input packages (sometimes referred to as “kits” or “agricultural input based technology” by other partners and donors) for specific crops and AEZs that include adapted, certified seed, and appropriate balanced fertilizer blends along with GAPs to sustainably improve agricultural productivity in West Africa. Activities under IR 2 are implemented in close cooperation with CORAF, other regional and national agricultural development institutions, and the private sector.

Sub-IR 2.1 Fertilizer and seed recommendations updated and developed for targeted crops and AEZs across West Africa

2.1.1 Contribute to the design of ECOWAS/UEMOA long-term agro-input strategy for West Africa

Beginning in Q2, CORAF conducted several consultative meetings in the West African region, including one in Q3 in Senegal, as well as four in Q4 in Guinea, Burkina Faso, Côte d’Ivoire, and Nigeria. EnGRAIS has closely coordinated with CORAF on these activities and contributed to technical discussions on the development of the West African Regional Agri-Input Strategy. EnGRAIS also contributed to the Regional Agro-Input Strategy through completion and submission of the fertilizer portion of a comprehensive survey questionnaire on the distribution of inputs in the region.

2.1.2 Synthesize and compile current fertilizer and seed recommendations for the FeSeRWAM

2.1.3 Validate joint strategy and work plan for agro-input packages

2.1.5 Synthesize and compile proven integrated soil fertility management training modules and GAPs

During FY19, EnGRAIS coordinated with PAIRED, National Agricultural Research Services (NARS), universities, and ministries of agriculture to collect and synthesize current fertilizer and seed recommendations as well as GAPs for agro-input packages that are inputs into the FeSeRWAM. This was completed following multiple workshops to review and validate the data that supported the development of the FeSeRWAM and agro-input packages strategy. To ensure the data was reviewed and updated by a broad range of regional stakeholders, EnGRAIS, together with PAIRED, held regional workshops that included representatives from the Anglophone (Gambia, Ghana, Liberia, Nigeria, and Sierra Leone), Francophone (Benin, Burkina Faso, Côte d'Ivoire, Guinea, Mali, Niger, Senegal, and Togo, and Lusophone (Cape Verde and Guinea Bissau) countries in the region.

Following the validation workshops, a final database was developed that includes fertilizer recommendations and improved seed data (See Table 1).

Table 1 Summary of Number of Crops, Varieties and Fertilizer Recommendation per Country in the Database

Countries	Number of Crops	Number of Varieties	Number of Fertilizer Recommendations
Benin	12	83	10*
Burkina Faso	7	52	15
Côte d'Ivoire	7	55	23*
Ghana	9	27	63
Guinea	11	29	11
Liberia	8	32	7
Mali	8	89	40
Niger	6	47	5
Nigeria	14	58	30
Senegal	5	35	9
Sierra Leone	6	43	6
Togo	10	45	26

The database includes fertilizer recommendations for 24 crops in 12 countries. Data in Table 1 for Côte d'Ivoire and Benin was still under review at the end of Q4 and will be finalized during Q1 of FY20. Data from Guinea Bissau, Guinea, and Chad is also in process and will be incorporated sometime during FY20. There is no data yet for Cape Verde, whose officials participated in the meeting, but did not provide data; Mauritania attended the first meeting but did not participate in

the data collection activities. The data variables include geographic locations, AEZs, soil descriptors (texture, depth, and organic matter content), crops (variety characteristics), fertilizer recommendation (including grades and dosage), and GAPs. The breakdown per country (**Error! Reference source not found.**) includes number of different crop varieties per country.

Table 2 Breakdown Crops and Number of Varieties per Country for Benin, Burkina Faso, Ghana, and Guinea

Country	Crop (Mandatory)	Number of varieties		
Benin			Ghana	
	Cashew	-	Cassava	2
	Cassava	8	Cowpea	3
	Cotton	4	Groundnut	3
	Maize	14	Maize	12
	Millet	8	Millet	1
	Oil palm	4	Rice	2
	Peanut	7	Sesame	1
	Pineapple	2	Sorghum	1
	Rice	8	Soybean	2
	Sorghum	4	Ghana Total	27
	Soybean	12	Guinea	
	Yam	12	Banana	1
Benin Total		83	Cassava	1
Burkina Faso			Citrus	1
	Cotton	2	Fonio	1
	Cowpea	7	Maize	6
	Maize	14	Peanut	2
	Millet	5	Pineapple	1
	Rice	3	Potato (Irish)	3
	Sesame	5	Rice	7
	Sorghum	16	Tomato	3
Burkina Faso Total		52	Yam	3
			Guinea Total	29

2.1.4 Organize and facilitate a regional workshop to validate the draft FeSeRWAM

Following the compilation of validated data for the region, EnGRAIS and PAIRED (with the support of task force members and experts from IFDC Headquarters) developed the first version of the FeSeRWAM. This prototype was validated at a regional workshop in August 2019 in Dakar, Senegal (Click on [FeSeRWAM Technical Validation Report, September 2019](#) for the validation report). The current FeSeRWAM version is an online and interactive tool with two main views:

- **Country-specific view** (Figure 5). For instance, Nigeria below allows the viewer to make queries for the whole country or within the country-specific AEZs on various data.
- **West Africa regional view** (Figure 6). This allows the user to make queries at the regional level, investigating a particular AEZ or several across countries.

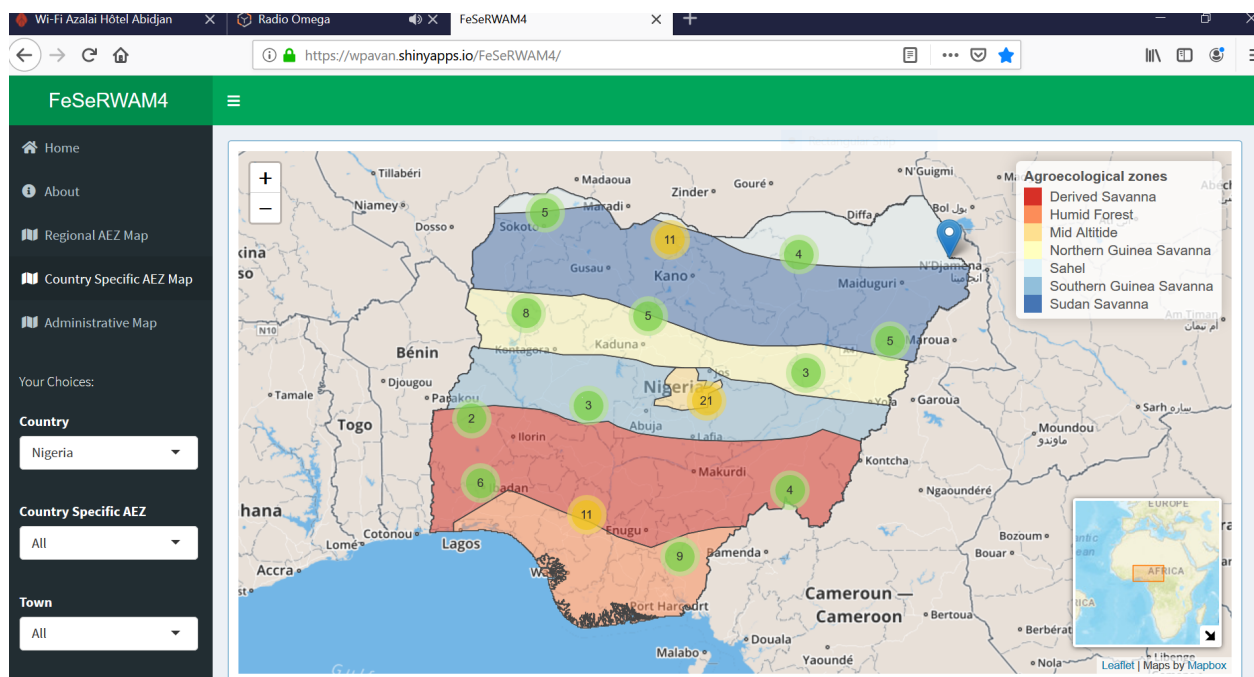


Figure 5 FeSeRWAM Version 1 Country AEZ View

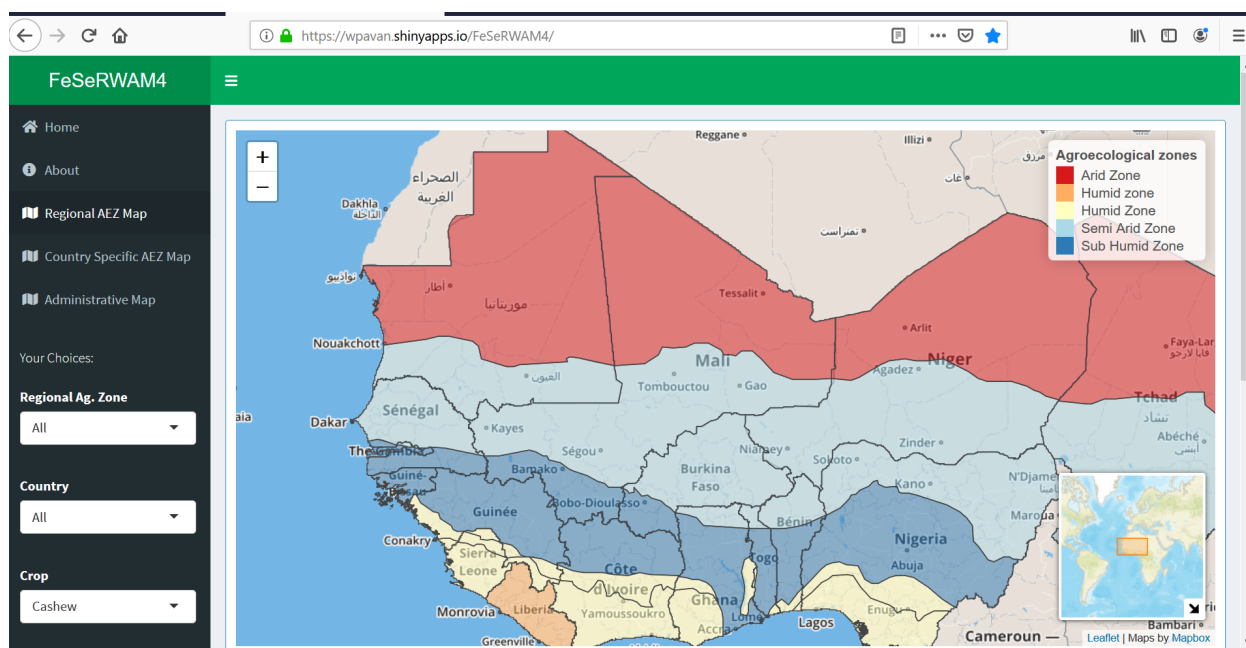


Figure 6 FeSeRWAM Version 1 Regional AEZ View

The version of the FeSeRWAM launched during the reporting period (click on [FeSeRWAM](#) to access prototype) lacks complete information for the region, but EnGRAIS and PAIRED developed a work plan to complete the information and update the map in FY20 (click on

FeSeRWAM Fact Sheet for description). The next version of the FeSeRWAM will include the following features:

- Ability for a user in a country to know what varieties, yields, GAPs, and fertilizer recommendations are available in other countries;
- Ability to decide what product to use locally based on the information on successful varieties in an AEZ;
- Simultaneously display information about multiple varieties for comparison;
- A feedback mechanism; and
- Queries for different user needs (agro-dealers, blenders, agricultural extension agents, researchers, decisions makers, etc.).

2.1.6 Develop agro-input packages suitable for specific crops and AEZs in West Africa with CORAF

Following the data collection and validation process, technical experts met during Q4 (September 25-27, 2019), to finalize initial agro-input packages. The group of 15 participants including seed and fertilizer experts focused on packages for targeted crops across West Africa. A total of 40 agri-input packages were developed (Table 3), and are under review by the NARS and international research institutions, including ICRISAT, IITA, and Africa Rice. These agri-input packages include different varieties of 12 crops and cover the three main West African AEZs.

Table 3 ***Numbers of Developed Agri-Input Packages by Crops and Regional AEZ's***

Crops	Semi-Arid	Sub-Humid	Humid	Total
Cashew	0	1	0	1
Cassava	0	0	2	2
Cocoa	0	0	2	2
Coffee	0	0	1	1
Cotton	2	3	1	6
Cowpea	1	1	0	2
Maize	3	3	1	7
Millet	2	0	0	2
Peanut	1	2	1	4
Rice	4	3	2	9
Sorghum	2	2	0	4
AEZ Total	15	15	10	40

2.1.7 Determine if relevant and necessary to have and support a soil fertility board of experts

CORAF has decided to develop a group of community specialists, including various agricultural experts available in CORAF member countries. EnGRAIS and PAIRED will contribute fertilizer and seed experts, respectively, and continue to discuss opportunities for a soil fertility board to

collaborate with the group of regional agricultural experts. However, any proposal would need to include a clear plan for initially funding such a board and making it sustainable in the long run.

Sub-IR 2.2 Comprehensive fertilizer and seed input packages promoted and marketed across West Africa

2.2.1 Consult with relevant stakeholders regarding developing a web-based FeSeRWAM

2.2.2 Train stakeholders to access and use the web-based platform

Over the course of FY19, EnGRAIS and PAIRED continuously supported the task force members in the development of the web-based FeSeRWAM, composed of information from the input packages fact sheets. During the three-day FeSeRWAM validation workshop in Senegal in August 2019, EnGRAIS assembled experts (GIS, IT, web designers, etc.) and relevant stakeholders to develop the web-based map. The prototype of the FeSeRWAM was presented and validated by key stakeholders and a roadmap was developed to update and revise the map as needed. EnGRAIS will continue to work with the team of experts and consultant as they develop and upload the revised FeSeRWAM.

During the FeSeRWAM validation workshop, the group also developed a communication strategy to inform private sector and extension agents about the FeSeRWAM. It was agreed that the strategy must inform stakeholders how to access, use, and share the information on the web-based platform, and that such training materials should include a tutorial video. The communication strategy will be completed when the new version of the FeSeRWAM is finalized.

3.3 IR 3: Fertilizer policy and regulatory systems across West Africa improved and harmonized in accordance with ECOWAS guidance

The objective of this IR is to provide support to ECOWAS (and now UEMOA and CILSS) and Member States on the implementation of harmonized policies and regulations for fertilizer to facilitate increased regional private sector-led trade and improve use and supply of high-quality and appropriate agro-inputs, including fertilizers.

Therefore, EnGRAIS worked with the RECs at regional level to facilitate interventions at country level. Key activities undertaken during the reporting period include:

Strengthened Communication with the ECOWAS Commission and Advocated for Timely Political Support to EnGRAIS

EnGRAIS maintained regular communications with the ECOWAS Commission to ensure smooth planning, implementation, and monitoring of program activities, and put the following key issues on the table for policy dialogue:

1. ECOWAS feedback on the new foreword developed by EnGRAIS that has already been endorsed by WAFA and UEMOA;
2. ECOWAS's feedback on discussion points regarding the establishment of the West Africa Committee for Fertilizer Control (WACoFeC), which was submitted to both ECOWAS and UEMOA Commissions on March 18, 2019;

3. Acceptance of the Portuguese translation of Regulation C/REG.13/12/12 relating to fertilizer quality control in the ECOWAS region;
4. The Commissioner's communication to the fertilizer private sector at the 2019 WAFF on the creation of a better enabling environment in the region and some of the critical first steps in this process, including the ECOWAS/UEMOA/CILSS tripartite agreement on fertilizer; and
5. The request for political support to Member States to fast-track implementation of fertilizer regulations at national level.

In addition, EnGRAIS posted the new Lower Coast Sub-Regional Coordinator (SRC) to Abuja, Nigeria, to cover project activities in the sub-region and liaise with ECOWAS and key fertilizer industry players in Nigeria.

Facilitated UEMOA Commission's Political Support to Accelerate Implementation of Regional Fertilizer Regulations in Member States

IFDC, through the previous USAID-funded WAFP and now EnGRAIS, is mandated by the ECOWAS Commission to facilitate implementation of the harmonized regional legal framework for fertilizer trade and quality control in all Member States. While significant progress was made during WAFP (2012-2017), there remained some countries that were slow to publish and especially implement at the national and sub-national levels. To support fast-tracking fertilizer policy, EnGRAIS worked with the ECOWAS and UEMOA Commissions to organize a regional workshop for representatives of UEMOA Member States and key stakeholders. The workshop was held November 20-22, 2018, at the headquarters of UEMOA in Ouagadougou, Burkina Faso, and brought together 40 participants, including representatives from UEMOA and CILSS Member States, who were delegates from the ministries of agriculture and national fertilizer regulatory bodies, UEMOA senior officials, WAFA board members, and resource persons and experts. The agenda focused on ensuring alignment of national supporting legal instruments and actions under the provisions of ECOWAS Regulation C/REG.13/12/12 through sharing best practices regarding effective implementation. In addition, EnGRAIS seized this opportunity to sensitize Member States and strongly advocate for reformed subsidy programs through a presentation and discussions on the validated, regional fertilizer subsidy guide. The participants made major recommendations (as detailed by organization in [Table 4](#)) for integrating political support in policies and programs.

Table 4 Recommendations for Implementation of Fertilizer Regulations

Organization	Recommendations
Workshop Participants	Make necessary arrangements for undertaking immediate actions identified so far: presentation of meeting outcomes, preparation of explanatory notes, development/review of supporting regulations, and lobbying before the competent authorities.
Member States	<ul style="list-style-type: none"> • Publish as early on as possible the Regulation in the Official Gazette (Guinea Bissau, Mauritania). • Adopt relevant supporting regulations establishing the national regulatory systems for fertilizer quality control (regulatory body, testing laboratories, national committee, etc.). • Grant sufficient human, financial, and capital resources to the national regulatory system for efficient operations. • Solicit support from donors for strengthening the national regulatory system. • Include in the general budgets necessary funds for implementing quality control activities. • Inform IFDC about the status of implementation of the Regulation, on a regular basis.

Organization	Recommendations
UEMOA Commission	<ul style="list-style-type: none"> • Integrate the evaluation of implementation of this Fertilizer Regulation in UEMOA's annual review of policies, programs, and projects at the national level. • Support technically and financially the establishment and operations of national regulatory systems for fertilizer quality control.
EnGRAIS	<ul style="list-style-type: none"> • Provide to Member States a template for periodic reporting on the status of implementation of the Regulation. • Develop a summary report on the status of implementation of the Regulation for national governments via UEMOA, ECOWAS, and CILSS.

Sub-IR 3.1 Regional Fertilizer Subsidy Guidance endorsed by ECOWAS and disseminated to policymakers and industry stakeholders in Member States

3.1.1 Update and disseminate WAFSuProM

During the last two quarters of FY19, EnGRAIS staff collected current data needed to update the West Africa Fertilizer Subsidy Program Matrix (WAFSuProM) through a survey while building on the fertilizer statistics presented at regional validation workshops facilitated by AFO, in collaboration with WAFSA, during Q2 as well as other sources of information. By the end of Q4, a draft updated WAFSuProM was ready for final review (click on [WAFSuProM – Second Edition, September 2019](#) to view document). Dissemination of the updated WAFSuProM will occur from Q1 of FY20, including to business platforms to inform private sector decisions.

In general, updates for the initial eight countries show that: 1) there are no government fertilizer subsidy programs in Benin and Côte d'Ivoire; and 2) Burkina Faso, Ghana, Mali, Niger, Nigeria, and Togo still implement subsidy programs, but now are beginning to implement reforms that, when completed, will bring them closer to the “smart” subsidy programs proposed in the Regional Fertilizer Subsidy Program Guide (click on [West Africa Fertilizer Subsidy Program Guide, February 2019](#) to review full document).

In addition, other countries such as Guinea and Sierra Leone are also implementing fertilizer subsidy programs, and EnGRAIS plans to include information for new countries in the FY20 version of the WAFSuProM.

3.1.2 Analyze fertilizer cost structure for policy implications for subsidy programs

3.1.3 Develop and disseminate policy briefs on cost structure policy prescriptions and subsidy-related issues

This activity was linked to completion of the cost build-up studies undertaken under IR 1 (Activity 1.2.1). Given that the cost build-up studies may have implications toward national subsidy programs, EnGRAIS awaited the final results, which were validated during Q4. Therefore, these activities were not completed as expected during the reporting period. However, during the first quarter of FY20, EnGRAIS will analyze the studies and apply final findings and recommendations toward policy prescriptions/implications for subsidy programs and related issues.

3.1.4 Coordinate fertilizer subsidy program review and analysis including seeds

Over the past year, there were clear indications that the CORAF/PAIRED project would not be ready to collaborate with EnGRAIS to integrate seeds into an expanded regional input subsidy matrix and subsequent guide until at least FY20. However, EnGRAIS continued to print and widely disseminate the current, validated, and rebranded Regional Fertilizer Subsidy Programs Guide to stakeholders during all major EnGRAIS- and partner-organized national and international events such as the 10th Annual Argus Africa Fertilizer Meeting in Marrakech, Morocco, February-March 2019, and the WAFF held in April. More than 300 copies of the regional guide were distributed during FY19.

In addition, EnGRAIS transformed, through support from a legal consultant, the regional guide into a draft directive in French (click on [ECOWAS Subsidy Program Directive – French Draft](#) to read document), which was submitted to ECOWAS in August 2019 for endorsement and its issuance to Member States for improving their subsidy programs.

3.1.5 Provide advice and technical assistance to GoG under the GFEP (to modify the current Ghana fertilizer subsidy program)

See the report on assistance to GoG to finalize the GFEP and to reform the current fertilizer subsidy program in Section 4.1.3. However, another high-level discussion point of joint interest is the GoG plan for management of blending facilities and a review of a Terms of Reference (ToR) for development of guidelines that will help the Plant Protection and Regulatory Services Directorate (PPRSD) better regulate blending activities.

During the FY, two other countries discovered that applying the Regional Fertilizer Subsidy Program Guide principles and recommended actions would help them reform their subsidy programs. EnGRAIS facilitated these changes to existing programs in Burkina Faso and Niger. In **Burkina Faso**, preliminary support to the *Direction Générale des Productions Végétales*, which is in charge of the subsidy program, and to AGRA, has resulted in a synopsis entitled: “*Revue du programme de subvention d'intrants et d'équipements agricoles au Burkina Faso et proposition de réformes.*” This working document outlines: (i) a brief overview of the current subsidy program, (ii) major shortfalls and challenges, (iii) a brief description of proposed reforms, and (iv) major actions to be taken for operationalizing proposed reforms using the Regional Subsidy Program Guide. EnGRAIS will be involved in the major actions to be taken to reform the subsidy program during FY20, from validation of the draft policy document to effective implementation and subsequent monitoring and evaluation. In **Niger**, as a result of several discussions with key managers of the IFDC-implemented PARSEN² project (Niger Fertilizer Sector Reform and Technical Assistance for Implementation of the Reform Plan), EnGRAIS provided technical support to PARSEN on reforming the fertilizer subsidy program that will help address the main inefficiencies in the system and fill in the gaps identified. Major components and activities undertaken for initial changes to the subsidy program include:

² PARSEN is funded by the Millennium Challenge Corporation (MCC)/Millennium Challenge Account (MCA) Niger. The reform plan is structured around the following components: an institutional, legislative, regulatory, and policy framework for a reformed subsidy program; and the management of the reform program. The reform plan was validated by all stakeholders during a national workshop in December 2017 and adopted by the Government of Niger in January 2018.

1. Targeting 15,000 beneficiaries in the 10 communes in the selected three regions (Dosso, Tahoua, and Tillabery);
2. Beneficiary selection criteria are food security status, targeted crops (rice, maize, and onion), area cropped (0.25 to 0.50 ha), women or youth group, and ability to pay a non-subsidized portion of fertilizer price;
3. Use of e-voucher system;
4. Identification of entry points (cooperatives in irrigated schemes, field technicians in other sites that know farmers) in each region to get secondary data on resident farmers to be screened; and
5. Training of enumerators for registering identified beneficiaries.

Sub-IR 3.2 ECOWAS regulation for fertilizer quality control published by all Member States and implemented at the regional level

Developed policy briefs in partnership with USAID's Bureau for Food Security, PEMEFA, and TAAT

During Q1, EnGRAIS collaborated with the USAID-funded Soil Fertility Technology Adoption, Policy Reform, and Knowledge Management Project, PEMEFA, and AfDB's TAAT project to develop a series of draft policy briefs addressing many of the quality concerns often raised in Africa, and regarding: (i) assessments of the quality of fertilizers traded in 11 countries in Africa, and (ii) implementation of the ECOWAS fertilizer regulatory framework. The regional brief covering these issues entitled, "*ECOWAS Fertilizer Regulatory Framework: Implications for the Development of Private Sector-Led Supply of Quality Fertilizers in West Africa*" is included as Annex 2. These policy briefs are communication materials for sensitization campaigns, trainings, policy dialogues, etc., by various projects and programs depending on their needs.

Organized Peer Review of Fertilizer Quality Assessments in Benin, Burkina Faso, Mali, and Liberia

During Q2, EnGRAIS organized a peer review of two draft reports on fertilizer quality assessments conducted under WAFP in Mali, Benin, Burkina Faso, and Liberia. Peer comments and changes made by two senior scientists at IFDC were integrated into the drafts and finalized during Q3 and Q4. These reports, along with the associated statistical data and findings, provide a baseline for the respective countries on their quality control systems.

3.2.1 Facilitate the publication of Regulation C/REG.13/12/12 in official gazettes

There remain three ECOWAS Member States (Cape Verde, Guinea Bissau, and Nigeria) and Mauritania that have yet to publish ECOWAS Regulation C/REG.13/12/12 in their Official Gazettes. While EnGRAIS facilitated the Portuguese translation of the Regulation and reviewed it with ministry officials from **Cape Verde** and **Guinea Bissau**, it had not yet been officially approved by ECOWAS by the end of the FY, despite regular reminders from EnGRAIS since the November 2018 submission. The approval of this translation is essential to enable the publication of the Regulation in the Official Gazettes in these two countries.

While **Nigeria** has yet to publish the ECOWAS Regulation in its Official Gazette, with continued advocacy by EnGRAIS, the country's National Assembly passed the National Fertilizer Quality

Control (NFQC) Bill³ in March 2019, and it will be signed into law by the President of Federal Republic of Nigeria early in Q1 of FY20. From conversations with the current national fertilizer regulatory body, the Department of Farm Input Support Service (FISS) of the Federal Ministry of Agriculture and Rural Development, and other stakeholders, including FEPSAN, EnGRAIS has learned that the Regulation is expected to be published soon after the passage of the NFQC into law. For **Mauritania**, the tripartite agreement between ECOWAS, UEMOA, and CILSS on fertilizer will provide the legal basis to expedite the publication of the Regulation, which should occur during FY20.

3.2.2 Facilitate the development and adoption of supporting regulations

During the reporting period, EnGRAIS provided significant technical support to multiple countries in the region for their implementation of ECOWAS fertilizer regulations.

In **Niger**, EnGRAIS collaborated with PARSEN to support several efforts to advance the country's implementation of fertilizer quality control regulations. These included the following:

1. Facilitated a workshop to review and amend Decree N° 2016-304/PRN/MAG/EL, which highlights implementation modalities of ECOWAS Regulation C/REG.13/12/12. Participants included members of the National Committee for Fertilizer Control in Niger (CONACEN), as well as representatives from PARSEN and MCA-Niger.
2. Supported development and technical validation of six draft country-specific fertilizer regulations covering registration and licensing, fee payment and allocation of proceeds, customization of fertilizer inspection and analysis manuals, and penalties for violations, all of which are aligned with ECOWAS's framework.
3. Presented ECOWAS fertilizer regulations and its approach, focusing on key issues and challenges facing the implementation of these regulations in Niger to the two supervisory bodies working on implementation of the fertilizer reform plan – Niger Fertilizer Technical Committee (COTEN) and Niger Fertilizer Market Information Network (OMEN).
4. Conducted two workshops, training 62 fertilizer inspectors (13% women) on the new regional and national legal frameworks, as well as procedures and techniques for fertilizer inspection, sampling, and quality control.

During the FY, the agriculture hierarchy in **Côte d'Ivoire** underwent significant political changes, with a new Minister of Agriculture and Rural Development (MINADER) and its Director General of Crop Production and Food Security (DGPSA). Consequently, EnGRAIS held several meetings with the new MINADER officials and the newly appointed Director DGPSA in order to discuss the status of regulations implementation in the country and plans to move things forward. EnGRAIS did the following during Q4 to prepare the new Director to properly brief his Minister and advocate for appropriate measures:

1. Developed two major documents: an explanatory note on the current situation of fertilizer regulatory system in Côte d'Ivoire and a brief report on status of implementation at the regional level comparing Côte d'Ivoire to other Member States. These documents provide

³ The fertilizer bill seeks to regulate the manufacture, importation, distribution, and quality control of fertilizer in Nigeria.

a history of all activities and actions carried out both at national and regional levels to promote the adoption of the regional Regulation since its publication in the national Official Gazette in 2013.

2. Advocated for joint development of an updated action plan to establish a regulatory system, including the NaCoFeC.
3. Reviewed and provided feedback on a draft decree that will identify the national application of the ECOWAS Regulation on fertilizer quality control, to serve as a basis for a tripartite meeting between the DGPSA, the Legal Department of MINADER and EnGRAIS during early FY20.

As a result of meetings with the MoAs and other senior officials and stakeholders in Banjul, **The Gambia** and Freetown, **Sierra Leone**, EnGRAIS facilitated the creation of a National Fertilizer Regulatory Taskforce in each country to help move the national regulatory agenda forward. EnGRAIS organized and facilitated a two-country workshop held March 25-29, 2019, at the Riviera Royal Hotel in Conakry, Guinea, for 19 participants from the two countries, including representatives from various Ministries' Departments and Agencies (MDAs) working within the fertilizer sector, the private sector, and producers' organizations. The workshop on "Facilitating Development of Country-Specific Fertilizer Supporting Regulations for The Gambia and Sierra Leone" focused on drafting country-specific fertilizer supporting regulations aligned to the ECOWAS Regulation C/REG.13/12/12, sharing best practices regarding effective implementation, and reviewing other countries' in the region models.



Figure 7 Country Workshop for The Gambia and Sierra Leone, Conakry, Guinea,

During the workshop, the two countries' team representatives developed draft roadmaps to enhance implementation of the regulations with support from EnGRAIS and other partners. The participants also determined that developing a National Fertilizer Regulatory Agency (NaFRA)

was a crucial aspect for Sierra Leone, as well as incorporating fertilizers into the current draft Plant Protection Bill. In addition, transforming the current Agribusiness Unit into a Directorate is critical for The Gambia. Recommendations and next steps discussed at the workshop are presented in [Table 5](#).

Table 5 Recommendations for Implementation of Fertilizer Regulations

Organization	Recommendations
IFDC and ECOWAS	<ol style="list-style-type: none"> 1. IFDC to provide technical assistance for finalization of the Conakry draft documents and for further capacity building of key stakeholders and required facilities (e.g., regulatory entities, designated laboratories, agro-dealers, etc.) as identified by the respective countries. 2. ECOWAS/IFDC to follow up on implementation of the proposed actions and provide support where necessary. 3. Facilitate the organization of exchange visits between ECOWAS Member States and/or outside the region to share experiences and learning on the functioning of fertilizer regulatory systems. 4. Develop jointly with national governments project proposals for mapping soil fertility, developing agro-dealership, and upgrading of national laboratories to analyze fertilizers, pesticides, seeds, and soils. 5. Make necessary arrangements for undertaking immediate actions identified so far: presentation of meeting outcomes, preparation of explanatory notes, development/review of supporting regulations, and lobbying before the competent authorities.
Sierra Leone and The Gambia	<ol style="list-style-type: none"> 1. National Agricultural Research Institutions to update fertilizer recommendations for the various agro-ecologies and crops. 2. Strengthen collaboration/linkages between extension, research, and farmers for increased use of fertilizers.

EnGRAIS shared the major outcomes from the two-country workshop with both countries' Ministers of Agriculture in the form of one-page briefs (see Annex 3). The Sierra Leonean Ministry of Agriculture and Forestry has capitalized on these outcomes to validate the draft country-specific regulations for fertilizer and seeds for ratification by Parliament and submitted a detailed implementation plan and budget to the World Bank requesting funding for effective implementation, including the establishment of the NaFRA.

As **Nigeria** will pass its NFQC Law in early Q1 of FY20 and should soon thereafter publish the ECOWAS Regulation C/REG.13/12/12 in its Official Gazette, EnGRAIS supported preparations during Q3-Q4 by the government and private sector – making sure that once the prerequisites are met, the law and regulations under review will be effectively implemented immediately. For example, EnGRAIS attended a stakeholder meeting in May 2019, facilitated by a legal consultant hired by AGRA, and provided recommended changes and amendments to the draft Nigeria Fertilizer Regulations and raised issues in the document for further discussion. Additionally, EnGRAIS facilitated a meeting with FISS, in Abuja in June 2019, to support the development of a roadmap and activity plan to guide FISS in the start-up and enforcement of the NFQC Law. Other stakeholders such as AFAP, with the support of AGRA, undertook some additional preparatory work during Q4 by assessing the blending facilities currently installed and training public and private stakeholders on the implications for the upcoming guidelines for improved blending.

EnGRAIS participated in and informed the process by ensuring that AFAP knew the necessity of aligning Nigeria's law and implementing regulations to ECOWAS Fertilizer Regulation.

In parallel to development on the regulatory agenda, Nigeria is implementing a radical policy, banning solid fertilizers in some parts of the country because of fears that they may be used as explosives by Boko Haram. The situation is alarming in terms of possible repercussions to food production in Nigeria, and more widely in West Africa, if such bans are extended to other conflict zones, with so much of the population living in poverty and food insecurity. In response to the situation, EnGRAIS and the IFDC Country Representative in Nigeria met with Indorama and Wafa and developed an action plan to react to the issue during Q4. While the action plan was not deployed during the reporting period, EnGRAIS sought and received advice and information from IFA on the issue. IFA shared the considerable information it had on actual safety and security issues related to fertilizers while giving reassurance that they stand ready to help further when needed.

During Q4, EnGRAIS facilitated **Benin's** adoption of five country-specific fertilizer regulations relating to the following:

1. Designation of a fertilizer testing laboratory, known as the Soils-Water-Environment Laboratories (LSSEE) of the National Agricultural Research Institute of Benin (INRAB);
2. Modalities for fertilizer sampling and analysis;
3. Modalities for labeling and tolerance limits of fertilizers distributed in the country;
4. Conditions and modalities for obtaining a license granted for fertilizer manufacture, packaging, importation, and distribution in Benin, or for its suspension and withdrawal; and
5. Appointment of the eight members of the NaCoFeC/CONACE.

On September 3, 2019, the CONACE was officially inaugurated and held its first statutory meeting on September 6. Additionally, the country has been in the process of reviewing licensing fee costs, taking into consideration licensing fee costs in other countries in the region. At the request of the National Fertilizer Regulatory Body,⁴ EnGRAIS provided technical and cost information on the fees for acquiring a license to sell fertilizers in Burkina Faso, Mali, and Togo and shared relevant legal instruments of the respective countries as guidance.

In **Burkina Faso**, OCP supported enforcement of fertilizer regulations by financing a study tour for fertilizer inspectors to visit Jorf Lasfar's production plant in Morocco on January 7-February 1, 2019. During the tour, the inspectors were trained on fertilizer manufacturing processes as well as techniques for sampling and analysis, which indicates the increasing role of the private sector in ensuring fertilizer quality in West Africa.

EnGRAIS supported the National Fertilizer Regulatory Body in **Togo** in sensitizing public and private fertilizer stakeholders at a national meeting (July 2019) about the new regional/national regulatory environment and legal implications for the fertilizer industry and regulators. The Body

⁴ *Division Inspections Phytosanitaires, Contrôle de qualité et Gestion des Engrais (DIPCGE)* Under the Directorate of Crop Production (in French, *Direction de la Production Végétale - DPV*).

also equipped about twenty appointed fertilizer inspectors and trained them (September 2019) on the legislations, techniques, procedures to control the quality of fertilizers sold in the country.

In addition to the activities highlighted above, due partially to advocacy and technical support by EnGRAIS, the PPRSD, which is charged with fertilizer quality control in **Ghana**, has been increasing its capacity. New inspectors have already joined the department, and the wet chemistry laboratory is being equipped through support from OCP for analyzing N, P, and K by December 2019, while contracting with other private and public laboratories for testing secondary and micro-nutrients. With support from OCP and GIZ, training is being delivered for new fertilizer inspectors and chemists/analysts.

Chad submitted three draft supporting regulations to EnGRAIS, which reviewed them and provided written comments and suggested changes as well as templates from other countries. The supporting regulations related to the following main areas:

1. Designation of a fertilizer testing laboratory;
2. Conditions and modalities for manufacturing, importing, distributing, and experimenting with fertilizers in the country; and
3. Roles, organization, and functioning of the NaCoFeC, to repeal provisions previously adopted.

The first and third above-mentioned legal instruments were adopted during Q4 while the second one is still in draft form.

3.2. Prepare status report of NaCoFeCs that should be represented in the WACoFeC

3.2.4 Facilitate establishment and operations of the WACoFeC

3.2.5 Convene the launching and first statutory meetings on the establishment of the WACoFeC

3.2.6 Build the organizational, operational, and technical capacity of the WACoFeC Secretariat

EnGRAIS began a survey on implementation of ECOWAS fertilizer regulations by country, including the NaCoFeCs during Q1, and after much follow up and analysis, submitted the report to the RECs during Q2 (click on [Status of Implementation of REG.13.12.12, March 2019](#) to read report). Currently, eight countries have established their NaCoFeCs and are ready to participate in the WACoFeC once established (Benin, Burkina Faso, Ghana, Guinea, Mali, Niger, Senegal, and Togo) (click on [ECOWAS Fertilizer Regulation Matrix – September 30, 2019](#) to see the regulatory status of all countries in the sub-region). However, ECOWAS remained hesitant to initiate the committee, given that Nigeria was not eligible to join during the FY. This question should be resolved once Nigeria publishes the Regional Regulation hopefully in early FY20. However, given this delay and ECOWAS's position on it, EnGRAIS was not able to take action on any activity pertaining to the WACoFeC during the reporting period.

3.2.7 Finalize discussion on possible piloting of a standardized fertilizer testing system

During Q1, EnGRAIS engaged in multiple discussions with several partners in Ghana on developing a standardized fertilizer testing system using spectral technology. EnGRAIS facilitated CropNuts presenting this concept at the GoG/OCP Foundation/private fertilizer blenders' meetings in November 2018, followed by a visit to the PPRSD wet chemistry laboratory facilities.

Discussions to pilot this model in Ghana were finalized during Q1 and follow-up discussions on mobilizing necessary resources to commence and effective pilot were ongoing throughout the reporting period.

3.2.8 Develop and facilitate the adoption of a regional action plan for fertilizer testing laboratories

During Q4, EnGRAIS finalized a ToR for a capability assessment of country laboratories and launched field assessments in Senegal in August 2019. Three public and one private laboratory, including CERES-LOCUSTOX Laboratory, which has been designated by the Ministry of Agriculture to test official fertilizer samples under the regulatory program, were assessed. Key areas evaluated include: location of laboratory, staffing, equipment (instrumentation efficiency and capabilities), chemicals (reagents) accessibility and quality, water availability, analytical methods, sample preparation, standardization (ISO methods and regulations), and spacing, etc. Assessments will be pursued for the remaining six countries (Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, and Nigeria) during Q1-Q2 of FY20.

The Nigerian Institute for Soil Science, led by Professor Victor Chude, has received the mandate from Nigerian Government to compile information on and assess the capabilities of existing laboratories throughout the country. As this activity is closely aligned with EnGRAIS, the institute and IFDC plan to sign an MoU to exchange information and methodologies in early Q1 of FY20.

3.2.9 Develop and disseminate modules and/or materials for capacity building of regulatory personnel

During Q4, EnGRAIS developed a first draft of training modules for fertilizer inspectors for five major modules, as follows:

1. Fertilizer Regulatory System
2. Introduction to Fertilizer Inspection and Sampling for Quality Control
3. Fertilizer Inspection and Sampling, and Monitoring of Compliance
4. Fertilizer Inspection and Sampling Reporting
5. Assessment of Quality of Fertilizers as Baseline or for Performance Evaluation

These will be reviewed and finalized during Q1 of FY20.

3.2.10 Promote the use of ICT for improved monitoring of fertilizer regulations

A report was developed under WAFP on Ghana's experience with a mobile-based ICT system to monitor and ensure compliance with fertilizer regulations. During Q4, EnGRAIS staff reviewed that report and began to develop guidelines based on the Ghana pilot so that other countries can learn from the Ghana experience and set up effective e-surveillance systems. At the same time, EnGRAIS explored user friendly and cheaper ICT applications used elsewhere to facilitate field inspections and quality control as well as monitoring of compliance with regulations being enforced.

3.2.11 Provide technical assistance to strengthen the national fertilizer regulatory enforcement tool

See the review of the GFEP Strategic Plan and blending ToR in Section 3.1.5 above.

3.4 IR4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins

The objective of this IR is to mobilize commitment and engagement for key stakeholders across West Africa from bilateral missions, local governments, and other donors for country-level activities related to regulations and policies, market information, appropriate and affordable input packages, and the development of effective supply systems. Meeting this goal at the country level is integrally related to how EnGRAIS will implement activities to realize this goal at the regional level. Since no EnGRAIS buy-ins existed during FY19, the activities below do not fall under specific sub-IRs and are related to pursuit of buy-ins. However, they are numbered and stated according to sub-IRs presented in the FY19 Work Plan.

4.1.1 *Conduct outreach and consultation with bilateral USAID Missions in the region*

During the course of FY19, EnGRAIS conducted extensive outreach and consultations with each of the Feed the Future Missions in the region (Ghana, Mali, Niger, Nigeria and Senegal) regarding possible buy-ins to the project. While prospects were very good in Mali, Niger, and Nigeria, both Mali and Niger did not have potential resources available until FY20; and the Nigeria Mission indicated that it would request its awarded agricultural projects to provide associated sub-contracts on fertilizers to IFDC directly, rather than buy into EnGRAIS. USAID/WA also indicated that the Ghana Mission reiterated its unwillingness in Q4, which it expressed in a letter to the GoG during Q1, to buy into EnGRAIS.

In Senegal, after several meetings with IFDC/EnGRAIS management and receiving the buy-in menu and mechanism sheet, the Mission decided to move forward with an EnGRAIS buy-in. During Q3, IFDC submitted a project description (PD) for the Senegal Dundël suuf Fertilizer project. The request specified that the intervention should have four outcomes:

- Analyze and map soil nutrient deficiencies to better characterize fertilizer requirements;
- Develop fertilizer formulas based on AEZ profiles and crops needs;
- Develop and disseminate proven fertilization products and technologies that combine effectiveness, economic efficiency, and environmental compliance; and
- Support the Government of Senegal (GoS) to promote the fertilizer market by achieving regulatory provisions for ECOWAS fertilizer quality standards and reinforcing the capacities of the government and other actors in the fertilizer value chain to enforce quality standards.

IFDC developed a strong initial PD and budget based on the Mission's request and the results of the co-creation workshop, and after incorporating comments from the Mission, submitted the final version to USAID/Senegal during Q4, on July 5, 2019. The activity was approved on September 30, 2019, and program start-up will begin during Q1 of FY20.

4.1.2 Work with missions to develop a program of interventions that link with EnGRAIS

All the above outcomes for the Senegal buy-in are within the scope of the overall EnGRAIS RF, and will further its SO, IRs, and expected results by taking key fertilizer development activities to the level of Senegalese farmers, fertilizer private sector, and national institutions.

4.1.3 Ensure that proposed interventions emanate from country priorities and needs

Based on direction from the Senegal Mission, IFDC facilitated a project co-creation workshop with 42 Senegal stakeholders, including representatives from the Mission and GoS, in Dakar on June 7th. IFDC submitted its draft PD, based largely on results from the workshop, on June 14th, complete with a Senegal-specific RF, indicators, and targets, and a budget for \$8 million over three years. The Mission then provided comments on June 27th, and IFDC submitted the final PD on July 5th, which was responsive to all Mission comments (click on [PD Dundal Suuf USAID/Senegal Final, July 2019](#) to read the full, submitted PD). Through this participatory process, IFDC ensured the new project interventions will meet the country's priorities and needs.

In **Ghana**, EnGRAIS worked intensely with the GoG, particularly the Office of the President and MoFA, and other stakeholders, such as AGRA, AFAP, OCP, and fertilizer blenders on supporting key aspects of the GFEP. This included development and management of the GFVCOS and report (click on [Ghana Fertilizer Value Chain Optimization Study, August 2019](#) to read the full report), technical inputs into the feasibility analysis for possible fertilizer plant development in Western Ghana, the GFEP Five-Year Strategic Plan, a Ghana-specific blending training, and the farmers' database being developed through tracking of distributions of subsidized fertilizer that will later be used to measure and monitor demand for subsidized fertilizer, so that farmers can be subsidized directly through use of vouchers/coupons, and the need for GoG contracts with suppliers will be eliminated.

The initial phase of the GFVCOS was conducted during Q1 by consultants engaged by IFDC/EnGRAIS with funding from OCP (cost-share). The consultants produced a draft report that had a great deal of good information from the study, but the report was poorly organized and did not provide clear enough conclusions or recommendations for the GoG, especially with regard to needed changes to their fertilizer subsidy program. However, these initial findings and recommendations were presented to about 40 representatives of stakeholders, including MoFA, other GoG representatives, OCP, other members of the fertilizer private sector/blenders, and development partners, in Accra, on December 5, 2018.

According to the study, the largest cost increase to fertilizer products occurs in the domestic distribution chain. Of the total domestic supply, about 40 percent is absorbed by the cost of doing business at the wholesale/distributor and retail levels, which includes profit margins and the commissions paid for the distribution of fertilizer. The same proportion of the costs is related to financing working capital, while 15 percent is absorbed by transportation cost, and five percent is absorbed by storage. Simulation results show that the cost of importing and distributing non-

subsidized fertilizer is not the same as subsidized fertilizer. Results of the GFVCOS also showed that Ghana has more than enough blending capacity (over one million tons divided between six different blenders for a current market of about 350,000 tons) already to accommodate the subsidy programs shift to using more balanced blended fertilizer products.

As shown in Figure 8, the 50 percent subsidy applied to fertilizers under the Planting for Food and Jobs Program contributed to a reduction of operational costs (57 percent) and financial costs (42 percent), as compared to non-subsidized fertilizers. While ensuring a lower retail price to the farmers, the current subsidy system is characterized by very low margins along the domestic distribution channels that do not provide the necessary incentives for retailers to expand their businesses or for new ones to enter the market.

Following the December 5th presentation and several follow up presentations and meetings with the GoG that included preparations for the 2019 subsidy program, EnGRAIS revised and enhanced the GFVCOS report to include, among other things, more elements of the Regional Fertilizer Subsidy Program Guide and eight specific recommendations for changes to the 2019 subsidy program that could be made prior to the 2019 growing season. The final report was then issued during Q4, in early August, and the GoG implemented at least six out of the eight recommended changes to the subsidy program.

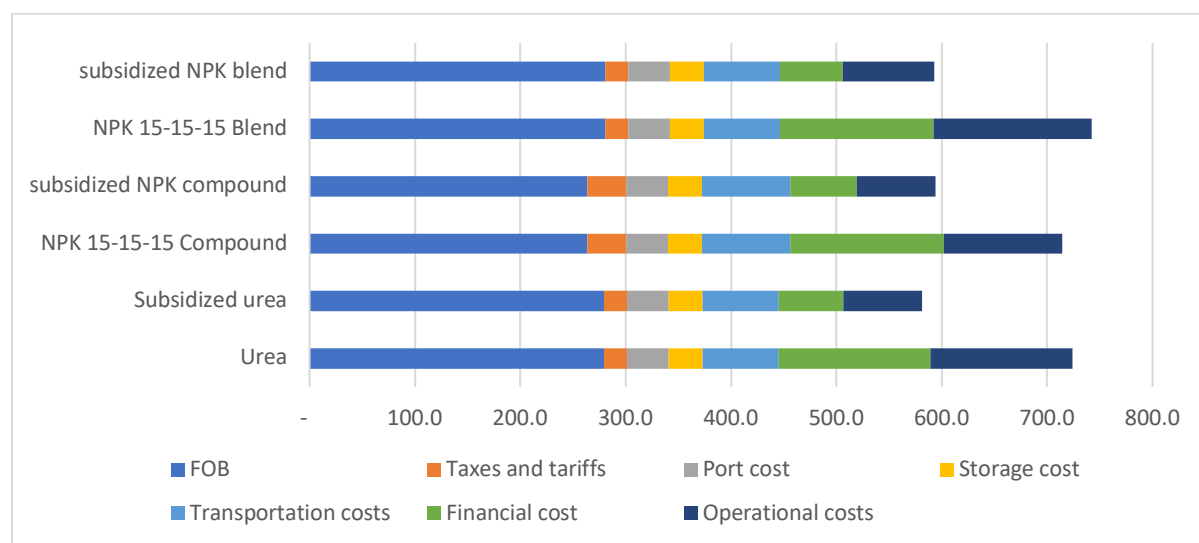


Figure 8 Cost of Procuring Subsidized Fertilizers vs. Commercial Distribution

4 CROSS-CUTTING ISSUES

4.1 Monitoring, Evaluation and Learning (MEL)

During FY 2019, EnGRAIS finalized the Monitoring, Evaluation and Learning (MEL) Plan with USAID/WA and incorporated the suggested indicator to identifying the number of individuals participating in program events disaggregated by both individual type and sex. Additionally, the MEL indicator database was completed and will record and store all data and other related information on the project's performance indicators. EnGRAIS also developed a data collection

instrument to determine the extent of private sector investment due to the program's activities and trained the SRCs on how to apply the tool with WAFA members. The Performance Indicators Table in Annex 4 illustrates that EnGRAIS achieved or exceeded targets for 11 out of 13 of its indicators during FY19.

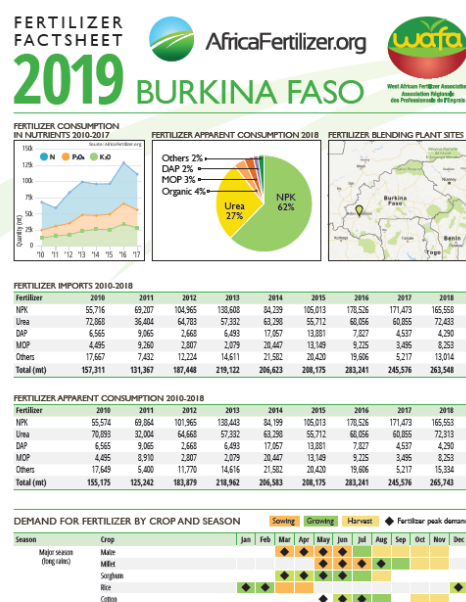
EnGRAIS finalized its Environmental Monitoring and Mitigation Plan (EMMP), which details how the project will anticipate and address environmental impacts under EnGRAIS activities and the buy-in programs. The EMMP was approved by USAID in November 2018.

EnGRAIS rolled out a comprehensive and secure online MEL database in July after it was piloted in April 2019. The database is designed to facilitate indicator data flow, management, analysis, and reporting, as well as record and store other information related to the project's performance. EnGRAIS established internal procedures to ensure that data and information collected, analyzed, and reported on are subjected to quality assurance and meets USAID data quality standards. The MEL Specialist worked with the IRTLs to review DQA procedures and proper documentation of indicators to ensure EnGRAIS collected and reported accurate and quality data. During Q4, USAID/WA conducted Data Quality Assessments (DQAs) on all EnGRAIS Performance indicators as planned, and there were no major changes suggested for EnGRAIS's MEL system/provisions in the DQA assessment report.

4.2 Information and Communications Technology/Market Information System (ICT/MIS) Support

EnGRAIS provided ICT/MIS support during the year through the following activities:

- Organized fertilizer statistics validation workshops in [Ghana \(March 13-14, 2019\)](#) and in [Burkina Faso \(March 27-28, 2019\)](#) to validate 2018 annual fertilizer statistics figures for 6 countries in West Africa (Burkina Faso, Cote d'Ivoire, Ghana, Nigeria, Mali and Senegal). This was done in collaboration with AFO and WAFA.
- Prepared 2019 fertilizer factsheets for [Burkina Faso](#), [Côte d'Ivoire](#), [Ghana](#), [Nigeria](#), [Mali](#) and [Senegal](#) that was shared during the West Africa Fertilizer Forum in Togo and other events. This was done in collaboration with AFO and WAFA.
- Supervised the development of EnGRAIS Monitoring Evaluation and Learning (MEL) database that is be used to monitor the performance indicators of EnGRAIS and help in report writing (graphs).



- Updated and disseminated the WAFBIM [English](#) and [French](#) (April 2019), with new information on fertilizer production and blending plants that are operational in West Africa to guide decision making in the region (with WAFA and IR 1 TL).
- Updated and disseminated the Fertilizer Recommendations for West Africa Map (FeRWAM) [English](#) and [French](#) (October and December 2018), with new information about crops and fertilizer recommendations (with IR 2 IRTL).
- Supported the development and validation of the Fertilizer and Seed Recommendations for West Africa Map (FeSeRWAM) prototype which is being implemented in collaboration with CORAF – PAIRED. Currently, the prototype has information on 2 countries (Nigeria and Togo) and is being hosted by IFDC HQ. The final product will be developed in West Africa by a consultant and it will include all countries in West Africa where we have collected seed varieties and fertilizer recommendations.
 - <https://wpavan.shinyapps.io/FeSeRWAM4/>
- Supported in the Agro-input package selection and development with analysis on data that was provided.
- Analyzed fertilizer prices and disseminated twelve monthly issues of *FertiNews* which consist of fertilizer prices and fertilizer market information to partners. This was done in collaboration with AFO. (Link to Newsletter)

September 2019 Edition



Franglais
Cliquez ici pour la version française

FertiNews, your reliable source for the latest information on the fertilizer market in sub-Saharan Africa welcomes you to its **September 2019 edition!**

Just relax as you read FertiNews!

[Send us your feedback](#) | [Subscribe for free](#)

Job opportunity!
Coordinator - Fertilizer Systems Research and Field Implementation Program - Ghana. [Read more and apply](#)

Connect With Us

Facebook
AfricaFertilizer.org
Food Security Portal

Twitter
AfricaFertilizer.org
Food Security Portal

Websites
AfricaFertilizer.org
Food Security Portal

☐ Forward this to a Friend

News

WEST AFRICA : (Oct 1st, 2019) - West Africa Fertilizer Financing Forum
Actors in West Africa's fertilizer industry emphasized the need to financially support the fertilizer value chain to improve agricultural productivity in the region. Agriculture ministers, development partners and private sector leaders made the call during the opening ceremony of the first West Africa Fertilizer Financing Forum in Abidjan, Côte d'Ivoire, on Monday 30 September. [Read more](#)

WEST AFRICA

Product	Type	BFA	CIV	GHA	MAL	NER	NGA	SEN
NPK 15-15-15	com	565	489	394		464	529	449
	sub	405		275	371			339

4.3 Communications

During the fourth quarter of FY19, the project recruited a Bilingual Communications Specialist to support project communications efforts. The project communications team carried out activities in line with its objectives for the year. Activities included:

- Providing communication support for Intermediate Results components.
- Producing public communications materials to promote project activities (flyers, banners, etc.).
- Monitoring adherence to USAID-approved branding strategies with partners to ensure appropriate branding guidelines are followed.
- Using EnGRAIS social media pages ([Facebook](#), [Twitter](#), and [Flickr](#)) as communications tools to communicate project activities.
- Leveraging IFDC website to publish information on the project such as [in-country support on fertilizer quality regulations](#) and [updates on the FeSeRWAM](#).
- Producing and disseminating EnGRAIS Quarterly Newsletters.

4.4 Administration/Finance

Staffing

By Q3, EnGRAIS was completely staffed, and the following are staff brought on during FY19:

- SRC, Lower Coast, Mr. Kido K.J.J. Kouassi (February 2019)
- SRC, Upper Coast, Ms. Olive L. M'Bahia (February 2019)
- Communications Specialist, Mr. Felix Deyegbe (July 2019)

The only other change in staffing was that the title of sub-regional liaison (SRL) was changed to sub-regional coordinator (SRC) for the three incumbents. This change was made because the SRC title better reflects what is in the incumbents' job descriptions than that of SRL.

Staff Travel

The table in [Annex 6](#) provides details on staff travel during the reporting period.

4.7 Local Grants and Subcontracts Agreement Status

Grants

During FY19, EnGRAIS awarded five in-kind grants – four to WAFA and one to the Office of the President/MoFA. These grants totaled US \$435,726.00 and supported the implementation of a wide range of activities, including ongoing organizational/institutional capacity building for WAFA as well as sponsorships for regional and continental fertilizer technical events. Table X below provides details on the five grants awarded during FY19.

Table 6 *Summary of Grants Awarded During FY19*

Type	Description/ Purpose	Grantee/ Contractor	Grant Amount (USD)	Date/Period	Remarks
Non-Competitive (USAID pre- approved)	Implementation of WAFA Capacity Strengthening (organizational/institutional + AGM) and WAFA Promotion in Key Fertilizer Sector Events + Amendment	WAFA	\$138,900	August 27, 2018 to September 30, 2019	Amendment #1 signed December 12, 2018 (amount reflects FY19 commitment)
	Improving and deploying WAFA strategic and communication plans	WAFA	\$91,350	October 8, 2018 to May 30, 2019	Signed October 23, 2018
	Review, processing and pre-validation of 2018 fertilizer statistics for 6 West African countries (Ghana, Nigeria, Burkina Faso, Mali, Cote d'Ivoire, Senegal).	WAFA	\$49,416	March 8, 2019 to June 8, 2019	Signed March 12, 2019
	Partially sponsoring the participation of technical personnel from the private and public sectors to the 3 rd WAFF	WAFA	\$147,660	April 18, 2019 to July 15, 2019	Signed April 27, 2019
Non-Competitive (USAID pre- approved)	Provide support to 2 technical personnel, 1 from the Office of the President and 1 from MoFA, to participate in the Argus 2019 Africa Fertilizer Meeting in Marrakech, Morocco	Office of the President, Republic of Ghana	\$8,400	January 22, 2019 to March 15, 2019	Signed February 11, 2019
Total			\$435,726		

Sub-Contracts

EnGRAIS spent a total of US \$186,497.41 on consultants in FY19 to support both technical and administrative activities. [Annex 7](#) provides details about the contracts and consultants signed and active during the reporting period.

5 OUTLOOK FOR THE NEXT QUARTER (OCTOBER – DECEMBER 2019)

5.1 IR 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened

Sub-IR 1.1 WAFA's and other relevant regional private sector organizations/associations capacity strengthened and made sustainable

During the next quarter, EnGRAIS support to WAFA will mainly focus on strengthening the organizational management capacities of the association and implementing WAFA's five-year strategy and 2020 work plan. EnGRAIS support will mainly be provided through no-cost activities and use of the EnGRAIS grant (left over from FY19, and additional new grant agreements depending on funds availability). Key activities for the coming quarter include:

- Conduct WAFA OCR in early October 2019 in order to design and start implementation of the WAFA capacity building strategy (2018-2023) and corresponding annual work plan.
- Consolidate current WAFA membership, support WAFA in collection of outstanding registration and membership fees, and expand membership in Nigeria and other countries (including Niger, Togo, Ghana).
- Secure WAFA funding beyond the end of EnGRAIS support, through the design and implementation of an enhanced revenue generation strategy that can support the implementation of its five-year strategic plan.
- Provide technical and legal support to national associations (e.g., support to APECI in Côte d'Ivoire, to launch FIAG in Ghana, and to launch an association in Senegal).
- Support development of formal and varied institutional linkages and partnerships, including the signing of an MoU between WAFA and UEMOA before the end of Q1 FY20.
- Initiate partnership between WAFA and ASIWA, mainly through linkages with IR 2-related and PAIRED activities.

Sub IR 1.2 Industry actors collaborate through multi-stakeholder platforms to improve supply chain efficiency and improve fertilizer affordability

- Publish the final version of the Fertilizer Cost Build Up and Process Maps for four major fertilizer trade corridors and promote implementation of the results of 2019 reports and use of the Fertilizer Cost Simulator.
- Prepare, in collaboration with WAFA, a series of policy briefs derived from the findings and recommendations of the first set of studies, for submission to relevant policy makers at national and regional levels.
- Monitor the effective publication by AfDB and WAFA of the proceedings of the WAFFF.

- Assist WAFA board and its members to follow up on WAFFF presentations, recommendations, and business linkages.
- Support the effective implementation of the WAFA-AFO partnership agreement, and more specifically the handing over of the national price and market analysis from consultants to the WAFA coordinating unit.

5.2. IR 2: Comprehensive input packages developed and disseminated in cooperation with CORAF

Sub-IR 2.1 Fertilizer and seed recommendations updated and developed for targeted crops and AEZs across West Africa

- Identify and hire consultant to support the development of the revised FeSeRWAM.

Sub-IR 2.2 Comprehensive fertilizer and seed input packages promoted and marketed across West Africa

- Develop detailed activities and methods to promote and disseminate agri-input packages.

5.3. IR 3: Fertilizer policy and regulatory systems across West Africa improved and harmonized in accordance with ECOWAS guidance

Sub-IR 3.1 Regional Fertilizer Subsidy Guidance endorsed by ECOWAS and disseminated to policymakers and industry stakeholders in Member States

- Conduct analysis of fertilizer cost structures in various West African countries to determine policy implications related to subsidy programs (link with IR 1).
- Conclude discussions with CORAF/PAIRED about possible expansion of fertilizer subsidy program review and analysis to include seeds.
- Translate the draft fertilizer subsidy directive into English and Portuguese, submit translated versions to ECOWAS, and discuss the next steps towards appropriate endorsement and issuance to Member States.
- Work together with ECOWAS to prepare a memo introducing the draft directive to Specialized Technical Committee on Agriculture, Environment, and Water Resources.
- Provide advice and technical assistance to the GoG under the GFEP and GoS under the Dundël suuf Fertilizer Project to: (1) modify the current Ghana and Senegal fertilizer subsidy programs to adhere to the Regional Subsidy Program Guide and ensure that they become “smart” subsidy programs; and (2) strengthen the national fertilizer regulatory environment and capacities in Ghana and Senegal to ensure they are in harmony with the ECOWAS fertilizer regulations.
-

- Sub-IR 3.2 ECOWAS regulation for fertilizer quality control published by all Member States and implemented at the regional level
- Follow up with national MoAs on the publication of the ECOWAS Regulation in the national gazettes of the three remaining ECOWAS Member States, adoption of country-specific supporting regulations, as well as establishment of national committees for fertilizer control.
- Follow-up with ECOWAS, UEMOA, and CILSS for establishment of the WACoFeC to monitor effective application of harmonized regional fertilizer regulations in Member States.
- Complete assessments of laboratory capacities for fertilizer testing in Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, and Nigeria for development of a regional action plan for strengthening and upgrading reference fertilizer testing laboratories in West Africa.
- Review draft modules and/or materials for capacity building of regulatory personnel.

5.4. IR 4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins

- Begin implementation of Senegal buy-in, approved by USAID/WA, on September 30, 2019, including recruiting, office procurement, kickoff Meeting in Dakar, and Year 1 activities.
- Explore buy-in opportunities in additional GFSS/GFSS-aligned countries:
 - Present results of Ghana Fertilizer Value Chain Optimization Study and follow-up work modifying the 2020 Ghana Planting for Food and Jobs/subsidy program to Ghana Mission in hopes of interesting them in an EnGRAIS buy-in;
 - Seek to convert well-received Nigeria IFDC Global Development Alliance (GDA) proposal to EnGRAIS buy-in and/or propose other activities for buy-in;
 - Seek to convert well-received Mali IFDC GDA proposal to EnGRAIS buy-in and/or propose other activities for buy-in;
 - Propose a buy-in to USAID/Niger to close gaps in the MCA-funded, IFDC-implemented PARSEN project; and
 - Further explore a possible buy-in by USAID/Liberia.
- Explore cost-share opportunities from other donors or donor-funded projects, especially in Burkina Faso, Côte d'Ivoire, Guinea, Sierra Leone, and other non-GFSS focus ECOWAS countries.

Annex 1 Success Story



USAID | WEST AFRICA
FROM THE AMERICAN PEOPLE

SUCCESS STORY

WAFA Unlocks New Doors of Opportunity for its Membership

"We started with nothing, but today the WAFF has become a powerful platform in West Africa for fertilizer stakeholders, and brings together over 200 key public and private sector players ... Everything to do with fertilizer in West Africa passes through this forum," says Mr. Moussa Diabate, President of WAFA.



Mr. Moussa Diabate, WAFA President, addressing participants at the WAFF in Lomé, Togo, April 2019



ECOWAS Commissioner and WAFA President signing the MoU



Key participants at the first-ever WAFF in Abidjan, Côte d'Ivoire, Sept. 30 – Oct. 1, 2019

U.S. Agency for International Development

The West Africa Fertilizer Association (WAFA) has big plans for the regional fertilizer sector. Officially registered in 2016 as a regional private sector association, WAFA has been looking for profitable partnerships to support it to achieve its main objective of building a competitive and reliable market that guarantees sustainable access to quality and affordable fertilizers to West African farmers. While WAFA has chalked up significant success since its formation, and now represents 85% of the fertilizer trade in the region, it remains a young organization that needs to continue strengthening its organizational and coordination capacity to achieve the goals in its 5-year strategy.

If WAFA succeeds, the fertilizer sector in West Africa will be primed for success. Recognizing this opportunity, the Feed the Future Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) Project for West Africa, implemented by the International Fertilizer Development Center (IFDC), has been supporting WAFA to become a strong and efficient association that can organize the private sector and promote quality, accessible, and affordable fertilizers across the region.

In 2018, EnGRAIS and WAFA agreed on a two-year joint work plan to improve WAFA's organizational efficiency and reach financial and operational sustainability. An important milestone was completed recently as an EnGRAIS-provided consultant conducted an Organizational Capacity Review (OCR) exercise. With the OCR support, WAFA can develop activity plans, regularly review its performance, identify and address weaknesses, and improve its management procedures and processes, in line with the expected results of its strategic plan.

Platforms for Progress

With support from EnGRAIS, WAFA co-organizes the annual West Africa Fertilizer Forum (WAFF) with Argus Media. WAFF is a regional platform created to strengthen the West African fertilizer market and sector, encourage private sector investment, and promote the use of quality fertilizers among farmers. This forum gives WAFA the opportunity for key business discussions and to develop these relationships across the region and generate significant financial resources for the association. WAFA has already hosted three successful annual WAFFs.

“We started with nothing, but today the WAFF has become a powerful platform in West Africa for fertilizer stakeholders, and brings together over 200 key public and private sector players annually to discuss issues related to fertilizers,” says Mr. Moussa Diabate, President of WAFA. “Many people are eager to participate in this forum now. Everything to do with fertilizer in West Africa passes through this forum.”

WAFA now has credibility that is attracting the attention of major financial institutions, including the African Development Bank (AfDB) and its Africa Fertilizer Financing Mechanism. AfDB worked with WAFA on the first-ever West Africa Fertilizer Financing Forum in Abidjan, Côte d'Ivoire, (September 30 – October 1, 2019) focused on solutions to the region's fertilizer sector financing needs.

Logistics and quality issues are among the top priorities for WAFA. The association participated in cost build-up studies conducted by EnGRAIS along four main fertilizer trade corridors in West Africa. The study results provide critical information for suppliers' logistical planning to make fertilizers available, accessible, and affordable to end-users. WAFA is a strong promoter of the ECOWAS regulations on fertilizer quality, and EnGRAIS contributed to develop the regulations, in collaboration with the industry, policy makers, and users.

By signing a new Memorandum of Understanding with ECOWAS, WAFA has become a key ECOWAS partner to improve and increase the flow of quality and adapted fertilizers in the West Africa region. The MoU strengthens WAFA's position as the official voice for all fertilizer sector players in the region. In this position, WAFA is better placed to access better opportunities for its members to help farmers access appropriate and balanced fertilizers.

Improving Fertilizer Quality and Expanding Memberships

As of September 2019, WAFA had 41 members in 11 out of 15 ECOWAS countries, including most of the fertilizer manufacturers, importers, and major distributors and blenders across the region. WAFA can boast of strategic partnerships and alliances with key fertilizer industry players and technical partners including, IFDC, AfricaFertilizer.Org, Argus Media, and the International Fertilizer Association.

EnGRAIS will continue to support WAFA to direct its efforts appropriately to benefit its members. Through increased memberships, strong partnerships, and improved efficiency, WAFA will become the cornerstone of a thriving, private sector-led fertilizer market that is capable of providing the best, affordable product for the farmers of West Africa.

Annex 2 ECOWAS Regulatory Fertilizer Framework

ECOWAS⁵ Fertilizer Regulatory Framework: Implications for the Development of Private Sector-Led Supply of Quality Fertilizers in West Africa⁶

Bocar Diagana⁷, Emmanuel Alognikou⁸, Porfirio Fuentes⁹, Joaquin Sanabria¹⁰ and
Latha Nagarajan¹¹

Background

High-quality fertilizers supplied in a timely manner and at affordable prices to knowledgeable farmers through professionalized private supply chains constitute a key outcome of a harmonized regulatory framework that would enable fertilizer markets to properly function at regional and national levels. Policies and regulations are essential levers that the West Africa regional economic integration body – ECOWAS – has used for creating this enabling environment. The importance of a harmonized regulatory framework is manifold. Fertilizer quality control, which relies heavily on the capacity for monitoring, policing, and enforcement, is critical as “the physical attributes and chemical properties of fertilizers to make them effective in providing nutrition for crops and for the consumers of crop products and that make them safe for the ecosystems depend highly on the soundness of the regulatory and legal procedures in place” (IFDC policy briefs, forthcoming). Well-trained operators throughout the fertilizer supply chain with solid and tested experience on fertilizers and with a capacity to apply sound business management practices will rightly react to market signals and proper incentives to ensure efficient procurement and delivery of high-quality fertilizer products where and when needed.

However, in West Africa, the creation of an enabling environment is still an ongoing process not yet completed. Over the last decade, ECOWAS has been developing a regional regulatory and policy

⁵ The Economic Community of West African States (ECOWAS) is the main economic body for regional integration in West Africa and comprises the following 15 Member States: Benin, Burkina Faso, Cape Verde, Côte d’Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

⁶ The preparation of this policy brief by IFDC was funded by a grant from the Alliance for African Partnership (AAP), a new, innovative initiative at Michigan State University that seeks to develop a collaborative and cross-disciplinary platform for addressing today’s global challenges. Acknowledgement is also given to two IFDC-implemented projects that leveraged activities achieving results reported in this brief: Feed the Future Soil Fertility Technology Adoption, Policy Reform and Knowledge Management Project, under a cooperative agreement with the United States Agency for International Development to support the Bureau for Food Security, and the Feed the Future Enhancing Growth through Regional Agricultural Input Systems (EnGRAIS) Project, funded by USAID.

⁷ Regional Economist, IFDC North and West Africa, Dakar, Senegal

⁸ Fertilizer Policy Expert, IFDC EnGRAIS Project Policies and Regulations Team Leader, Lome, Togo

⁹ Senior Scientist/Economist, Trade and Development Policies, IFDC Fertilizer Research Program, Muscle Shoals, AL, USA

¹⁰ Senior Scientist, Biometrician, IFDC Fertilizer Research Program, Muscle Shoals, AL, USA

¹¹ Senior Economist, Research and Monitoring, Evaluation, Learning and Sharing Specialist, IFDC, Washington, D.C., USA

framework with the ultimate objectives of harmonizing national regulations and policies across Member States, in line with those stressed in the recent Regional Agricultural Investment Plan for Food Security and Nutrition (RAIP-FSN, 2016-2020). This policy brief shows how quality issues, among other things, triggered the process of setting a regional regulatory framework, describes what the framework entails and its status of implementation across ECOWAS Member States, and draws selected policy and research implications for effective quality control and increased private sector engagement in the fertilizer value chain.

The Starting Point: The 2010 Fertilizer Quality Assessments in West Africa

In the 2010s, studies were conducted to contribute to national and regional efforts to intensify the use of fertilizers, an input declared as “a strategic commodity in achieving the African Green Revolution to end hunger” by African Heads of States and Governments during the Africa Fertilizer Summit, held in Abuja, Nigeria, in 2006. These studies were also meant to serve as a baseline for assessing the performance of the quality control and regulatory mechanisms that are being instituted with the adoption of the regional framework.

Salient Assessment Results

Salient results of the Fertilizer Quality Assessments in West Africa covered the following aspects of fertilizer quality: nutrient content, bag weight, and adulteration.¹²

Nutrient Content Compliance

The nutrient content of a fertilizer is probably the most important quality characteristic. Table 1 shows the out-of-compliance (OOC) frequencies for one or more macronutrients in the most important fertilizers traded in West Africa. Major findings include:

- Nutrient shortages OOC occurred with higher frequency and severity in NPK bulk blends manufactured in the ECOWAS region, as compared with compound (or complex) products. Most of the nutrient deficiencies are due to granule segregation and/or insufficient nutrient inputs at the time of the blending (Sanabria et al. 2013).
- Compound/straight imported fertilizers had less frequent and severe nutrient shortages OOC, but the shortages are still an issue. OOC of compound NPKs may be explained by shortages during manufacture and by granule degradation during handling along the distribution chain (Sanabria et al. 2013).

Adulteration

It should be noted that the only cases of completely proven adulteration are seven samples of single superphosphate (SSP) from Nigeria that were found to have no P₂O₅ nor any of the minerals that carry P in phosphate rock.

Bag Weight Compliance

As shown in Table 2, fertilizer bags being underweight is a serious problem that may be attributed to lack of control in filling and weighing bags during manufacture or re-bagging. This includes inappropriate bag

¹² Other findings not largely covered in this synthesis include external factors that potentially affect the quality of fertilizers traded in national and regional markets (see forthcoming IFDC country policy briefs for Côte d’Ivoire, Ghana, Mali, Nigeria, and Senegal).

filling procedure and/or equipment. Data also suggest a few cases in which the weight shortages were deliberate¹³ (Sanabria et al. 2013).

Other external factors that can influence fertilizer quality include characteristics of fertilizer markets, fertilizer distributors, storage conditions, and fertilizer products. For example, 68% of caking in urea and NPK 15-15-15 compound in Benin (2014) was due to hot and humid storage conditions and bag stacks more than 20 bags high. Market characteristics, such as concentration of dealers and location, also matter as isolated dealers and non-permanent markets had samples with more nutrient content OOC than dealers operating within a market or markets in a permanent location (Ghana, 2010).

These assessments, particularly those carried out in 2010, provided references to develop a harmonized regional legal framework for controlling the quality of fertilizers traded within the ECOWAS zone.

Table 1. Frequency of Nutrient Content OOC for Major Fertilizers Commercialized in West Africa

Type of Manufacture	Fertilizer Grade	Number of Samples	Nutrient Content OOC* in One or More Nutrients (%)
West Africa 2010-2013: Côte d'Ivoire, Ghana, Nigeria, Senegal, and Togo			
Bulk Blends	NPK 15-15-15	106	51
	NPK 20-10-10	90	86
	NPK 6-20-10	30	12
	NPK 15-10-10	27	96
	Asaase Wura (NPK 0-22-18+9CaO+7S+5MgO)	23	31
	Cocoa Feed (NPK 0-30-20)	27	26
Compound/ Straight Products	NPK 15-15-15	356	10
	Ammonium Sulfate	340	16
	NPK 16-16-16	162	15
	NPK 23-10-5	103	1
	Sulfan (NPK 24-0-0+6S)	89	3
	Urea	534	4
West Africa 2014-2016: Mali			
Bulk Blends	NPK 15-15-15, NPK 15-15-15+4S, NPK 15-15-15+6S	47	92
Straight Products	DAP	25	17
	Urea	26	11
West Africa 2014-2016: Benin, Burkina Faso, and Liberia			
Bulk Blends	NPK 15-15-15	24	38
	NPK 15-15-15+6S+1B	24	38
	NPK 14-23-14+6S	43	30
	NPK 14-23-14+5S+1B	36	11

¹³ The frequency of deliberate underweighted bags was estimated by subtracting the average random error committed filling and weighing the bag from the frequency of having bags underweighted by more than -0.5 kg.

Compound/ Straight Products	NPK 23-10-5+3S+2MgO+0.3Zn	57	0
	Urea	136	22

* The nutrient content OOC is assessed using the regulation and tolerance limits adopted by ECOWAS.

Source: IFDC, 2013 and 2018-19 (data from baseline fertilizer quality assessments).

Table 2. Bag Weight OOC in West Africa: Percentage of Fertilizer Bags Underweight by at Least 0.5 kg

Country	Number of Bags Sampled	Bag Weight OOC (%)*
Côte d'Ivoire	18	28
Ghana	560	12
Nigeria	174	41
Senegal	146	13
Togo	157	6
Mali ¹⁴	97	13
Burkina Faso ¹⁵	277	23
Benin	136	31
Liberia	31	0

* The tolerance limit suggested by ECOWAS for weight departure from the label-specified net weight is 1% of the bag weight, hence 0.5 kg for 50-kg bags. Since bag weights reported in most assessment questionnaires are integers with no decimals, 1.0 kg was adopted as the weight at which a fertilizer bag starts to be out of weight compliance.

Source: IFDC, 2013 and 2018-19 (data from baseline fertilizer quality assessments).

The Current State of Implementation of 2012 Regional Regulations in West Africa

In order to address many of the challenges that constrain availability and use of fertilizer in the region, the ECOWAS and UEMOA¹⁶ Commissions embarked, starting in 2010, on the development of a regional legal framework that harmonizes national regulations governing fertilizer trade and quality control under the framework of the IFDC-implemented, joint ECOWAS and UEMOA project entitled “Marketing Inputs Regionally (MIR) Plus.” This resulted in the adoption of the Regulation C/REG.13/12/12 relating to fertilizer quality control in the ECOWAS region in December 2012 for effective implementation and enforcement by all national governments.

Furthermore, four implementing regulations were adopted in 2016:

1. Roles, organization, and functioning of the West Africa Committee for Fertilizer Control (WACoFeC).
2. Labeling standards and tolerance limits for fertilizers.
3. Inspection of fertilizers.
4. Analysis of fertilizers.

With a mandate given by the ECOWAS Commission in April 2013 to facilitate implementation of the regional fertilizer regulations at the country level, IFDC, through the West Africa Fertilizer Program

¹⁴ IFDC report on Fertilizer Quality Assessment in Mali (in preparation).

¹⁵ IFDC report on Fertilizer Quality Assessment in Burkina Faso, Benin, and Liberia (in preparation).

¹⁶ Union Economique et Monétaire Ouest Africaine (UEMOA) or West Africa Economic and Monetary Union.

(WAFP),¹⁷ has supported ECOWAS and its Member States to adopt and implement these regional regulations.¹⁸ As a result of this assistance, the status of implementation stands to date as follows and is summarized in Table 3:

- Twelve Member States (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Niger, Senegal, Sierra Leone, Gambia, and Togo) have published the main ECOWAS regulation in their national gazettes.
- National advisory (technical) committees/councils in charge of advising the Ministers of Agriculture on policies and regulations for development of fertilizer manufacture, inspection, sampling, analysis, and marketing were also established/reinforced in six countries (Burkina Faso, Ghana, Mali, Niger, Nigeria, and Senegal).
- The 12 Member States that have published the main regulation in their respective gazettes, plus Cape Verde and Nigeria, have developed at least one country-specific legal instrument/procedure for alignment to harmonized regional quality control rules.
- Nine countries (Benin, Burkina Faso, Ghana, Guinea, Mali, Niger, Senegal, Sierra Leone, and Togo) out of these 12 have adopted at least one country-specific legal instrument/procedure and aligned it to harmonized regional quality control rules.

Table 3. Implementation of Regional Fertilizer Regulations at the National Level

Countries by Tier	Broad Characteristics
Tier 1: Much to be done <u>8 countries:</u> Côte d'Ivoire, Cape Verde, Gambia, Guinea, Guinea Bissau, Liberia, Sierra Leone, Senegal	<ul style="list-style-type: none"> • Formal regulatory system for fertilizer not in place. • Registration and licensing sometimes done by the Ministry of Agriculture or Ministry of Commerce/Trade. • Quality control sometimes done by standard board or environmental agency. • Limited awareness of the regional regulations among key stakeholders including many government officials.
Tier 2: Some progress <u>4 countries:</u> Benin, Niger, Nigeria, Togo	<ul style="list-style-type: none"> • Legal framework consistent with ECOWAS rules in place (Benin, Niger, and Togo) or finalized and awaiting approval (Nigeria). • Limited implementation of some aspects of the regulations including quality inspections. • Most regulatory staff identified and/or appointed, but not all trained or operational. • National laboratory identified and/or designated with some capacity for fertilizer analysis. • Good progress with sensitization of key stakeholders (Benin, Niger).
Tier 3: Almost there <u>3 countries:</u> Burkina Faso, Ghana, Mali	<ul style="list-style-type: none"> • Legal framework mostly consistent with ECOWAS regulations already in place. A review of national legislation for full alignment to ECOWAS legal framework needed. • National laboratory appointed and staffed, capacity improvements ongoing. Limited laboratory operations but contracting with private and public laboratories for fertilizer testing (Ghana). • Measures taken or being taken for monitoring and tracking inspection and general compliance of fertilizer shops (license validity, packaging, labeling, and bag weights). • Systems developed or being developed for registration, import, and license renewal.

Source: Adapted from WAFP, 2014 and World Bank Group, 2015.

¹⁷ The WAFP project, a USAID/West Africa-funded project (2012-2017) implemented by IFDC, aimed to increase regional availability and use of appropriate fertilizers in West Africa in support of ECOWAS agricultural policies.

¹⁸ The application process consists of four concrete steps from publishing the ECOWAS regulations in national official gazettes to taking appropriate measures to implement and enforce the adopted regulations.

Table 3 shows the wide disparity across Member States with respect to the full setting of an effective regulatory framework, despite progress made at the regional level in completing regulations enforceable in all Member States.¹⁹ Several implications can be derived on policy and research grounds on what is left, needed, and can be expected as outcomes or impacts on the fertilizer market at the regional level through interlinked national markets when all Member States effectively enforce the regulations.

Key Implications

Policy-Related

Quality Control Capacity

Many ECOWAS Member States still lack necessary technical, human, equipment, and financial resources for effective implementation of the harmonized regional legal framework. Therefore, political commitment and allocation of adequate resources as well as capacity building are key to enforcement and successful implementation.

Quality control systems must ensure that the principle of truth-in-labeling is a reality. However, most laboratories designated for fertilizer testing under the Ministries of Agriculture in West Africa are very familiar with soil, plant tissue, and water analyses, and lack the specifics about fertilizer testing in addition to relevant equipment and qualified staffing to some extent.

Quality control being a governmental oversight responsibility should be extended to public fertilizer tendering systems and subsidy programs when applicable. Quality problems associated with bulk-blended products require that particular attention be paid to strategies to enhance manufacturing knowledge and equipment, particularly for making blends.

Building Capacity of Fertilizer Suppliers

Fertilizer dealer characteristics, such as knowledge and training about fertilizers, type of distributor, and possession of license to sell fertilizers, are equally important indicators of fertilizer quality. Unlicensed retail dealers who sell mainly to small-scale farmers and have no knowledge or training about fertilizers presented a higher frequency of samples of nutrient content OOC. Therefore, appropriate actions should be taken to reverse this trend, including training for fertilizer distributors on various technical topics (appropriate handling of fertilizer products, physical and chemical properties of fertilizers, appropriate storage of fertilizer products, good business practices) and enhancing manufacturing knowledge and equipment for manufacturing blends.

Findings also suggest to policymakers that, while promoting greater fertilizer use, it is sound policy to enforce quality control and promote fair competition among sellers that ensures farmers get what they pay for and encourage further quality fertilizer use.

Private Sector Engagement in Supply Chains

The regulatory objective of protecting fertilizer companies involved in product manufacture, blending, importation, and distribution should be extensive enough to detect any unlawful practices. Protection afforded to fertilizer companies relieves them of the necessity of self-defense and allows them to

¹⁹ Note that national fertilizer laws were passed in Burkina Faso, Mali, and Ghana in 2007, 2008, and 2010, respectively, before the 2012 ECOWAS regulations. The ECOWAS regulation takes precedence over them, but some harmonization is needed in each country.

concentrate on their core responsibility of delivering quality fertilizers and innovative services to their clientele. By establishing effective and reliable fertilizer regulatory systems, governments thereby ensure that all participants in the fertilizer supply chain can make informed business decisions on quality fertilizer manufacture, blending, and sales. Private sector investors would also benefit from such oversight and enjoy farmer confidence leading to increased sales and incomes, hence increased investments in the fertilizer industry. Partnerships between public and private sectors and self-regulation by the private sector are essential elements for a successful implementation of the regulatory framework. Hence, the private sector can actively participate in improving regulatory oversight and trade regulations by having representation on national committees for fertilizer control as one of the key and front-line players while participating in the WACoFeC meetings, depending on issues for discussion, as prescribed.

Research Implications

Research activities focusing on the current ECOWAS regulatory framework will zero-in on quality issues and the impact of poor-quality fertilizers. These activities will include, but are not limited to, the following:

- Assess the current fertilizer legal and regulatory environment and the fertilizer value chain.
- Strengthen the capacity of ECOWAS Member States to adopt complementary, country-specific, supporting legal instruments and implement and enforce the harmonized ECOWAS regulations.²⁰
- Conduct studies to identify the origin of the quality problems of bulk-blended fertilizers, to assess whether the regulatory framework allows West African fertilizer markets to appropriately handle both compounds and blended fertilizers, and to propose appropriate policy and regulatory solutions.
- Analyze the economic impact of frequent poor-quality fertilizer found in West African countries.

References

- ECOWAS Commission. 2012. *Regulation C/REG.13/12/12 relating to Fertilizer Quality Control in the ECOWAS Region*, Abidjan, Côte d'Ivoire.
- ECOWAS Commission. 2016. *Regional Agricultural Investment Programme for Food Security and Nutrition*, Draft document to Consultative Committee for Food and Agriculture, Abuja, Nigeria.
- IFDC Marketing Inputs Regionally (MIR Plus) Project. 2014. *End-of-Project Report*.
- IFDC West Africa Fertilizer Program. 2017. *Final Report*.
- IFDC. 2018/19 (forthcoming). Country Policy Briefs on “Assessment of Quality of Fertilizer Marketed in Benin, Burkina Faso, Cote d'Ivoire, Ghana, Liberia, Mali, Nigeria, Senegal and Togo,” Muscle Shoals, AL.
- IFDC. 2019 (forthcoming). *Fertilizer Quality Assessment in Benin, Burkina Faso and Liberia*, Muscle Shoals, AL.
- IFDC. 2019 (forthcoming). *Fertilizer Quality Assessment in Mali*, Muscle Shoals, AL.
- Keyser, J.C., M. Eilitta, G. Dimithe, G. Ayoola, and L. Sene. 2015. *Towards an Integrated Market for Seeds and Fertilizers in West Africa*, The World Bank, Washington, D.C.
- Sanabria, J., G. Dimithe, and E.K.M. Alognikou. 2013. *The Quality of Fertilizer Traded in West Africa: Evidence for Stronger Control*, IFDC, Muscle Shoals, AL.

²⁰ Capacity strengthening needs will be determined from the assessment of the regulatory environment, which will also cover the quality of existing laboratories in the region.

Annex 3 Two-Country Workshop Reports

Highlights of Two-Country Workshop on “Facilitating Development of Country Specific Fertilizer Supporting Regulations”

Held in Conakry, Guinea on March 25-29, 2019

Sierra Leone is enhancing its policy environment to allow agriculture and a vibrant fertilizer private sector to develop. As part of the efforts to get there, the country published the ECOWAS Fertilizer Regulation C/REG.13/12/12 relating to fertilizer quality control in its National Gazette in June 2017, and the national assembly passed the National Fertilizer Regulatory Agency Act, 2017 in November 2017.

Within this context, a two-country (Sierra Leone and the Gambia) workshop aimed at drafting prescribed country-specific regulations that support the harmonized ECOWAS Regulation C/REG.13/12/12 was held in March 2019. The 5-day workshop was facilitated by the Feed the Future “Enhancing Growth through Regional Agriculture Input Systems (EnGRAIS)” project for West Africa, implemented by the International Fertilizer Development Center (IFDC), and saw the participation of a resource person from Ghana’s Ministry of Food and Agriculture, high ranking officials from government ministries, and departments from The Gambia and Sierra Leone. Sierra Leone had ten nominees representing the Ministry of Agriculture and Forestry (MAF), Ministry of Trade and Industry (MTI), Ministry of Justice, the private sector, the National Federation of Farmers, and the Environmental Protection Agency.

The participating country delegates drafted key supporting regulations by using templates provided by EnGRAIS. They were aided in the task by discussion sessions where participants learned from experience from other countries and made sure that the regulations produced reflected realities on the ground.

Three notable outcomes resulted from the workshop:

- i. Shortcomings of the National Fertilizer Regulatory Agency Act, 2017 were identified, and recommendations were made for amendment;
- ii. First drafts of country-specific supporting regulations and administrative forms for inspection, sampling, quality assessment, and testing of fertilizer were developed, as per provisions of ECOWAS Regulation C/REG.13/12/12; and
- iii. Roadmaps and timelines defining the next steps towards effective implementation of the Regulation were proposed, with special reference to Government’s commitment to fast-track the relevant processes.

In addition to these outcomes, recommendations listed in the table below were made to further enhance the fertilizer sector:

Organization	Recommendations
IFDC and ECOWAS	<ol style="list-style-type: none">1. IFDC/EnGRAIS to provide technical assistance for finalization of the Conakry draft documents and for further capacity building of key stakeholders and required facilities.2. ECOWAS/EnGRAIS to follow up on implementation of the proposed actions and provide support.3. Facilitate the organization of exchange visits between ECOWAS Member States and/or outside the region to share experiences and learning on the functioning of fertilizer regulatory systems.

Organization	Recommendations
	<ol style="list-style-type: none"> 4. Develop with the Government project proposals for mapping soil fertility, developing agro-dealership, and upgrading national laboratories to analyze fertilizers, pesticides, seeds, and soils. 5. Undertake actions identified so far: presentation of meeting outcomes, preparation of explanatory notes, development/review of supporting regulations, and lobbying before the competent authorities.
Government of Sierra Leone	<ol style="list-style-type: none"> 1. SLARI to update fertilizer recommendations for the various agro-ecological zones and crops. 2. Strengthen collaboration between extension, research, and farmers for increased use of fertilizers.

Highlights of Two-Country Workshop on “Facilitating Development of Country Specific Fertilizer Supporting Regulations”

Held in Conakry, Guinea on March 25-29, 2019

The Gambia is seeking to enhance its policy environment to allow agriculture and a vibrant fertilizer private sector to develop. As part of the efforts to get there, the country published the ECOWAS Fertilizer Regulation C/REG.13/12/12 relating to fertilizer quality control in its National Gazette in October 2016.

Within this context, a two-Country (the Gambia and Sierra Leone) workshop aimed at drafting prescribed country-specific regulations that support the harmonized ECOWAS Regulation C/REG.13/12/12 was held in March 2019. The 5-day workshop was facilitated by the Feed the Future “Enhancing Growth through Regional Agriculture Input Systems (EnGRAIS)” project for West Africa, implemented by the International Fertilizer Development Center (IFDC), and saw the participation of a resource person from Ghana’s Ministry of Food and Agriculture, high ranking officials from government ministries and departments from the Gambia and Sierra Leone. The Gambia had nine (9) nominees representing the Ministry of Agriculture and the relevant departments, the Ministry of Justice, the Strategic Policy and Delivery Department of the Office of the President, the National Coordinating Organization for Farmers’ Association, the Gambia Standard Bureau and the National Environment Agency.

The country delegates drafted key supporting regulations by using templates provided by EnGRAIS. They were aided in the task by discussion sessions where participants learned from experience from other countries and made sure that the regulations produced reflected realities on the ground.

Three notable outcomes resulted from the workshop:

- iv. Propositions to amend the current draft Gambia Plant Protection Bill to include fertilizers and to formally designate a regulatory body for the fertilizer sector were made;
- v. First drafts of country-specific supporting regulations and administrative forms for inspection, sampling and quality assessment and testing of fertilizer were developed, as per provisions of ECOWAS Regulation C/REG.13/12/12; and
- vi. Roadmaps and timelines defining the next steps towards effective implementation of the Regulation were proposed, with special reference to Government’s commitment to fast-track the relevant processes.

In addition to these outcomes, recommendations listed in the table below were made to further enhance the fertilizer sector:

Organization	Recommendations
IFDC and ECOWAS	<ol style="list-style-type: none"> 1. IFDC/EnGRAIS to provide technical assistance for finalization of the Conakry draft documents and for further capacity building of key stakeholders and required facilities. 2. ECOWAS/EnGRAIS to follow up on implementation of the proposed actions and provide support. 3. Facilitate the organization of exchange visits between ECOWAS Member States and/or outside the region to share experiences and learning on the functioning of fertilizer regulatory systems. 4. Develop with the Government project proposals for mapping soil fertility, developing agro-dealership, and upgrading national laboratories to analyze fertilizers, pesticides, seeds, and soils. 5. Undertake actions identified so far: presentation of meeting outcomes, preparation of explanatory notes, development/review of supporting regulations, and lobbying before the competent authorities.
Government of the Gambia	<ol style="list-style-type: none"> 1. NARI to update fertilizer recommendations for the various agro-ecological zones and crops. 2. Strengthen collaboration between extension, research, and farmers for increased use of fertilizers.

Annex 4 Performance Indicator Table

Indicator	Type	Unit	FTF or Custom	Disaggregation	Baseline	FY19 Target	FY19 Achievement					% of FY19 Target	Total	Remarks
							Q1	Q2	Q3	Q4	Total		LOP	
SO: Regional availability and use of appropriate fertilizers sustainably increased														
Ind. 1 - Volume (MT) of apparent fertilizer consumption in ECOWAS member countries.	Impact	MT	Custom	ECOWAS Region	2,521,000	2,571,420	0	0	0	0	3,276,409 (30% increase)	130%	10%	Reasons for increase of apparent consumption by 30% against a 2% target for FY19 is explained in Annex 5.
Ind. 2 - Average fertilizer price ratio for Urea between FOB and ECOWAS Member States' retail prices	Impact	%	Custom	ECOWAS Region	2.60	2.55	0	0	0	0	1.64 (37% decrease)	35%	2.34	Reasons for exceeding the 2.55 target set for the weighted average price ratio in West Africa is explained in Annex 5.
Ind. 3 - EG.3.1-14 Value of new USG commitments and private sector investment leveraged by the USG to support food security and nutrition	Output	\$	FTF	Total	0	1,000,000	-	-	-	20,103,401	\$20,103,401	201,034%	\$30 million	Target of \$1 million was far exceeded because of the support and advice EnGRAIS gave to MOFA in Ghana for the GFEP for subsidized fertilizer to be blended locally. The Ghana private sector partner leveraged amount was \$19.47 million. This was blended by Glofert and Yara. In addition, the USG commitment amount (grant) amounted to over \$630,674.
				USG Commitment amount	0	200,000	-	-	-	630,674	\$630,674	31,534%	\$350,000	
				Private Sector Partner leveraged amount	0	800,000	-	-	-	19,472,727	\$19,472,727	243,409%	\$29,650,000	
Ind. 4: EG.3.2 Number of	Output	#	FTF (GFSS)	Total by Type of	0	756	109	161	194	45	509	67.3%		The overall target was not achieved because

individuals participating in USG food security programs [IM-level]				Individual and by sex										of the over-estimation of the expected participation of in Civil Society at EnGRAIS organized events. In addition, the participants at IR2-organized events included those sponsored by CORAF, and to avoid double counting, those participants were not counted here. Otherwise all other sub-targets for this indicator were achieved.
				People in Government	0	66	22	52	39	1	114	172.7%		
				Men	0	56	17	46	33	1	97	173.2%		
				Women	0	10	5	6	6	0	17	170.0%		
				Proprietor s of USG-assisted private sector firms	0	211	64	107	129	30	330	156.4 %		
				Men	0	196	61	96	110	26	293	149.5 %		
				Women	0	15	3	11	19	4	37	246.7%		
				People in Civil Society	0	479	23	2	26	14	65	13.6 %		
				Men	0	418	20	2	26	14	62	14.8 %		
				Women	0	61	3	0	0	0	3	4.9 %		
IR 1: Competitive, inclusive, private sector-led, regional fertilizer market strengthened														
Ind. 1.1.2 - Percentage of WAFA members who have paid their dues on time	Outcome	%	Custom	Members	0	40%	0	0	0		46%	106%	80%	The target was exceeded by 6%.
Ind. 1.2.1 - Number of regional fertilizer logistics and financial plans developed and promoted	Output	#	Custom	Total	0	5	0	0	0		5	100%	9	The targets have been achieved - 3 logistics plans were developed i.e. 1. Build a Logistics Monitoring System, 2. Invest in better port logistics for bulk cargo and 3. Change public policies

				Regional logistics plans developed	0	3	0	0	0		3	100%	5	to promote more efficient import logistics. For financial plans, they include, plans with AfDB and WAFA’s own financial plans to support members
				Financing mechanism s available to WAFA members	0	2	0	0	0		2	100%	4	
IR 2: Appropriate input packages developed and disseminated in cooperation with CORAF														
Ind. 2.1.1 - Number of agro-input packages developed by EnGRAIS and/or CORAF/WECAR D by AEZ as a result of USG Assistance	Output	#	Custom	Steps	0	40	0	0	0	40	40		160	The targets were achieved as 40 agro-input packages were developed for the three AEZs.
				Developed	0	40	0	0	0	40	40	100%	80	
				Made available	0	0	0	0	0	0	0		80	
				Agro-ecological zone	0	40	0	0	0	40	40		80	
				Semi-Arid	0	15	0	0	0	15	15	100%	27	
				Sub-humid	0	15	0	0	0	15	15	100%	27	
				Humid	0	10	0	0	0	10	10	100%	26	
Ind. 2.1.2 - Number of stakeholders who have accessed information on key agro-input packages by type of stakeholder	Output	#	Custom	Type of stakeholde r	0	29	0	0	0	0	0		29	The targets for the stakeholders accessing agro-input information will be achieved during FY20 as the FeSeRWAM from which information will be accessed will be fully functional
				Public sector:	0	21	0	0	0	0	0	N/A	21	
				Private sector:	0	5	0	0	0	0	0	N/A	5	
				Civil society:	0	3	0	0	0	0	0	N/A	3	
Ind. 2.2.1 - Number of agro-input packages disseminated by the Program's partners by AEZ as a result of USG Assistance	Output	#	Custom	Agro-ecological zone	0	0	0	0	0	0	0		80	The dissemination of agro-input packages will begin in FY20
				Semi-Arid	0	0	0	0	0	0	0	N/A	27	
				Sub-humid	0	0	0	0	0	0	0	N/A	27	
				Humid	0	0	0	0	0	0	0	N/A	26	
IR 3: Fertilizer policy and regulatory environments across West Africa improved and harmonized in accordance with ECOWAS guidance														

Ind. 3.1.1 - Number of ECOWAS Member States that have reformed their fertilizer subsidy policies by using the Regional Subsidy Program Guidance	Output	#	Custom	None	0	1	0	0	0	3	3	300%	6	The target has been exceeded as 3 ECOWAS countries (Ghana, Togo and Niger) reformed their fertilizer subsidy policies.
Ind. 3.2.2 - Number of ECOWAS or CILSS Member States that have published regional fertilizer regulations relating to fertilizer quality control in their national gazettes	Outcome	#	Custom	None	13	2	0	0	0	0	0	0%	4	Target could not be achieved because ECOWAS and MS national governments declined to move fast enough on adoption/publishing of regulations.
IR 4: Mobilizing commitment and harmonizing engagement from key stakeholders across West Africa supported by mission buy-ins														
4.1. Number of buy-in agreements signed with bilateral missions to carry out country focused set of activities	Output	#	Custom	None	0	2	0	0	1	1	1	50%	6	Only 1 buy-in in Senegal was obtained while 2 were targeted
4.2 - Amount of additional resources obtained per country through buy-ins	Output	\$	Custom	Countries	0	2	0	0	0	0	0		5,500,000	The target has been exceeded because of the \$8 million buy-in in Senegal
				Ghana	0	0	0	0	0	0	0		1,000,000	
				Mali	0	0	0	0	0	0	0		1,000,000	
				Niger	0	0	0	0	0	0	0		500,000	
				Nigeria	0	1	0	0	0	0	0		1,000,000	
				Senegal	0	1	0	0	0	\$8 million	\$8 million	800%	1,000,000	
				Others	0	0	0	0	0	0	0		1,000,000	

Annex 5 Explanation on Performance Indicators 1-2

Indicator 1: Volume (MT) of apparent fertilizer consumption in ECOWAS member countries.

Reasons for increase of apparent consumption of fertilizer by 30% in West Africa against the 2% target set for FY19:

a. Two subsidies introduced by the Ghanaian Government in 2017 increased 2018 supply.

In Ghana, the fertilizer market largely depends on the size of GoG subsidies. The normal market size is around 250,000 to 300,000, but the new administration launched a new subsidy program called the PFJ in Q2 of 2017 whilst the normal fertilizer subsidy program was launched earlier in Q1 of 2017. The two subsidy programs brought in more fertilizers, and there were carryover stocks into the following year, thus increasing the overall supply.

b. Subsidy program introduced in Nigeria in 2017 increased 2018 supply.

Nigeria, in trying to revive their fertilizer blending industry, launched the Presidential Fertilizer Initiative (PFI) in 2017 and sourced urea from local production. At the same time, phosphate was sourced from OCP through the government, and potash was imported and blended for local consumption. Nigeria also had a lot of carryover stocks from 2017 into 2018 and that increased supply.

Indorama, a fertilizer manufacturing company in Nigeria, produced large quantities (over 1.3 million tons) of urea in 2018 and supplied to the Nigerian market. Indorama started production of urea in June, and Notore, another Nigerian manufacturer, was also producing urea in 2018. During 2017, Indorama had also been producing all year, thereby increasing urea supply to the Nigerian market in 2018.

c. Increase of supply of fertilizer on Malian market.

Mali had a huge increase in fertilizer brought into the Malian market in 2016 as a result of increases in demand for a new irrigated area of about 24,609 hectares due to a Presidential Initiative as well as a newly introduced subsidy program. Since then, imports of fertilizer have progressively increased in Mali, rapidly increasing their apparent consumption of fertilizers.

Indicator 2: Average fertilizer price ratio for Urea between FOB and ECOWAS Member States' retail prices

There are key reasons for the reduction far below the 2.55 target set for the weighted average price ratio in West Africa – 1.64 was achieved in FY19. The weighted average price of urea in 2018 in West Africa was 1.64 which fell below the target of 2.55 set for FY19. This was as a result largely of influence from cheaper Ghana and Nigeria urea fertilizer prices. The ratios of urea price in Ghana and Nigeria were 1.46 and 1.47, respectively, meaning that their prices were closer to the World (FOB) price than other West African countries.

Annex 6 FY19 Staff Travel Report

Name	Destination	Departure	Return	Purpose
Sansan Youl	Dakar – Ouagadougou - Dakar	28/10/2018	1/11/2018	Attend and facilitate the Agro-Input Package Development and Dissemination Strategy Workshop, October 30-31 Ouagadougou, Burkina Faso
Robin Wheeler	Accra - Ouagadougou - Accra	29/10/2018	1/11/2018	
Christian Amedo	Accra - Ouagadougou - Accra	29/10/2018	1/11/2018	
Fred Gyasi	Accra - Ouagadougou - Accra	29/10/2018	1/11/2018	
Ekwe Dossa	Lomé - Ouagadougou - Lomé	29/10/2019	1/11/2018	
Diyana Bawiena	Accra - Abidjan - Ouagadougou - Accra	22/10/2018	2/11/2018	Participate in the Meeting with AFFM/AfDB and WAFA on financing mechanisms and policy advocacy Plan and assist at the meeting with private and public stakeholders on CIV fertilizer regulations and markets WAFA strategic workshop
Emmanuel Alognikou	Lomé - Abidjan - Lomé	22/10/2018	27/10/2018	
Demba Doua Diallo	Bamako - Ouagadougou - Bamako	29/10/2019	1/11/2018	Attend and facilitate the Agro-Input Package Development and Dissemination Strategy Workshop, October 30-31
Sansan Youl	Dakar - Accra - Dakar	11/11/2018	13/11/2018	Attend GFVCOS Presentation organized within the GFEP framework
Emmanuel Alognikou	Lomé - Accra - Lomé	11/11/2018	16/11/2018	Attend the Presentation of the IFDC-facilitated GFVCOS. Meet with CropNuts on introduction of a spectral fertilizer quality testing method, as a pilot in Ghana. Work with D. Bawiena on preparations for up-coming UEMOA experience sharing workshop. Attend the meeting with the Acting CEO.
Patrice Annequin	Abidjan - Accra - Abidjan	11/11/2018	17/11/2018	Attend OCP / GoG / MoFA meetings (GFVCOS). Attend series of meetings with Pat Murphy, Acting IFDC CEO.

Patrice Annequin	Abidjan - Ouagadougou - Abidjan	18/11/2018	22/11/2018	WAFA 2nd strategy workshop EnGRAIS / UEMOA workshop on fertilizer regulations
Bernardin Gatete	Accra - Ouagadougou - Accra	18/11/2018	21/11/2018	
Robin Wheeler	Accra - Ouagadougou - Accra	19/11/2018	22/11/2018	
Emmanuel Alognikou	Lomé - Ouagadougou - Lomé	19/11/2018	25/11/2018	EnGRAIS / UEMOA workshop on fertilizer regulations and side meetings
Sansan Youl	Dakar - Banjul - Dakar	2/12/2018	8/12/2018	Attend the Food Crisis Prevention Network RPCA- AGIR annual meeting and others side meetings
Robin Wheeler	Accra - Banjul - Accra	5/12/2018	8/12/2018	
Patrice Annequin	Abidjan - Accra - Abidjan	2/12/2018	6/12/2018	Attend OCP / GoG / MoFA meetings (GFVCOS)
Diyana Bawiena	Accra - Abidjan - Accra	14/12/2018	22/12/2018	Prepare and Participate in the regional workshop to develop a concept note and roadmap for posting online regional agricultural input recommendation and agro- input packages maps for West Africa
Sansan Youl	Dakar - Abidjan - Dakar	15/12/2018	22/12/2018	
Andre Bationo	Accra - Abidjan - Accra	17/12/2018	21/12/2018	
Andy Thigpen	Alabama - Abidjan - Alabama	14/12/2018	21/12/2018	
Ekwe Dossa	Lomé - Abidjan - Lomé	17/12/2018	21/12/2018	
Daniel Mensah	Accra - Abidjan - Accra	17/12/2018	22/12/2018	
Christian Amedo	Accra - Abidjan - Accra	17/12/2018	22/12/2018	
Harrison Abu	Accra - Abidjan - Accra	17/12/2018	22/12/2018	
Demba Doua Diallo	Bamako - Abidjan - Bamako	17/12/2018	21/12/2018	
Christian Amedo	Accra - Dakar - Accra	21/01/2019	24/01/2019	Participate in a Technical Planning and Coordination Workshop on Agri-Inputs and Ag Technologies for USAID/WA key partners
Robin Wheeler	Accra - Dakar - Accra	21/01/2019	24/01/2019	
Emmanuel Alognikou	Lomé - Dakar - Lomé	21/01/2019	24/01/2019	
Oumou Camara	Accra - Dakar - Accra	21/01/2019	24/01/2019	CORAF/PAIRED, IFDC/EnGRAIS, and AGRA/PIATA issues
Diyana Bawiena	Accra - Bamako - Accra	10/2/2019	16/02/2019	
Robin Wheeler	Accra - Bamako - Accra	12/2/2019	15/02/2019	
Christian Amedo	Accra - Bamako - Accra	12/2/2019	15/02/2019	

Fred Gyasi	Accra - Bamako - Accra	12/2/2019	15/02/2019	Participate in the WAFA AGM in Bamako
Sansan Youl	Dakar - Bamako -	12/2/2019	16/02/2019	
Patrice Annequin	Abidjan - Bamako - Abidjan	11/2/2019	15/02/2019	
Olive M'Bahia	Abidjan - Bamako - Abidjan	11/2/2019	15/02/2019	
Samuel Goulivas	Abidjan - Bamako - Abidjan	11/2/2019	15/02/2019	
Sansan Youl	Bamako - Abidjan - Dakar	17/2/2019	21/02/2019	Attend the IPNI West Africa Program launching workshop
Robin Wheeler	Accra - Marrakech - Accra	26/2/2019	2/3/2019	Participate in the Argus Africa Fertilizer Conference
Patrice Annequin	Abidjan - Marrakech - Abidjan	26/2/2019	2/3/2019	
Oumou Camara	Accra - Dakar - Accra	26/2/2019	28/3/2019	Attend a meeting with USAID/ Senegal regarding a possible buy-in
Emmanuel Alognikou	Lomé - Accra - Lomé	10/3/2019	15/3/2019	Attend the regional brainstorming session
Ekwe Dossa	Lomé - Accra - Lomé	10/3/2019	13/3/2019	
Sansan Youl	Dakar - Accra - Dakar	10/3/2019	13/3/2019	
Amadou Ouadidje	Bamako - Accra - Bamako	10/3/2019	13/3/2019	
Demba Doua Diallo	Bamako - Accra - Bamako	10/3/2019	13/3/2019	
Olive M'Bahia	Abidjan - Accra - Prampram - Abidjan	10/3/2019	13/3/2019	IFDC/EnGRAIS inception have a meeting with team Meetings with private sector partners for the cost build up study. Attend the GFSS brainstorming regional workshop and the FTWG (Nigeria & Ghana)
Kido Kouassi				
Robin Wheeler	Accra - Abuja - Accra	18/3/2019	21/3/2019	Introduce new SRC, Kido Kouassi to and meet with key EnGRAIS partners in Nigeria: WAFA Vice-President, NFTC, AGRA, FEPSAN, FISS/FMARD, ECOWAS, and WAAPP
Emmanuel Alognikou	Lomé - Abuja - Lomé	18/3/2019	22/3/2019	
Kido Kouassi	Abidjan - Abuja - Abidjan	18/3/2019	22/3/2019	
Salasi Idris	Abuja - Conakry - Abuja	18/3/2019	21/3/2019	Plan and deliver 2-country workshop for Gambian and Sierra Leonean reps to develop
Diyana Bawiena	Accra - Conakry - Accra	18/3/2019	21/3/2019	

Emmanuel Alognikou	Lomé - Conakry - Lomé	23/3/2019	2/4/2019	country-specific fertilizer supporting regulations, aligned to the harmonized ECOWAS framework; hold side meeting with the fertilizer regulatory body in Guinea to follow-up on implementation activities and issues.
Kido Kouassi	Abidjan - Conakry -	23/3/2019	2/4/2019	
Kido Kouassi	Conakry - Abuja - Abidjan	2/4/2019	4/4/2019	Attend Joint WAFA -FEPSAN Meeting
Kido Kouassi	Abidjan - Abuja	11/4/2019		Relocation to Abuja
Christian Amedo	Accra - Dakar - Accra	8/4/2019	11/4/2019	Consultations with PAIRED on MEL issues
Diyana Bawiena	Accra - Lomé - Accra	22/04/2019	30/04/2019	Prepare and participate in WAFF 2019 and the EnGRAIS staff retreat
Christian Amedo	Accra - Lomé - Accra	23/04/2019	28/04/2019	Participate in WAFF 2019 and the EnGRAIS staff retreat
Robin Wheeler				
Daniel Nana Sei Mensah				
Bernardin Gatete				
Fred Gyasi				
Olive M'Bahia	Abidjan - Lomé - Abidjan			
Patrice Annequin	Abidjan - Lomé - Abidjan	24/04/2019	28/04/2019	
Kido Kouassi	Abuja - Lomé - Abuja	23/04/2019	28/04/2019	
Doua Demba Diallo	Bamako - Lomé -Bamako	23/04/2019	28/04/2019	
Patrice Annequin	Abidjan - Accra - Abidjan	14/05/2019	17/05/2019	Work on GoG/MoFA final GFVCOS inputs and report
Kido Kouassi	Abuja - Accra - Abuja	15/05/2019	17/05/2019	
Patrice Annequin	Abidjan - Accra - Abidjan	26/05/2019	31/05/2019	Participate in IFDC international training [balanced crop nutrition] as trainer / session chair
Emmanuel Alognikou	Lomé - Accra - Lomé	27/05/2020	4/6/2020	Participate in and deliver presentation at the IFDC international training on "Bringing Balanced Fertilizers to Small Scale Farmers" (May 27-29). Work directly with

				EnGRAIS staff on key activities (May 30-June 4).
Oumou Camara	Accra - Dakar - Accra	6/6/2019	8/6/2019	Facilitate/participate in Senegal Dundël suuf co-design workshop
Diyana Bawiena	Accra - Dakar - Accra	5/6/2019	8/6/2019	
Robin Wheeler	Accra - Dakar - Accra	6/6/2019	8/6/2019	
Andre Bationo	Accra - Dakar - Accra	6/6/2019	8/6/2019	
Kofi Debrah	Accra - Dakar - Accra	6/6/2019	12/6/2019	
Kuukua Ghunney	Accra - Dakar - Accra	6/6/2019	12/6/2019	
Christian Amedo	Accra - Dakar - Accra	6/6/2019	8/6/2019	
Patrice Annequin	Abidjan - Dakar - Abidjan	6/6/2019	8/6/2019	
Emmanuel Alognikou	Lomé - Dakar - Lomé	6/6/2019	8/6/2019	Validation of improved fertilizer recommendations data to update the FeSeRWAM for Anglophone countries
Ekwe Jean Dossa	Lomé - Abuja - Lomé	9/6/2019	12/6/2019	
Fred Gyasi	Accra-Abuja-Accra	8/6/2019	13/6/2019	
Samuel Arthur		8/6/2019	13/6/2019	
Sansan Youl	Dakar - Abuja - Dakar	8/6/2019	13/6/2019	
Diyana Bawiena		8/6/2019	13/6/2019	
Christian Amedo	Accra - Abidjan - Accra	17/6/2019	28/6/2019	Update and adjust WAFA/EnGRAIS Workplan (17-21 June); validate improved seed and fertilizer recommendations data to update the FeSeRWAM for Francophone Countries (24-28 June 2019)
Diyana Bawiena	Accra - Abidjan - Accra	17/6/2019	28/6/2019	
Fred Gyasi	Accra - Abidjan - Accra	17/6/2019	28/6/2019	
Samuel Arthur	Accra - Abidjan - Accra	23/6/2019	28/6/2019	Update the FeSeRWAM with new recommendations data to for Francophone Countries (24-28 June 2019).
Robin Wheeler	Accra - Abidjan - Accra	23/6/2019	26/6/2019	Participate in the sub-regional workshop for the validation of improved seed and fertilizer recommendations data to update the FeSeRWAM for Francophone countries.

Sansan Youl	Dakar - Abidjan - Dakar	22/6/2020	4/7/2019	Participate in the Sub-Regional Workshop for the validation of improved seed and fertilizer recommendations data to update the FeSeRWAM for Francophones countries. Side meeting with partners and attend the Africa Rice invitation
Felix Deyegbe	Accra - Abidjan - Dakar - Accra	4/8/2019	17/08/2019	Participate in the technical validation meeting for the Nitidae cost build up studies and the FeSeRWAM Regional Validation Workshop
Robin Wheeler	Accra - Dakar - Accra	14/8/2019	17/08/2019	
Diyana Bawiena	Accra - Dakar - Accra	7/8/2019	17/08/2019	Planning pre/during and post of the Regional Validation Workshop “FeSeRWAM”
Diyana Bawiena	Accra - Abidjan - Accra	25/08/2019	28/08/2019	Participate in EnGRAIS staff retreat in Abidjan
Christian Amedo	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Robin Wheeler	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Felix Deyegbe	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Samuel Arthur	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Victorine Goly	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Fred Gyasi	Accra - Abidjan - Accra	25/08/2019	28/08/2019	
Kido Kouassi	Abuja - Abidjan - Abuja	25/08/2019	28/08/2019	
Sansan Youl	Dakar - Abidjan - Dakar	25/08/2019	28/08/2019	
Bernardin Gatete	Cotonou - Abidjan - Cotonou	25/08/2019	28/08/2019	
Kido Kouassi	Abidjan - Accra - Abuja	1/9/2019	7/9/2019	Meeting with MoFA for subsidy and lab assessments preparation; meeting with IFA, Prem, AFO and Development Gateway
Patrice Annequin	Abidjan - Accra - Abidjan	3/9/2019	6/9/2019	Participate in AGRF and side meetings with GoG and Ghana fertilizer industry
Patrice Annequin	Abidjan - Accra - Abidjan	23/09/2019	28/09/2019	Meetings with MOFA to assist in the definition of the PFJ 2020 modus operandi

Samuel Arthur	Accra - Dakar - Accra	23/09/2019	28/09/2019	Technical Meeting for Finalization of Initial Agri-Input Packages Across AEZs of West Africa
Emmanuel Alognikou	Lomé - Accra - Lomé	23/09/2019	26/09/2019	Preparation for Ghana 2020 PFJ/Fertilizer Subsidy Program, discussions on personnel issues with COP and Regional Director, and research on ICT applications for improved monitoring of implementation of regulations
Emmanuel Alognikou	Lomé - Abidjan - Lomé	29/09/2019	5/10/2019	Side meetings with EnGRAIS partners: ECOWAS, DGPSA/MINADER, etc. Side meeting with EnGRAIS SRCs and other staff members EnGRAIS Advisory Committee Meeting
Diyana Bawiena	Accra - Abidjan - Accra	30/09/2019	4/10/2019	Participate in WAFFF, EnGRAIS Advisory Committee Meeting and OCR Training for WAFA
Robin Wheeler	Accra - Abidjan - Accra	30/09/2019	3/10/2019	
Christian Amedo	Accra - Abidjan - Accra	30/09/2019	4/10/2019	

Annex 7 Subcontracts in FY19

Name of consultant	Types	Start	End	Amount US\$	Purpose
Catherine L. Alston	Independent consultant	17-Oct-18	30-Jul-19	14,250.00	Report Writer/Editor
Isaac Alvin Amoah	Independent consultant	3-Sep-18	15-Oct-18	*3,657.60	GFVCOS Consultancy Focus: Ghana fertilizer market and cost build up analysis
Eli Gaveh	Independent consultant	3-Sep-18	15-Oct-18	*8,814.47	GFVCOS Consultancy Focus: Fertilizer blending market development & subsidy scheme analysis
Binta Ceesay Etim	Independent consultant	3-Sep-18	15-Oct-18	*17,500.00	GFVCOS Consultancy Focus: Fertilizer blending market development & subsidy scheme analysis
Knowledge & Skills Training Consultants	Consultant Institution	21-Oct-18	28-Feb-19	9,750.00	Facilitating the Development of WAFA 5-Year Strategic Plan
Nitidæ	Consultant Institution	22-Jan-19	30-Apr-19	99,488.00	Fertilizer Cost build up studies and process maps in West Africa
Samuel Arthur	Independent consultant	14-Jan-19	13-Apr-19	6,600.00	EnGRAIS (MEL) Database Consultant
Samuel Arthur	Independent consultant	15-Apr-19	14-Jul-19	6,600.00	EnGRAIS (MEL) Database Consultant
Atakora Williams Kwame	Independent consultant	30-Apr-19	30-May-19	3,000.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM
Ishaku Yo'ila Amapu	Independent consultant	30-Apr-19	30-May-19	3,000.00	
Prof. Victor Okechukwu Chude	Independent consultant	30-Apr-19	30-May-19	1,750.00	Consultant to Facilitate the workshop to compile improved fertilizer recommendations data to update the FeSeRWAM

Bitrus Dawi Tarfa	Independent consultant	30-Apr-19	30-May-19	3,000.00	Consultant to compile fertilizer recommendations data to update the FeSeRWAM
Fatimata Sy Sawadogo	Independent consultant	25-Apr-19	31-Dec-19	4,384.34	Drafting of an ECOWAS directive for improving fertilizer subsidy programs in West Africa
Dr. DICKO Koulam Mohamed	Independent consultant	12-Jun-19	30-Jun-19	3,774.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
Dr. Jean Ouedraogo	Independent consultant	12-Jun-19	30-Jun-19	3,013.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
Dr. Felix Kouelo Alladassi	Independent consultant	12-Jun-19	30-Jun-19	3,013.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
Dr. Komla Kyky GANYO	Independent consultant	12-Jun-19	30-Jun-19	2,053.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
M. Moussa N'DIENOR	Independent consultant	20-Jun-19	5-Jul-19	2,139.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
M. Moussa SALOU	Independent consultant	12-Jun-19	30-Jun-19	1,711.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM (Francophone countries)
CNRA (Cote d'Ivoire)	Consultant Institution	?	?	5,732.00	Consultant to compile improved fertilizer recommendations data to update the FeSeRWAM

				197,497.41	
--	--	--	--	-------------------	--

* Cost eventually will be paid by OCP as cost-share for GFVCOS. However, IFDC is still awaiting payment.