

The Ghana Fertilizer Platform Study

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ABBREVIATIONS

1D1F	One District One Factory
AgCLIR	Agribusiness Commercial, Legal, and Institutional Reform
AFAP	African Food and Agribusiness Partnership
AGRA	Alliance for a Green Revolution in Africa
AMOFERT	Mozambican Association for the Promotion of Fertilizers
AAMUSTED	Akenten Appiah-Mena University of Skills Training and Entrepreneurial Development
ApFOG	Apex Famers Organisation of Ghana
APPDF	Agriculture Public-Private Dialogue Forum
ASWG	Agriculture Sector Working Group
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Programme
CRI	Crop Research Institute
COCOBOD	Ghana Cocoa Board
CSO	Civil Society Organization
CSIR	Council for Scientific and Industrial Research
DAES	Directorate of Agricultural Extension Services
DCS	Directorate of Crop Services
DP	Development Partner
ECOWAS	Economic Community of West African States
EnGRAIS	Enhancing Growth through Regional Agricultural Input System
EPA	Environmental Protection Agency
ESCARD	Ecumenical Association for Sustainable Agriculture and Rural Development
FASDEP	Food and Agriculture Sector Development Policy
FERARI	Fertilizer Research and Responsible Implementation
FONG	Farmers Organisation Network in Ghana
GAIDA	Ghana Agri-Input Dealers Association
GAWU	Ghana Agricultural Workers Union
GDP	Gross Domestic Product
GFP	Ghana Fertilizer Platform
GFEP	Ghana Fertilizer Expansion Programme
GNAFF	Ghana National Association of Farmers and Fishermen
GOG	Government of Ghana
GSA	Ghana Standards Authority
ICOUR	Irrigation Company of Upper Region
IFDC	International Fertilizer Development Centre
KeFERT	Kenya Fertilizer Platform
MDA	Metropolitan, Municipal, and District Assemblies
METASIP	Medium-Term Agriculture Sector Investment Plan
MoFA	Ministry of Food and Agriculture
MOP	Muriate of Potash
MoTI	Ministry of Trade and Industry
MSP	Multi-Stakeholder Platform
NASTAG	National Seed Trade Association of Ghana

NFC	National Fertilizer Council
NFFAWAG	National Farmers and Fishermen Award Winners Association of Ghana
NGO	Non-Governmental Organization
PEF	Private Enterprise Federation
PERD	Planting for Export and Rural Development
PFAG	Peasant Farmers Association of Ghana
PFJ	Planting for Food and Jobs
PFRD	Pesticide and Fertilizer Regulatory Division
PPMED	Policy, Planning, Monitoring and Evaluation Division
PPRSD	Plant Protection and Regulatory Services Directorate
SAKSS	Strategic Analysis and Knowledge Support Systems
SARI	Savanna Agricultural Research Institute
SEEDPAG	Seed Producers Association of Ghana
SRI	Soil Research Institute
SSA	Sub-Saharan Africa
STAG	Seed Trade Association of Ghana
TSP	Triple Superphosphate
UCC	University of Cape Coast
UENR	University of Energy and Natural Resources
UG	University of Ghana
USAID	U.S. Agency for International Development
WAFP	West African Fertilizer Program

EXECUTIVE SUMMARY

This report presents outcomes of the IFDC-implemented FERARI program's Ghana Fertilizer Platform (GFP) study, which spanned the period from February 2020 to April 2021. Over the years, Ghana's fertilizer sector has witnessed development programs and initiatives attempt to attain improved livelihoods and food and nutrition security through enhanced use of quality fertilizers. Currently, the Government of Ghana (GOG) is embarking on the Ghana Fertilizer Expansion Programme (GFEP) with a five-year strategic plan (2020-2024). The GFEP seeks to galvanize stakeholder commitment and participation in the fertilizer sector sustainable growth and development agenda in the country. In this regard, FERARI undertook this study with the aim of aiding the process of establishing an effective, functional, and sustainable GFP. It is envisaged that the GFP would guarantee all sector actor representation and inclusion in Ghana's fertilizer sector growth and development agenda.

The study comprised both a desk review of relevant literature and interviews with 36 fertilizer stakeholder, producing a concise description of the current fertilizer sector situation (challenges, constraints, and opportunities). It also identified and compared the different formats of successful fertilizer and other sector platforms and associations beyond fertilizers in sub-Saharan Africa and analyzed possible GFP formats. Further, it identified the relevant stakeholders required for the effective functioning of the GFP, their interests in participating, and the possible goals for the GFP. Eventually in April 2021, it entailed fertilizer stakeholder discussions at a roundtable meeting in Koforidua for 24 participants, who engaged in open discussions and brainstorming on how the GFP would function and agreed on the GFP goal and format to ensure inclusiveness, transparency, and accountability.

The study revealed that evidence abounds on major fertilizer issues, such as in the law, regulations, policy, programs, the business enabling environment, and the value chain, requiring concerted stakeholder action and involvement in the form of a multi-stakeholder interactive mechanism (such as the GFP) in the Ghanaian context. Accordingly, the existence of the GFP, as endorsed by identified stakeholders, will greatly facilitate stakeholder interactions and dialogue to afford a synergy of efforts, effective fertilizer information exchange, collaboration, policy implementation, and coordination in addressing sector issues. Stakeholder discussions showed favor for a formalized and legally registered GFP, managed by a joint public and private sector leadership with inclusive stakeholder representation, clearly defined rules of engagement, and a strong secretariat for effective coordination and management.

The study recommends that IFDC FERARI and partners facilitate the dissemination and discussion of this report among stakeholders to generate more awareness, understanding, and decisive actions toward the realization of the GFP. Further, GFP processes should be well-documented to allow identification of areas for further research and analysis, particularly on organizational, behavioral, and socio-economic development and management among actors of the fertilizer sector. For realization of a functional and sustainable GFP, stakeholders should pay serious attention to the roadmap that emerged from the April 2021 stakeholder roundtable discussions. The GFP should stay focused, with clearly defined constitution, financial resource mobilization, and monitoring and evaluation strategies to generate value proposition for stakeholder participation and commitment.

CHAPTER 1: INTRODUCTION

Chapter 1 introduces the Ghana Fertilizer Platform (GFP) study conducted by the International Fertilizer Development Center's (IFDC) Fertilizer Research and Responsible Implementation (FERARI) program. Specifically, this chapter covers the study background and scope, objectives, methodology, and expected outcomes. Overall, the study employs a combination of a desk review of literature and stakeholder interactions and discussions, leading to the assembly of comprehensive relevant information on the subject of multi-stakeholder platform (MSP) in Ghana's fertilizer sector.

1.1 Background

Over the past decade, Ghana has embarked on an agenda to develop its fertilizer sector. Various initiatives have sought to improve fertilizer consumption through several subsidy programs and the formulation of a fertilizer policy to guide fertilizer production, marketing, and quality control. Realization of the need to harmonize all these efforts has led to the formation of a national task team charged with developing the Ghana Fertilizer Expansion Programme (GFEP). This program is expected to focus on developing the fertilizer industrial sector, developing and optimizing the fertilizer value chain, and creating demand for fertilizers.

The five-year sector strategic development plan (2020-2024) is currently being finalized for execution. To drive this expansion program, it has been proposed that the national task team should be incorporated into a Ghana Fertilizer Platform (GFP), with the commitment and participation of the government, private sector, research organizations, and all other relevant stakeholders in the fertilizer value chain.

However, there are questions that need to be answered: how will the platform be organized or structured; who are the stakeholders and what will their roles be; how can representativeness, coordination, and funding of its activities be ensured; and how will it be governed. Hence, the GFP study was designed to find answers to these important questions.

In Africa, such multi-stakeholder, public-private dialogue platforms do exist and are operational, such as that in Kenya (Kenya Fertilizer Platform, or KeFERT) and in Mozambique (Mozambican Association for the Promotion of Fertilizers, or AMOFERT). Thus, we can study and learn from these examples in order to draw useful lessons on what could work and how. It is also important to analyze whether the necessary conditions for success are in place or what may be required so that such a platform will achieve its objectives.

IFDC's FERARI program undertook the GFP study as part of its support program to the Government of Ghana (GOG)'s Ministry of Food and Agriculture (MoFA) in charge of the agriculture and fertilizer sector development. The outcome of this study is expected to support the implementation of the GFEP by convening fertilizer multi-stakeholders into a truly representative, functional, and sustainable platform in the country. This will allow synergy, partnership, and consolidation of efforts geared toward attaining sustainable fertilizer growth and development in Ghana. Essentially, this study answers the question of how the GFP should be designed and operationalized in terms of stakeholder representation, goal orientation, structure, governance, and funding.

1.2 Objectives of the GFP Study

The objectives of the GFP study are to:

- Describe the current situation existing in the fertilizer sector in Ghana in terms of challenges, constraints, and opportunities for development.
- Identify and compare different formats used by other fertilizer platforms in sub-Saharan Africa (SSA) and analyze the possible formats that could be used for the GFP.
- Conduct a desk review and interviews on other successful platforms and associations beyond the fertilizer sector.
- Identify all relevant stakeholders required for the effective functioning of the GFP and their interest in participating.
- Determine the possible goals for such a platform to pursue.
- Convene all identified stakeholders in a roundtable meeting for open discussions and brainstorming on their perceptions about how this platform would function, resulting in agreements between stakeholders on the goal and format of the GFP, including how to ensure inclusiveness, transparency, and accountability.
- Produce a report describing how the GFP will be designed and developed for the Ghanaian context.

1.3 GFP Study Methodology

The GFP study comprises a review of secondary data sources and interactions with identified stakeholders for primary data. Methods used in the study to achieve the objectives are as follows:

- Desk review of relevant policy documents, reports, and Ghana country studies on the fertilizer sector.
- Literature review and desk review of fertilizer and other sector MSPs existing in Ghana, other SSA countries, and globally.
- Key informant and focus group interviews of relevant actors in the fertilizer value chain.
- Roundtable discussion and brainstorming sessions with stakeholders (meetings/workshops).
- Final report on the GFP process.

An interview guide based on the study objectives was developed and applied in gathering primary data from the identified stakeholder interactive meetings. The interviews and discussions were held with stakeholders from a list of IFDC program partners (AfricaFertilizer.org and EnGRAIS), public and private sector organizational representatives (GOG Metropolitan, Municipal, and District Assemblies [MDAs], CSOs/NGOs, development partners [DPs]), and actors in the fertilizer value chain. A total of 36 group and individual stakeholder interviews were conducted across Ghana in May-June 2020 (*see Appendix III for the list of stakeholders surveyed*). In April 2021, a stakeholder roundtable meeting was also held for 24 participants (*see Appendix IV for the participant list*). Table 1 presents a detailed work plan with the timeline for the GFP study activities to be conducted by the FERARI GFP team.

Table 1. Work Plan for GFP Study Activities from February 2020 to April 2021

Objective	Activity	Sub-Activity	Timeline	Results Indicator
Provide a general description of current fertilizer sector situation and justification for the GFP.	Conduct desk and literature reviews.	Identify key works; develop a reference list; complete a write-up	Feb. 17- April 30, 2020	Draft report on context and background developed.
Analyze multi-stakeholder platforms to determine factors for a successful GFP in Ghana.	Conduct stakeholder interactions/key informant (KI) interviews.	Develop an interview guide; identify KIs, hold meetings with KIs; and record and analyze responses.	May-June 2020	
	Analyze responses and prepare a write-up.	Develop article, presentation, and policy brief	July-Aug. 2020	Draft GFP study report developed.
<i>Extension of Assignment</i>				
Determine the relevant stakeholder interests and goals for the GFP.	Hold stakeholder roundtable meeting/workshop	Develop a list of participants and their contacts; develop activity concept and agenda; present and discuss draft report on GFP; and document proceedings.	First week of April 2021	Draft report presented and discussed.
Design the requirements for an appropriate multi-stakeholder representative and inclusive GFP.	Continue with desk/literature reviews.	Identify key works; consolidate reference list; develop a write-up	April 12-30, 2021	Improved report on analyzed data developed and finalized.
	Conduct a stakeholder roundtable meeting to share and adopt recommendations.		April-May 2021	
	Finalize the GFP study report			

1.4 Expected Outcomes

The expected outcomes of the study are as follows:

1. Mid-term report to capture progress, developed into articles for the FERARI Newsletter for partner and stakeholder information.
2. Policy brief for stakeholders.
3. Reports on workshop/meeting discussions with stakeholders.
4. Final report that systematically presents the outcomes of the reviews, questionnaires and synthesized responses, outcomes of the stakeholder roundtable discussions, and proposed or recommended action plan for development of the GFP.

1.5 Structure of the GFP Study Report

The structure of the GFP study report is outlined as follows:

- Chapter 1 of the report begins with the introduction, which covers the background, objectives, methodology, and expected outcomes of the GFP study.
- Chapter 2 presents a review of current fertilizer sector issues, such as the challenges, constraints, and opportunities, as well as the policy, law, regulation, and development programs that provide reasonable grounds for the GFP in the country.
- Chapter 3 presents an analysis of stakeholder views and perceptions of who should constitute the GFP and how this should happen.
- Chapter 4 presents an inventory of agricultural MSPs in Ghana and SSA and important lessons learned for a contextualized GFP.
- Chapter 5 presents further stakeholder discussions of design and operationalization of the GFP at a roundtable meeting held in April 2021.
- Finally, Chapter 6 provides a concise conclusion and recommendations on how a representative, functional, and sustainable GFP should be designed and operationalized in the country.

In summary, the study report presents logically generated information on current issues facing the fertilizer sector, as well as possible goals, roles, and functions of the GFP in contributing meaningfully to addressing the fertilizer issues. It provides encompassing information on key fertilizer stakeholder views and perceptions, lessons learned from existing MSPs, and outcomes of stakeholder roundtable discussions and provides recommendations for the GFP's realization in the ensuing chapters.

CHAPTER 2: CURRENT AGRICULTURAL DEVELOPMENT AND FERTILIZER SECTOR ISSUES

This chapter presents an array of key issues, including the challenges, constraints, and opportunities, as well as policy, law, regulations, and development programs and initiatives in the fertilizer sector. These are particularly important because cross-cutting issues in the fertilizer value chain provide the motivation for the GFP. A snapshot of the issues actually demonstrates justifiable conditions for the institutionalization of a multi-stakeholder dialogue mechanism to harmonize all efforts aimed at developing a sustainable and vibrant fertilizer sector in the country. From a review of literature, the various fertilizer issues that justify stakeholder attention and engagement to ensure sustainable agricultural and fertilizer sector development are presented in the ensuing sections.

2.1 Agricultural Development Issues

Over the years, agriculture has been the driving force of the economy of Ghana, which expanded 3.0% in 2016 and 8.4% in 2017. However, agriculture's share of the gross domestic product (GDP) declined from 18.7% in 2016 to 18.3% in 2017 (Argus Media, 2019). Although the decline in agriculture's contribution to GDP is a common phenomenon during development of a country, the sector's increasing contribution to Ghana's GDP more recently is due to renewed political will and government support.

In 2019, the agriculture sector was estimated to contribute 21% to GDP and employ about 45% of Ghana's population. GOG's increased budgetary allocation for agriculture to 7.5% of the total national budget (though less than the target of 10% as agreed, in the African Union's [AU] *Maputo Declaration*). The implementation of sector development programs is the major factor accounting for this recent increase of agriculture's contribution to the overall Ghanaian economy (IFDC/Kofi Debrah, 2019).

Ghana is currently pursuing key development policies and programs, including the Food and Agriculture Sector Development Policy (FASDEP), Planting for Food and Jobs (PFJ), Planting for Export and Rural Development (PERD), and GFEP. These are mostly executed with support from development partners, such as USAID and the U.S. Millennium Challenge Account, the Alliance for a Green Revolution in Africa (AGRA), and Netherlands government development programs.

Other agriculture sector support provisions include the African continental-level Economic Community of West African States (ECOWAS) and regional and global development programs including the AU Comprehensive Africa Agriculture Development Programme (CAADP) compacts, ECOWAS agricultural policy, and the United Nations Sustainable Development Goals (IFDC/Kofi Debrah, 2019).

Despite these visible development programs and initiatives, the agriculture sector faces certain palpable challenges, such as:

- Low agricultural productivity, even though there has been a high population growth rate (Argus Media, 2019). According to Bationo et al. (2018), "The population in West Africa has quadrupled over the last 50 years, while food production per capita declined in several decades."

- Small-scale farms (less than 2 hectares for rice, maize, and pineapples, with the exception of some large oil palm, cocoa, rubber, and coconut plantations), constituting the majority (90%) of agriculture that is predominantly less mechanized with traditional hoe-and-cutlass farming systems. It is predominantly rainfed cropping and pasture-based livestock agricultural systems with farming areas that are drought prone and endure the adverse impact of precipitation shortages (Argus Media, 2019).
- Unexploited large tracts of land suitable for agricultural development; as of 2015, around 47% of the total agricultural land area of 13,600,000 hectares was under cultivation while 1.9 million hectares of potential irrigable land remained largely underdeveloped in Ghana (MoFA, 2015).
- Poor soil conditions and the high cost of fertilizers, which prevent farmers from applying sufficient nutrients and maintaining adequate soil fertility, resulting in high yield gaps. For example, farm yields are estimated to be only 24% of the potential in SSA (Argus Media, 2019).
- Weak infrastructure, including transport networks, access to agro-inputs and energy, and irrigation system and storage facilities, which could be developed to improve the prospects of the agriculture sector (Argus Media, 2019).

Fertilizer is an important basic input in agricultural development and a major factor in all efforts to increase agricultural productivity for food and nutrition security. In this regard, these general agricultural development issues provide the basis for closer consideration of fertilizer sector-specific issues.

2.2 Fertilizer Sector Issues

This section discusses fertilizer sector law, regulation, policy, and programs that have been developed to deal with sector issues. Further, the narrative focuses on fertilizer sector-specific issues that affect agriculture sector growth and development. Obviously, an appreciation of these issues is key to establishing the justifiable grounds for the establishment of multi-stakeholder network and linkage to an institutional framework for realization of sustainable fertilizer sector growth and development as follows:

- The ***Plants and Fertilizer Act, 2010 (Act 803)*** lays out the legal framework for importing, blending, and distributing and for registering, licensing, testing, and inspecting chemical and organic fertilizers (GOG 2010). This legal and regulatory framework for Ghana's fertilizer sector was established before the regional West Africa agreements on fertilizer trade were signed. Act 803, article 79 (3c) identifies the content of fertilizer as: (i) *ammoniacal nitrogen*; (ii) *nitrate nitrogen*; (iii) *water-insoluble nitrogen*; (iv) *urea nitrogen*; (v) *other recognized and determinable form of nitrogen*; (vi) *available phosphate (P_2O_5)*; (vii) *soluble potassium (K_2O)*; or (viii) *other nutrients on an elemental basis*.
- The ***Fertilizer Policy, 2013*** was developed and approved by MoFA in March 2013 and provides the framework for soil fertility management and prevention of soil degradation in Ghana. It emphasizes sustainable food production, taking into account the need to replenish the soil with fertilizer to sustain food production for food and nutrition security in Ghana. It also provides the framework for efficient, equitable, and environmentally safe use of fertilizer, be it organic, mineral, biological, or any combination. Generally, "fertilizer" means any

substance containing or providing one or more recognized plant nutrient and thus used to promote plant growth (MoFA, 2013). Related terms are defined as follows:

- “Inorganic fertilizer” means fertilizer produced by chemical processes or mined derivatives of an inorganic substance or synthetic organic substance.
- “Organic fertilizer” means fertilizer derived from non-synthetic organic material, including sewage sludge, animal manures, and plant residues prepared through composting, fermentation, mincing, grinding, soaking, drying, or other similar methods to enhance the use of the plant nutrients it contains.
- “Bio-fertilizer” means any substance that contains living microorganisms, which when applied to seed, plant surfaces, or soil colonizes the rhizosphere or the interior of the plant and promotes growth by increasing the supply or availability of primary nutrients to the host plant(s).

The policy is based on sound agronomic practice, provision of appropriate fertilizer at competitive prices, and above all the existence of a favorable fertilizer policy environment. It provides marketing arrangements that eliminate inefficiencies in fertilizer imports, production, and distribution, which invariably leads to the provision of quality fertilizer on time at lower cost to farmers (MoFA, 2013). However, there is the need to review how the implementation of the current or intended fertilizer sector development programs and strategies are being synchronized with the goals and objectives in Ghana’s fertilizer policy.

- The ***Plant Fertilizer Regulations, 2012 (L.I. 2194)*** provides implementation and enforcement details. An ECOWAS treaty was signed by member states in December 2012 after the release of the Ghanaian Act and Regulations. In July 2016, the Parliament of Ghana approved and published the ECOWAS regulations.
- The ***ECOWAS Regulation C/Reg.13/12/12*** relates to fertilizer quality control in the ECOWAS region. Some work remains to be done in harmonizing the ECOWAS and Ghanaian legislation and regulations. Several key informants, including the USAID-funded West African Fertilizer Program (WAFP), hold the view that the 2010 Act and 2012 Regulations need to be reviewed and modified to better match ECOWAS rules. GOG should review the 2010 Act and 2012 Regulations (AgCLIR-Ghana, 2017).
- The ***Fees and Charges (Amendment) Instrument, 2016 (L.I. 2228)*** outlines fees and charges for fertilizer, which are inconsistent, particularly for fertilizer inspection. The fees for import and export inspection seem to cover only port or border charges, whereas the “fertilizer inspection” fees appear to apply to Plant Protection and Regulatory Services Directorate (PPRSD) visits to warehouses, blending facilities, and retail points of sale. Even within the “import/export inspection” category of fees, the fee scale does not adequately address all the different issues.
- The ***Fertilizer Subsidy Programme*** aims at enhancing small farmers’ access to high-quality fertilizer at affordable prices and stimulating production and agricultural productivity (Annequin et al., 2019). In response to the 2007-08 food crisis, African Heads of State adopted the *Abuja Declaration* in June 2006, aimed at increasing fertilizer use from 8 kg to 50 kg of

nutrients per hectare of cultivated land by 2015. Consequently, Ghana decided to reintroduce its input subsidy program in 2008, which has been underway for about a decade, though it was suspended in 2014 and revived in 2017 (AgCLIR-Ghana).

The Ghana Cocoa Board (COCOBOD) has also received subsidized fertilizer in some years (although none in 2016), but it imports fertilizer, at least 100,000 metric tons (mt) in most years, for use on cocoa, which is not part of MoFA's subsidy targets for maize, rice, soybean, millet, and sorghum (AgCLIR-Ghana, 2017). At its inception, the subsidy program absorbed between 10% and 13% of the MoFA budget, resulting in an increase in subsidized fertilizer from 43,200 mt in 2008 to 176,000 mt in 2011. Starting in 2013, maize, rice, and soybean seeds were added to the list of priority crops (cereals, legumes, market garden crops) (Annequin et al., 2019). In Ghana, fertilizer is also applied to high-value horticultural crops (pineapple, mangoes, and passionfruit), for which larger farms depend on importing firms' blended fertilizer formulations for their crop and soil specifications (AgCLIR-Ghana, 2017).

- The ***Planting for Food and Jobs (PFJ)*** and ***One District One Factory (IDIF)*** initiatives launched in 2017 are meant to achieve twin goals of reducing the costs faced by farmers in input purchase and introducing farmers to new agricultural technologies to boost productivity, each with a budget of nearly U.S. \$100 million (Andam, 2019; Annequin et al., 2019). After a pilot project of 200,000 direct beneficiary farmers in 2017, PFJ has progressively expanded the number of beneficiaries to 500,000 in 2018, with the ultimate goal of reaching 1.2 million farmers by 2020. In terms of scope, the program has eclipsed the previous subsidy programs, which focused on fertilizer, to include subsidies on seeds and expanded the set of crops over time (Andam, 2019).

Under the PFJ, farmers are supported with fertilizers sufficient to cultivate 2 hectares of land at a 50% subsidy rate, amounting to 15 50-kg bags, two-thirds of which is NPK fertilizer for basal application and the rest is urea fertilizer for topdressing. It provides *input (fertilizer and seed) subsidies* and *effective extension services, funding for processing and marketing*, and supports the *development of e-agriculture* to help develop agricultural value chains (Annequin et al., 2019). By 2019 the PFJ expanded to include crops such as groundnut and cowpea, roots, tubers, and other vegetables, with a broad scope and a significant budget with an investment plan of more than U.S. \$650 million over the four years of implementation (2018-2021) (Andam, 2019). PFJ implementation is being overseen by national, regional, and district technical committees and confronts the issues of smuggling, diversion, exit strategy, and structured reduction of the subsidy percentage of fertilizer cost from the 50%.

- The ***Ghana Fertilizer Expansion Programme (GFEP)*** is being developed upon realization of the need to harmonize all the efforts in developing the fertilizer sector in Ghana. It focuses on *developing the fertilizer industrial sector, optimizing and developing the fertilizer value chain, and creating demand for fertilizers*, with implementation of a five-year fertilizer sector strategic development plan (2020-2024). This is consistent with the *National Fertilizer Policy (2013) Section 4.0, Premise 4.1 IV*, which states “there is the urgent need for a strategic investment program to increase the availability and use of quality fertilizer alongside other inputs to promote an effective Agricultural Revolution in Ghana.” Hence, the GFEP is “*to serve as a comprehensive umbrella solution to operationalize and harmonize a number of*

fertilizer policy directions and initiatives that require consolidation and focused implementation” (IFDC/Kofi Debra, 2019).

Accordingly, Ghana and the Kingdom of Morocco launched a historic soil mapping and fertilizer expansion cooperation program collaboration on December 11, 2019, between MoFA and the OCP Foundation, under the GFEP. Prior to the launch, the partners signed a number of agreements that seek to advance fertilizer development and expand activities to benefit Ghanaian farmers and improve food security in Ghana (GhanaWeb, December 12, 2019). These include: the OCP foundation collaborating with MoFA and the Council for Scientific and Industrial Research (CSIR)-Soil Research Institute (SRI) to implement the three-year cooperation project agreement with the objective to *equip Ghana’s fertilizer and soil laboratories for improved fertilizer and soil quality testing and sustainable management*. It has provided a fully equipped wet laboratory for the PPRSD, extended support to fully equip the Accra soil laboratory to be functional for the first time, and provided additional equipment for the Kumasi soil laboratory. The ultra-modern laboratories will help Ghana to operate in compliance with international standards (GhanaWeb, December 12, 2019).

Although fertilizer is recognized as a major input for increasing agricultural productivity, its use in Ghana, particularly outside the cocoa sub-sector, has historically been low (AgCLIR-Ghana, 2017). This is mainly due to a lack of fertilizer availability, or where it is available, it is neither accessible nor affordable to small-scale farmers (Argus Media, 2019). Essentially, the key issues in Ghana’s fertilizer sector are as follows:

- Low use of quality fertilizers among farmers. Although fertilizer use in Ghana has significantly improved in recent years, jumping from 8 kg/ha in 2016 to 20 kg/ha in 2019 (due to the PFJ), it is still way lower than the *Abuja Declaration* target of 50 kg/ha according to Agriculture Minister, Hon. Dr. Owusu Afriyie Akoto (GhanaWeb, 2019).
- Depleting soil fertility, which is one of the major causes of declining per capita agricultural productivity and the consequent food insecurity in Ghana (Bationo et al., 2018).
- Limited uptake of external input-intensive technologies and fertilizer, even where it is profitable. This is due to poorly developed markets, high production and market risks, cash and credit constraints, and other socio-economic constraints (Bationo et al., 2018).
- Non-existence of inorganic fertilizer manufacture in Ghana, resulting in over-reliance on fertilizer imports, which have witnessed a sharp increase of 50% of NPK (compounds) fertilizers and 20% of urea and raw materials for blending, due to the PFJ (IFDC, 2019). Recent imports include various NPK formulations, ammonium sulfate, triple superphosphate (TSP), muriate of potash (MOP), and urea, and some are blended in-country (AgCLIR-Ghana, 2017). Eighty percent of annual imports occur between March and September (with a greater proportion occurring between March and May for the impending major farming season). Fertilizer imports enjoy duty- and VAT-free conditions (except for a 5% ECOWAS levy) on compounds, yielding to a high influx of all sorts of fertilizers (IFDC, 2019b; Argus Media, 2019).
- Predominance of the PFJ and COCOBOD on the fertilizer market, with both controlling 80% of the market that serves smallholder farmers who cultivate food crops/vegetables and cocoa, respectively (IFDC, 2019b).
- Less scale of fertilizer exports (because Ghana is not a fertilizer-producing country), which are mostly imported in bulk, blended, and bagged before transport to neighboring landlocked Mali

and Burkina Faso. However, Ghana has experienced an increase in export of about 75% of organic fertilizer and 3,500 mt of NPK to Burkina Faso and Togo from 2018 to 2019 (Argus Media, 2019).

- Application of NPK (blends and compounds), urea, and sulfate of ammonia for the cultivation of all crops in all agroecologies by most farmers without consideration of soil nutrient requirements, resulting in low productivity returns from fertilizer use. This is a major impediment to their adoption by most small-scale farmers and requires improvement in mineral fertilizer use (Argus Media, 2019).
- Uncommon adoption and use of special formulations and blends in spite of research conducted on crop fertilizer requirements by some major fertilizer importers and research institutions. Effectively, cocoa benefits from special fertilizer formulations by all major fertilizer importers (e.g., Yara *Assasewura*, Chemico *Cocofeed*, and LDC *Cocoa M*); these are designed especially for cocoa because of high demand (Argus Media, 2019). Other crops, particularly cereals in Guinea and Sudan agroecologies, also benefit from special fertilizer blends (AgCLIR-Ghana, 2017).
- Need for balanced fertilizers, which connotes the optimal mix of macro, secondary, and micronutrients. This is readily achievable using knowledge and best practices from around the world, including the use of soil mapping and plant tissue analysis to identify and isolate areas of deficiency. In effect, balanced fertilizers open the door to increased nutrient and water use efficiency (Argus Media, 2019).

The agricultural development and fertilizer sector issues described above are compelling enough to warrant concerted and coordinated multi-stakeholder efforts toward realization of a sustainable fertilizer sector growth and development in Ghana. They provide a case for a multi-stakeholder involvement in efforts aimed at harnessing potential benefits and opportunities in addressing challenges in the fertilizer sector under the GFP.

CHAPTER 3: ADDRESSING FERTILIZER ISSUES WITH THE GFP

In Chapter 3, the multi-stakeholder platform concept as a dialogue mechanism through the GFP is discussed, with special attention on how it can help address identified fertilizer issues in Ghana. This requires a profoundly clear understanding and conceptualization of the proposed GFP. In this regard, the MSP concept and the elements that go into establishing a truly representative, functional, and sustainable GFP are reviewed here. This includes an analysis of the fertilizer value chain and mobilization of key fertilizer stakeholders as the constituents, as well as the critical success factors to consider in establishing an effective GFP. Essentially, the ensuing sections cover the conceptualization and operationalization processes of the GFP as a multi-stakeholder dialogue mechanism in Ghana.

3.1 Definition and Function of MSP

Under this section, the various definitions and functions of MSP, in the bid to demonstrate the significance of a clear understanding the GFP concept and its role for stakeholder participation in the fertilizer development effort, are presented as follows.

3.1.1 Definition

According to Van Huijstee (2012), MSPs have emerged in response to the limited capacity and resources of individual societal sectors, such as government, business, and civil society, to solve complex sustainability problems on their own. Some experts feel that, in order to be worthy of the term, an initiative should be formally organized and characterized by a democratic, multi-stakeholder governance structure, while others consider them to be dialogue platforms with representatives from business, civil society, and other sectors (Van Huijstee, 2012).

According to Adekunle and Fatunbi (2012), “A typical MSP is a mix of stakeholders drawn from both the public and private sector stakeholders, such as scientist, extension workers, representatives of farmers, farmers’ associations, private firms, NGOs and government policymakers, who communicate, cooperate and interact (often across sectorial and ministerial lines).” The authors also state, “Creating an MSP has lately been promoted as a way to engender agricultural development in Sub-Sahara Africa (SSA),” and there has been a surge in productive MSP dialogue in different international fora for enhanced productivity in sector that require resource management.

3.1.2 Function

MSPs can perform a wide variety of functions at the same time, and these functions may vary and evolve in different phases. Van Huijstee (2012) provides an overview of the MSP functions, which are not mutually exclusive, as follows: (1) *Awareness raising*; (2) *brokering, bringing parties together*; (3) *creating mutual understanding and respect*; (4) *sharing dilemmas*; (5) *defining and analyzing sustainability problems*; (6) *finding common ground*; (7) *learning*; (8) *capacity building*; (9) *training*; (10) *standard setting*; (11) *piloting/experimenting*; (12) *certification*; (13) *accreditation*; and (14) *verification*.

According to IFDC/Alexander Fernando (2018), a fertilizer MSP performs three important functions as a neutral platform:

1. Addresses multidisciplinary issues, which are cross-cutting and beyond the mandate of any one entity.
2. Serves as a mechanism to address bottlenecks and key constraints, as well as ensure consensus building around need and actions.
3. Coordinates and facilitates information exchange within the fertilizer sector to prevent duplication and maximize synergies.

Further, a neutral MSP is representative and owned by actors and stakeholders in the entire fertilizer sector; it is a democratic, independent, neutral player in mediating and transparent among interest groups (IFDC/Alexander Fernando, 2018). Figure 1 illustrates the characteristic features of a fertilizer MSP, which are expected to be the hallmark of the GFP.

Multi-stakeholder platform to address fertilizer sector issues:



Source: IFDC/Alexander Fernando (2018)

Figure 1. Key Characteristic Features of a Fertilizer MSP

3.2 Types, Design, and Phases of MSP

There are various types, designs, and phases of MSPs. This section begins with the presentation of the types, and continues through the designs and phases of MSP.

3.2.1 Types

According to Adekunle and Fatunbi (2012), an MSP can be a physical, virtual, or physico-virtual network of stakeholders that has been set up around a commodity or system of mutual interest to foster collaboration, partnership, and mutual focus in generating innovation. It exists for

diagnosing problems, exploring opportunities, investigating solutions, setting standards, guiding practices, and monitoring of compliance with standards.

According to Van Huijstee (2012), MSPs occur in a variety of shapes and sizes, in different phases, and may perform different functions, such as certification bodies, roundtable dialogues, and project-facilitating bodies. However, they serve the common purposes of making business processes more sustainable and have a multi-stakeholder dimension, even though their approaches may be different, such as choosing a supervisory role, implementing a learning approach, and/or financing concrete projects (Van Huijstee, 2012).

In essence, the GFP can function as a physico-virtual membership-based dialogue mechanism for stakeholders as it seeks to foster collaboration, partnerships, and mutual focus in addressing fertilizer sector issues through networking, information exchange, and coordination.

3.2.2 Design

In the process of designing an MSP, many issues need to be considered, particularly during the *formalization phase*, that may be adapted and reshaped during the *implementation phase*. The 10 most critical elements of MSP design are as follows:

1. **QUALITY** (*standards for MSP evaluation, e.g., stakeholder involvement and impact*)
2. **BUSINESS PARTICIPATION** (*character, scope, and scale*) – *what ideal business types, market changes, and entry and exit conditions for companies*
3. **GOVERNMENT PARTICIPATION** (*regulator/referee – an endorsing, convening, facilitating, or financing or negotiating standards role*)
4. **GOVERNANCE** (*decision-making structures and processes or advisory role*)
5. **REPRESENTATION OF BENEFICIARIES** (*interests of stakeholders*)
6. **GRIEVANCE MECHANISMS** (*address rights/standards violations/protection, remedy for victims, and an alarm system for monitoring implementation*)
7. **Utmost TRANSPARENCY/CONFIDENTIALITY** in progress/results/impact on sustainability reporting procedures
8. **Clearly defined RULES OF ENGAGEMENT** (*inspire confidentiality in information exchange and external communication*)
9. **CAPACITY AND FINANCING** (*execute organizationally negotiated/designed plans/processes and financing structure - equal/differentiated - for associated costs - ownership/dependence*)
10. **EFFECTIVENESS AND IMPACT** (*impact assessments, sustainability certification, credibility*)

Source: Adapted from Adekunle and Fatunbi (2012).

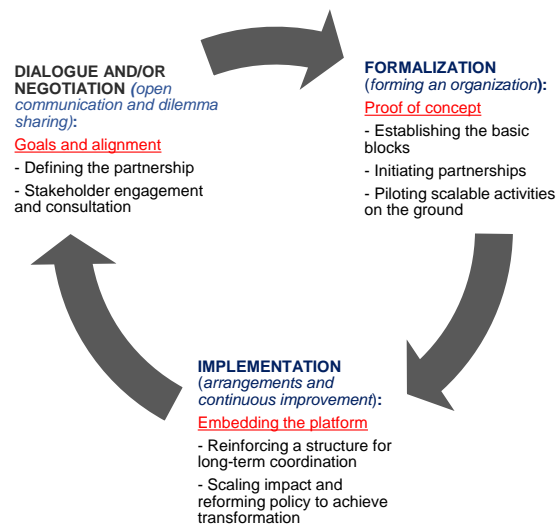
Consequently, the GFP as a dialogue mechanism should comprise the elements of quality, participation of business and government, governance structure, beneficiary representation, grievance mechanisms, transparency, and confidentiality, with clear rules of engagement, capacity and financing, and effectiveness and impact. As outlined above, these elements serve as the critical conditions for the GFP's successful design and establishment in the country.

3.2.3 Phases

The MSP concept also covers different phases in the design process, i.e., from multi-stakeholder dialogues in an initial norm-setting phase to long-established and institutionalized initiatives. It begins with a *dialogue* and/or *negotiation* involving representatives of stakeholder groups to address a certain sustainability problem or challenge. The dialogue is associated with open communication and dilemma sharing between partners.

If the dialogue and/or negotiation is successful in finding common ground, it evolves into the next phase of *forming an organization (formalization)*, followed by *implementation arrangements* and *continuous improvement*, which will again include negotiation and/or dialogue (Van Huijstee, 2012).

The context is also likely to change over time. Some issues may be addressed while new issues may arise, new parties may arrive on the scene, or regulations may change. Therefore, its design and implementation should be of continuous improvement and innovation (Van Huijstee, 2012). Fig 2 shows the phases and evolution of the MSP in meeting its objectives.



Adapted from PEF (2011) and Van Huijstee (2012).

Figure 2. MSP Phases and Evolution in Achieving its Objectives

Accordingly, the GFP process has been kick-started with the identification of key stakeholders and information sharing and exchange on stakeholder survey findings/reports, newsletter articles, policy briefs, and presentation and discussions at stakeholder meetings/workshops, under the IFDC FERARI program. This typically marks the stages of the dialogue and negotiation, as it is about beginning the formalization process of the GFP. In view of this development, it is instructive to understand the critical steps in setting up the GFP as a fertilizer MSP in Ghana.

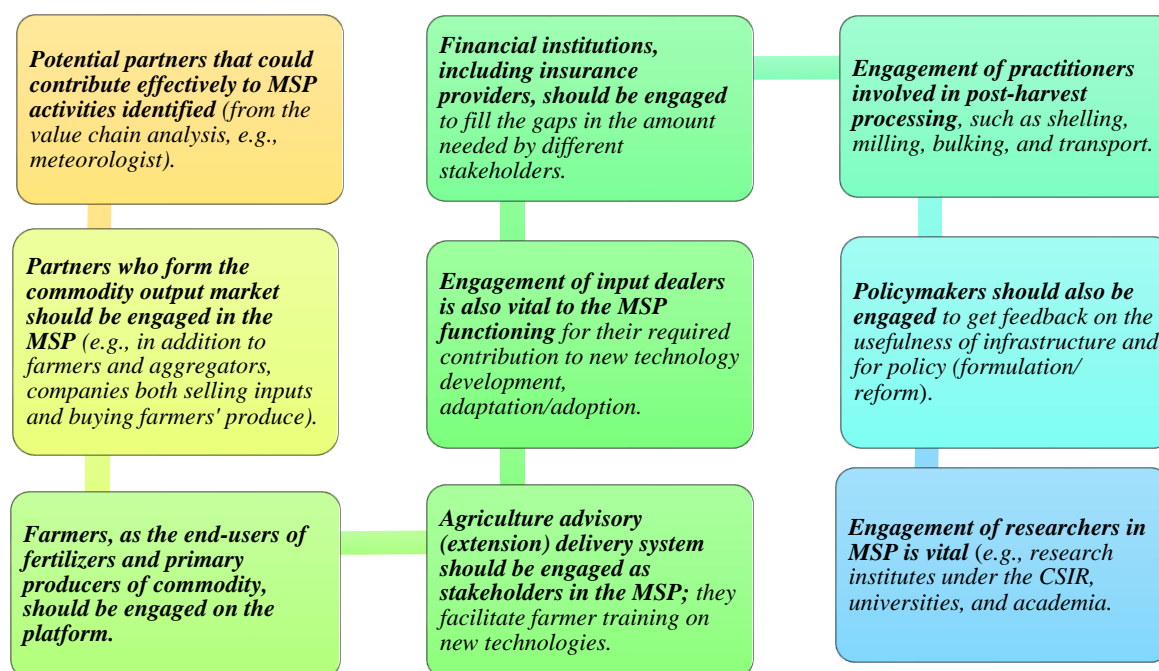
3.3 Setting Up an MSP

According to Adekunle and Fatunbi (2012), setting up a functional MSP for strategic and operational issues depends on the level and scale of activities envisaged. An operational MSP can be set up at the grassroots level depending on the scope of the operation, such as output market and stakeholder spread, demand, etc. In addition, the specific level of the MSP will determine the composition of stakeholders. For instance, the MSPs can be set up to provide strategic focus for itself. Strategic MSPs are recommended for administrative levels that exist above the MSP for operations.

There are two key steps in setting up an MSP. The first step is value chain analysis, whereby all steps involved, from production to consumption, are considered. These steps should be detailed enough to identify the:

1. Intricate steps under each major step.
2. Required inputs for each stage, including technical skills, personnel, and materials.
3. Financial requirements at different (value chain) stages.
4. General and specific demand and gaps in supply to inform the market demand.
5. Technology constraints (productivity, natural resource management, policy, product development, and type) requiring research inputs.
6. Other non-technological issues/constraints along the value chain (institutional, infrastructure, policy, markets, etc.).

While the value chain analysis provides an overview and determines the kind of partners to be invited to the MSP, the second step, which is mobilization of appropriate members, is achieved through the points displayed in Figure 3.



Adapted from Adekunle and Fatunbi (2012).

Figure 3. Mobilizing Appropriate MSP Members

The GFP process is following these MSP setup steps; it began with the fertilizer sector stakeholder research and analysis and is now proceeding with mobilization of the appropriate members by reaching out to the identified key stakeholders and fertilizer value chain actors, as seen in the stakeholder discussions.

3.4 MSP Activities

After the identification and engagement of appropriate stakeholders for the MSP, interactions must be facilitated through meetings and other regular communication channels. The MSP needs to adequately deliberate on all issues related to the business of the partnership, including: (1) process and instruments of partnership; 2) report of the value chain analysis, as well as prioritization of challenges and opportunities; and (3) development of a business plan.

The activities of an MSP are usually kick-started with joint development of a business plan and its proactive implementation in a partnership setting (Adekunle and Fatunbi, 2012). The business plan is implemented and reviewed at regular intervals to give opportunity for learning. A striking characteristic of an MSP is the enhanced interactions among the different stakeholders, leading to iterative learning at the interphase, from which innovation is generated and perfected. So the functioning of MSP depends on effective facilitation and coordination of the activities, which often requires significant soft management, facilitation, and people skills for the success of the platform (Adekunle and Fatunbi, 2012).

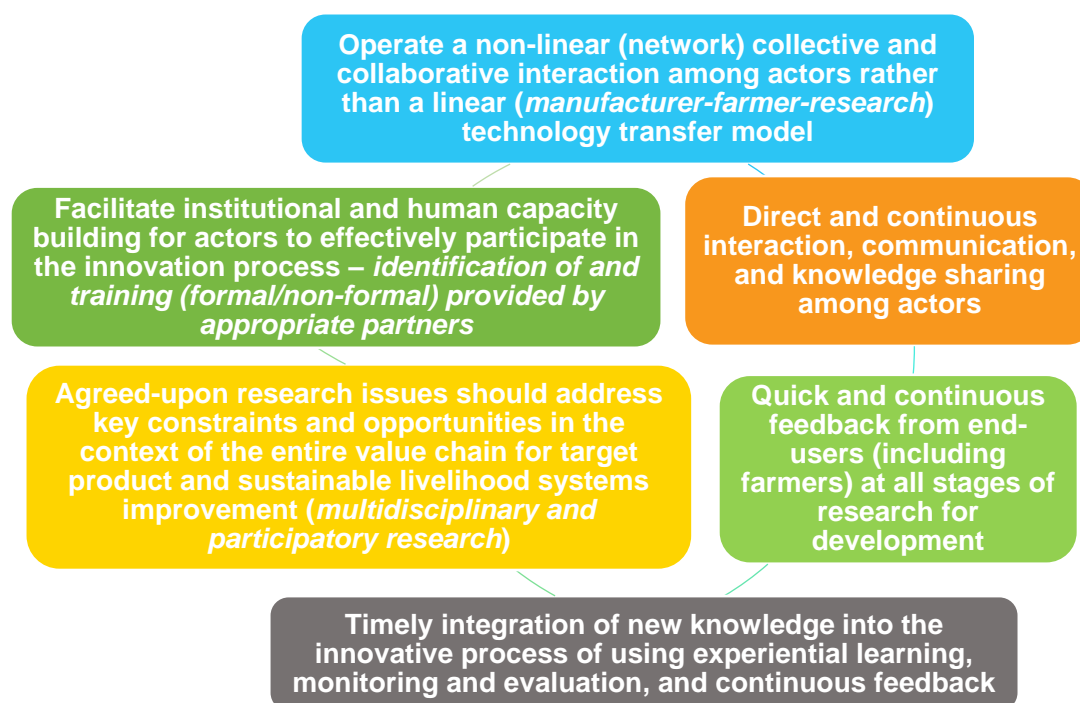
This follows a series of interactive learning at the interphase, from which innovation is generated. Interaction is not only motivated by the common belief that increasing agricultural productivity can help improve societal welfare, and linked with market, policy, natural resource management, product development, and type for sustained agricultural growth (Van Huijstee, 2012).

Interactions among stakeholders must be guided by the differences or dichotomy in their philosophies of work and life, particularly the reward pathways, to work together on a common agenda for potential benefit (Adekunle and Fatunbi, 2012). For example, the private sector is motivated by profit, while the public sector is rewarded by the generation of international public goods, such as technology (disseminated, adopted, and published in the public domain), technology adoption (successfully transferred and utilized by farmers), and informed policies (that have been enacted). The setup and operation of an MSP tends to overcome this dichotomy challenge through effective facilitation using a different set of soft skills (management, facilitation, and people), which can be acquired through capacity building (training and retraining) of partners or members (Adekunle and Fatunbi, 2012).

More importantly, Adekunle and Fatunbi (2012) state that the interest of stakeholders is sustained partly by the MSP arrangement, which ensures that all partners have a contribution to make and an obvious benefit to derive from the platform activities. In this regard, the GFP will need to conduct interactive and informative activities that provide a strong value proposition to sustain stakeholder interest while eliciting their active participation and commitment for its effectiveness and sustainability.

3.5 Conditions for MSP Effectiveness and Success

Adekunle and Fatunbi (2012) identify the pathway for a productive outcome from interactions in an MSP, as presented in Figure 4.



Adapted from Adekunle and Fatunbi (2012).

Figure 4. Pathways for Productive Outcomes in MSP Interactions

Essentially, the GFP as conceived could be an effective, representative, and sustainable MSP demonstrating key characteristic features in addressing fertilizer sector issues as follow:

1. The GFP, as a typical MSP, should comprise a mix of stakeholders drawn from both public and private sector stakeholders – scientists, extension workers, farmer associations, private firms, NGOs, government policymakers, and development partners – who communicate, cooperate, and interact with the aim of engendering agricultural development through addressing fertilizer sector issues.
2. The GFP should be a physico-virtual membership-based dialogue mechanism for stakeholders that fosters collaboration, partnerships, and mutual focus in addressing fertilizer sector issues through networking, information exchange, and coordination.
3. The GFP, as a dialogue mechanism, should encompass the key elements of *quality, participation of business and government, governance structure, beneficiary representation, grievance mechanisms, transparency, and confidentiality*, with clear rules of engagement, capacity and financing, effectiveness, and impact. These elements serve as the critical conditions for the GFP's successful design and establishment.
4. Already kick-started with the identification of key stakeholders and information sharing and exchange on stakeholder survey reports, newsletter articles, policy briefs, and presentations

and discussions at stakeholder meetings, marking the GFP's dialogue and negotiation, its formalization process should logically follow.

5. With fertilizer stakeholder research and analysis (as in the FERARI GFP study and the student stakeholder research), mobilization of the appropriate members by reaching out to identified fertilizer stakeholders and value chain actors should proceed in earnest.
6. Based on stakeholder discussions thus far, the GFP should embark on interactive and informative activities aimed at providing strong value proposition to sustain stakeholder interest, while eliciting stakeholder active participation and commitment for its effectiveness and sustainability.

From the foregoing, stakeholder buy-in is key to the GFP's setup and development into a more relevant, effective, representative, and sustainable dialogue mechanism to make a meaningful contribution to sustainable growth and development of the fertilizer sector in the country. This requires a comprehensive analysis and understanding of who the critical stakeholders are, as well as what their views and perceptions are about the GFP concept.

CHAPTER 4: STAKEHOLDER VIEWS AND PERCEPTION OF THE GFP

Chapter 4 presents the stakeholder views and perceptions of the GFP, as evident from the stakeholder discussions. These views and perceptions play a critical part in establishing the representative membership, structural, and operational aspects of the GFP. They are essential in gauging stakeholder understanding and consequent buy-in of the GFP concept as a dialogue mechanism to contribute to meaningfully addressing fertilizer issues in the country. This chapter covers the identification of fertilizer stakeholders and stakeholder perspectives of fertilizer challenges, constraints, and opportunities and possible goals and management of the GFP under the respective sections.

4.1 Stakeholder Identification

Fertilizer sector stakeholders in Ghana were identified by analyzing actors and activities along the value chain, i.e., from fertilizer production/manufacture to consumption. It covered the other public actors whose livelihoods are impacted by fertilizer, such as the fertilizer manufacturers/blenders, importers, wholesalers, and distributors through farmers (the end-users), processors, and the food output market. Overall, the fertilizer stakeholders in Ghana can be categorized as: (i) fertilizer companies; (ii) public sector; (iii) research and development institutions; (iv) specialized institutions; and (v) private sector professional bodies of farmers and input dealers (IFDC/Kofi Debrah, 2019).

- A. The **fertilizer companies** are mostly the *importing, blending, and distributing companies* participating in the fertilizer subsidy program, which includes about 10 major importers, between 35 and 50 major distributors, and six blenders (also involved in fertilizer importation and distribution of subsidized fertilizer, among the 29 businesses engaged in government-allocated import quotas under the PFJ) (IFDC, 2019b).

Retailers operate about 3,000 small retail input and fertilizer shops spread across Ghana, mainly located locally within the peri-urban towns and villages in most of the 158 districts. They provide easy access to agricultural producers, with the highest concentration in the major food crop-producing (mainly maize and cocoa farmers) areas of the Brong-Ahafo and Ashanti regions (IFDC, 2019b)

- B. The **public sector** includes the following:

- i. **Office of the President** (Senior Presidential Adviser on Agriculture).
- ii. **GFEP** secretariat.
- iii. **MoFA**, the ministry that regulates fertilizer sub-sector, with the relevant directorates and agencies as follows:
 - The **Directorate of Crop Services (DCS)** promotes “efficient use and management of soil and water resources for sustainable agriculture production” and “recommends issuance of permits and waivers for the importation of agricultural materials for the crops sub-sector.” Additionally, it manages the Fertilizer Subsidy Programme as the PFJ secretariat for MoFA.

- **PPRSD**, with more direct oversight of fertilizer importation and distribution than the DCS, mainly through its Pesticide and Fertilizer Regulatory Division (PFRD), which conducts laboratory tests on imported fertilizers; supervises field trials of “new” fertilizer formulations imported into Ghana; and inspects fertilizer at the port, in warehouses, and at points of sale. PPRSD also runs laboratory testing and analysis of fertilizers. The **PFRD** of the PPRSD supervises and trains regulatory inspectors, publishes informative materials, registers and trains pesticide and fertilizer dealers and service providers, keeps records and statistics of pesticides and fertilizers, and manages pesticide and fertilizer stocks in the country. It supervises the bio-efficacy trials undertaken by researchers. PFRD also provides services for *pesticide and fertilizer dealers and service providers, extension agents, exporters, importers, and international non-governmental organizations*.
 - **National Fertilizer Council (NFC)**, created in March 2014, is an advisory body consisting of three representatives of MoFA (the Minister and heads of PPRSD and DCS), representatives of CSIR and the Environmental Protection Agency (EPA), and two private sector representatives – one representing farmers and another representing fertilizer importers and manufacturers. The NFC is supposed to meet quarterly but seldom holds all quarterly meetings in a year.
 - **Ghana Fertilizer Advisory Council (GFAC)** membership comprises: (a) Director, PPRSD (Chairperson); (b) Director, CSD; (c) Director General, CSIR; (d) representative of CSIR; (e) two representatives from the Forest Industries Association of Ghana (FIAG); (f) one representative of analytical laboratories; (g) one representative from the EPA; (h) one representative of the universities in Ghana; (i) one representative of the Attorney General and Ministry of Justice; (j) one representative from the Ghana National Association of Farmers and Fishermen (GNAFF); and (k) Fertilizer Regulatory Administrator (Secretary).
 - **Directorate of Agricultural Extension Services (DAES)**, under MoFA, is in charge of the delivery of agricultural advisory and extension services. It is a major player in technology development, transfer, and adoption in the farmer-research-extension linkages.
 - **Women in Agriculture Directorate (WIAD)** is the technical directorate of MoFA in charge of addressing production and technological needs for women in agriculture.
 - **Agricultural Engineering Services Directorate** is the technical directorate of MoFA in charge of addressing agricultural technology development.
- iv. **EPA** is an agency under the Ministry of Environment, Science, Technology & Innovation (MESTI), responsible for safeguarding the environment and ensuring that the siting of projects and fertilizer and other production units do not pose danger to human health and environment degradation.
- v. **Ghana Standards Authority (GSA)**, under the Ministry of Trade and Industry (MoTI), has a Food and Agriculture Department in its testing division that, in theory, can analyze fertilizer chemical composition and test for the presence of heavy metals and other contaminants. In collaboration with the GSA, PPRSD takes the lead in testing fertilizers as well as conducting crop trials to test the efficacy of these fertilizers.
- vi. **Parliamentary Select Committee on Food, Agriculture and Cocoa Affairs** is the major legislative wing for the development and approval of legislative and regulatory documents of agriculture sector development in the country.

C. Research and development institutions, including:

- i. **CSIR-SRI**, located in Kumasi, Ashanti Region.
- ii. **CSIR-Crop Research Institute (CRI)**, located in Kumasi, Ashanti Region. The CRI is more focused on field crops and can test seed for germination rates and foreign matter, as well as pesticide residue levels. **SRI** and **CRI** are two key research centers of CSIR, with laboratories capable of testing for fertilizer nutrient composition. SRI has done soil mapping in Brong-Ahafo and Northern regions with AGRA support and it has a laboratory that can test soil samples for pH, moisture, and carbon composition (AgCLIR-Ghana, 2017).
- iii. **CSIR-Savanna Agricultural Research Institute (SARI)**, located at Nyankpala, Northern Region.
- iv. **Public universities and academia**, such as the School of Agriculture and the West Africa Centre for Crop Improvement (WACCI) of the University of Ghana (UG; Legon), Kwame Nkrumah University of Science and Technology (KNUST; Kumasi), University for Development Studies (UDS; Tamale), University of Cape Coast (UCC), University of Energy and Natural Resources (UENR; Sunyani), and Akyem Appiah-Menka University of Skills Training and Entrepreneurial Development (AAMUSTED) (Mampong).
- v. Specialized technical support organizations and development partners, such as IFDC, the International Food Policy Research Institute (IFPRI), AGRA, and the African Fertilizer and Agribusiness Partnership (AFAP).

D. Specialized institutions, such as:

- i. **COCOBOD** is the main parastatal agricultural organization that distributes fertilizer to 90% of cocoa farmers in Ghana. Other institutions with large plantations of industrialized crops include Ghana Oil Palm Development Corporation (palm oil), Ghana Rubber Estate Limited (rubber), Volta River Estate Ltd., and Blue Skies Ltd. (fruits such as banana, pineapple, and mango), also import for their use; distribution and supply to other large independent producers is on a contractual basis.
- ii. **Ghana National Petroleum Corporation (GNPC)** is the major player in Ghana's gas and oil sector. It has a key role in the development of the fertilizer industrial sector in Ghana, owing to its role in the oil sector.
- iii. **Ghana Gas Company** has a strategic role in investing for the development of the fertilizer industrial sector, as espoused in the GFEP.

E. Private sector professional bodies/trade associations of farmers and input dealers, including:

- i. **CropLife Ghana**, comprising major importers of agrochemicals and blenders who have the resources to fund the association at the appropriate level. This association lobbied MoFA in late March 2017 for a reinstatement of the fertilizer duty exemption on arrival in the port of Tema and prior to fertilizer distribution (AgCLIR-Ghana, 2017).
- ii. **Ghana Agri-Input Dealers Association (GAIDA)**, which was created with IFDC support in 2004 and has some 4,800 membership of agro-input dealers; however, the modest fees it charges means that it lacks the financial resources to function effectively. Half of the agro-input dealers in Ghana, including many small-volume, rural-based

dealers outside the regional and district centers, do not count themselves members of GAIDA. Largely, GAIDA has depended on USAID for support in the past. Currently, some observers consider the organization dormant, while others argue that GAIDA still plays an advocacy role (AgCLIR-Ghana, 2017).

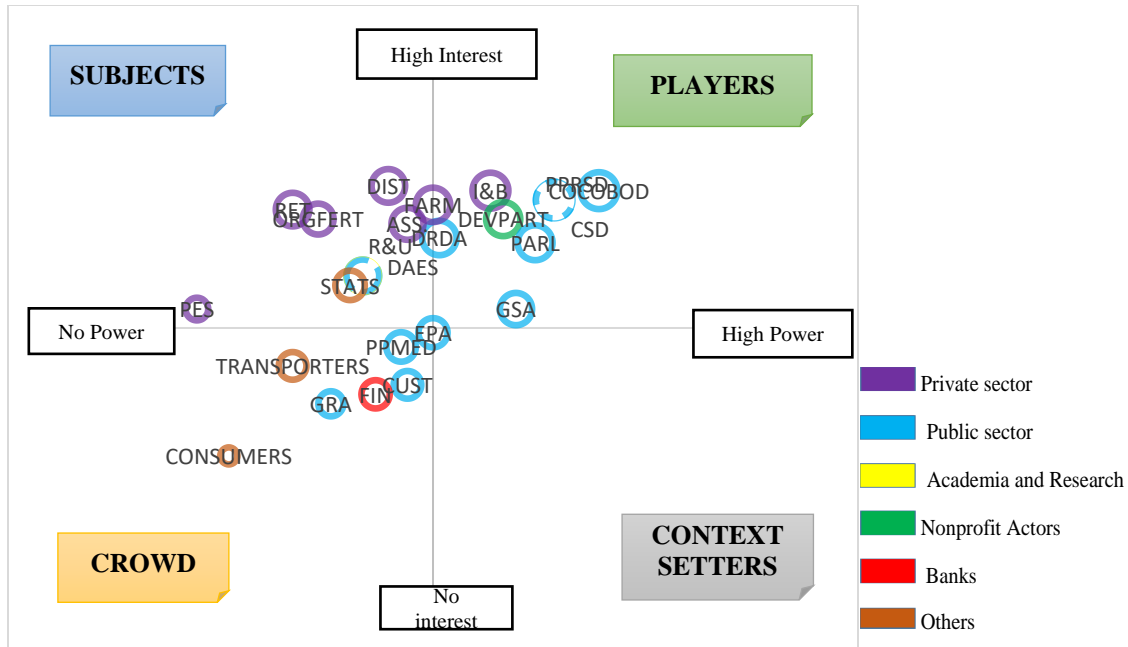
- iii. **Ghana Grains Council** is the main private sector organization in the output market for grains in Ghana.
- iv. **National Farmers and Fishermen Award Winners Association of Ghana (NFFAWAG)**, with membership of large-scale farmers who have won the Ghana National Farmers' Day Award since its inception in the 1980s.
- v. **Peasant Farmers Association of Ghana (PFAG)** is a strong advocacy group, mainly for smallholder farmers in Ghana, with membership across the country.
- vi. **Ghana National Association of Farmers and Fishermen (GNAFF)** is the only farmer and fisherfolk association that is mentioned in the 1992 Fourth Republican Constitution of Ghana.
- vii. **Ghana Federation of Agricultural Producers (GFAP)** was established to serve as the umbrella organization for all farmer associations in Ghana. Its membership includes PFAG, Apex Farmers Organisation of Ghana (ApFOG), GNAFF, Farmers Organisation Network in Ghana (FONG), and Ecumenical Association for Sustainable Agriculture and Rural Development (ECASARD).
- viii. **National Seed Trade Association of Ghana (NASTAG)**, an umbrella association for seed value chain actors in Ghana, was established in 2016 with membership including public sector organizations, such as the national research institutes (CRI, SARI), as well as private sector professional associations, such as CropLife Ghana, the Seed Producers Association of Ghana (SEEDPAG), and seed and agro-chemical companies.

4.2 Critical and Priority Members of the GFP

For identifying critical and priority members for the GFP, responses of stakeholders surveyed were subjected to a power and interest analysis. Stakeholders in the public sector (PPRSD, DCS, COCOBOD, and Parliament) were key players with high interest and high power in the fertilizer sector. Public sector players with high interest and low power were the District and Regional Directorates of Agriculture (DRDA). The GSA has some power but low interest in fertilizer.

In the private sector, the importers and blenders had high interest with relatively low power, whereas farmers, distributors, and associations had high interest with relatively little or very low power in the fertilizer value chain. Notably, development partners were seen as very important players with high interest and relatively low power.

Consumers had no power and no interest. Others in that category included the banks, transporters, and the Ghana Revenue Authority (GRA). Notably, the EPA and the Policy, Planning, Monitoring and Evaluation Division (PPMED) had almost zero power or interest in the fertilizer sector in Ghana. The research organizations, universities, and academia, Ghana Statistical Services (GSS), private extension service (PES), and MoFA's Directorate of Agricultural Extension Services (DAES) dominate among the subjects with high interests and no power (Aremu et al., 2020). Figure 5 depicts essential or critical and nonessential fertilizer sector stakeholders in identifying priority members of the GFP.



CUST: Ghana Customs Authority; DCS: Directorate of Crop Services; DEVPART: development partners; DRDA: District and Regional Directorates of Agriculture; EPA: Environmental Protection Agency; FIN: Banks; GRA: Ghana Revenue Authority; I&B: Importers and blenders; ORGFERT: organic fertilizer companies; PES: private extension service; PPMED: Policy, Planning, Monitoring and Evaluation Division; PARL: Parliament; R&U: Research organizations, academia, and universities; STATS: Statistics bodies.

Source: Aremu et al. (2020).

Figure 5. Stakeholder Power and Interest Analysis

Notably, the subjects are those stakeholders with high interest in the fertilizer value chain but with low power. Most private sector actors, such as private extension, fertilizer distributors, retailers, organic fertilizer producers, and professional associations, are in this group. Other stakeholders within this group are DAES, research and academia, and public and private statistic organizations (Aremu et al., 2020). Conclusively, Aremu et al. (2020) stated that stakeholders with high interest means potential for more power, e.g., farmers have high interest with moderate power and so they need to be included in the platform.

According to Aremu et al. (2020), the power and interest analysis among Ghana's fertilizer sector stakeholders indicates that there are about 20 essential stakeholders that should constitute the core membership of the GFP, as shown Table 2.

Table 2. Essential and Nonessential Stakeholders for Ghana's GFP

Essential Stakeholders		Nonessential Stakeholders
1) Development partners (DPs)	10) Ghana Standards Authority (GSA)	1) Ghana Customs (CUST)
2) Farmers	11) Parliament (PARL)	2) MoFA Policy, Planning, Monitoring and Evaluation Division (PPMED)
3) District and Regional Directorates of Agriculture (DRDA)	12) Environmental Protection Agency (EPA)	3) Ghana Revenue Authority (GRA)
4) MoFA Directorate of Agricultural Extension Services (DAES)	13) Fertilizer importers and blenders (I&B)	4) Fertilizer transporters (TRANS)
5) MoFA Directorate of Crop Services (DCS)	14) Fertilizer distributors (DISTR)	5) Food consumers (CONS)
6) MoFA Plant Protection and Regulatory Services Directorate (PPRSD)	15) Research institutions & universities (R&U)	
7) Ghana Cocoa Board (COCOBOD)	16) Statistics bodies (STATS)	
8) Fertilizer retailers (RET)	17) Organic fertilizer companies (ORGFERT)	
9) Professional associations (PA)	18) Private extension agents (PES)	
	19) Financial institutions (FIN)	

Source: Aremu et al. (2020).

Further, the stakeholders surveyed prioritized six stakeholder groups for the GFP as follows (in order of importance):

1. Fertilizer companies (importers, blenders, manufacturers, producers, and distributors).
2. GOG/policymakers/MoFA/regulators.
3. Farmers (groups/representatives).
4. Agro-dealers (fertilizer retailers/traders).
5. Research institutions.
6. Financial institutions.

Table 3. Stakeholder-Identified Priority Members of the GFP

Order of Importance	Priority Members for the GFP	No. of mentions
1.	Fertilizer companies (importers/blenders/manufacturers/producers/distributors)	43
2.	GOG/policymakers/MoFA/regulators	28
3.	Farmers (groups/representatives)	20
4.	Agro-dealers (fertilizer retailers/traders)	13
5.	Research institutions	12
6.	Financial institutions	7
7.	Parliamentary Select Committee on Food, Agriculture and Cocoa Affairs	1-3
8.	Security agents (national security, police)	1-3
9.	Environmental Protection Agency (EPA)	1-3
10.	Ghana Standards Authority (GSA)	1-3
11.	Development partners/donors, such as IFDC, AGRA, and AFAP	1-3
12.	Other institutions/CSOs/NGOs in the fertilizer sector	1-3
13.	GRA (Customs Division)	1-3
14.	Ministry of Finance	1-3
15.	Representative from ECOWAS	1-3

Order of Importance	Priority Members for the GFP	No. of mentions
16.	Service providers (Ghana Private Road Transport Union/transporters/transport owners/haulage companies)	1-3
17.	Private extension	1-3
18.	Seed dealers/producers	1-3

Source: Stakeholder Survey, May/June 2020 (authors findings).

Essentially, Tables 2 and 3 show the stakeholder groups the GFP could start with, as they fit into typical MSP categories of constituents, such as:

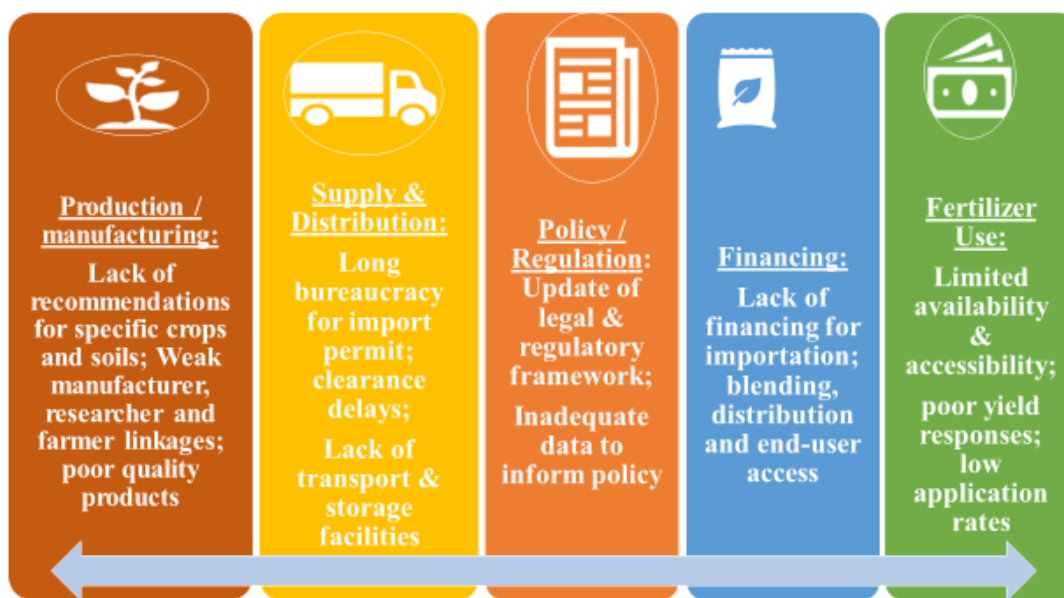
1. **Government of Ghana or public sector.**
2. **Private sector** (farmer-based organizations [FBOs], domestic and international agribusinesses, financial institutions; sub-sector association representatives).
3. **Development partners** (multilateral and bilateral donors).
4. **Knowledge partners** (CSOs, research organizations, universities, and academic institutions).

4.3 Key Fertilizer Sector Challenges, Constraints, and Opportunities

The stakeholder surveyed identified key fertilizer sector challenges, particularly along the value chain, as follows:

- Lack of fertilizer recommendations for specific crops and soils to boost the production/manufacture of quality fertilizers. This is largely due to weak manufacturer, researcher, and farmer linkages and the presence of poor-quality products (blends) in the system.
- Lengthy bureaucracy in obtaining import permits, clearance delays of fertilizer imports, limited supply caused by the subsidy quota system, and a general lack of fertilizer transport and storage or warehouse facilities in the farming areas. These were the major fertilizer supply and distribution challenges mentioned by stakeholders.
- Need to review and update the legal and regulatory framework for effective quality control and assurance and a lack of data to inform policy and strengthen the fertilizer sector-enabling environment, in terms of fertilizer policies and regulations.
- Limited availability of financing for all actors along the value chain, which is a major challenge affecting fertilizer importation, manufacture and blending, distribution, and end-user access to fertilizer.

Generally, the challenges with financing, supply, distribution, and limited crop- and soil-specific products have a compounding effect that limits availability and accessibility of fertilizers to farmers, resulting in low application rates and low yields. Figure 6 presents highlights of the fertilizer sector challenges/issues from the stakeholders' perspective.



Source: Field Survey, May-June 2020.

Figure 6. Stakeholder Perception of Fertilizer Sector Challenges/Issues in Ghana

Despite these challenges, stakeholders saw the fertilizer sector as one with a bright future in terms of opportunities and increasing fertilizer demand and use. They believed this would continue to rise, even after the GOG's PFJ program. Fertilizer and agro-chemicals were seen as crucial to agriculture. Survey participants also observed that the soils, especially in the northern part of the country, were generally poor; this translates to the need for an effectively functioning fertilizer sector. Stakeholders understood the decreasing availability of agricultural land would require use of more inputs (including fertilizer) to produce more and healthier food. They asserted that intensification is the way forward, and this would require increased fertilizer and input use.

Researchers believed there were good prospects, as they were engaged in conducting demonstrations and research on the importance of fertilizer use at the right time of application. They held the view that the fertilizer sector portended a vibrant future, because new blends were being formulated to meet soil- and crop-specific nutrient needs. They attested that the fertilizer sector would witness enhanced opportunities with the inception of the GFEP and a fertilizer authority and the construction and operationalization of a fertilizer production plant in Ghana. Figure 7 shows stakeholders' perception of Ghana's fertilizer sector future and opportunities.



Source: Stakeholder Survey, May-June 2020.

Figure 7. Stakeholder Perception of Fertilizer Sector Future and Opportunities

4.4 Stakeholder Views of and Interest in the GFP

The majority of stakeholders hailed the concept of the GFP as very necessary, a great idea, and a morale booster. Consequently, they advocated commitment and participation, secured funding, information exchange, confidentiality, and effective decision-making for the realization and sustainability of the GFP. They were optimistic that possible hindrances could be overcome with trust building, reaching consensus, embarking on education and sensitization, power balancing, and regular stakeholder engagement.

4.5 Priority Goals for the GFP

From the perspectives of the stakeholders surveyed, priority issues that could possibly be goals of the platform were categorized as:

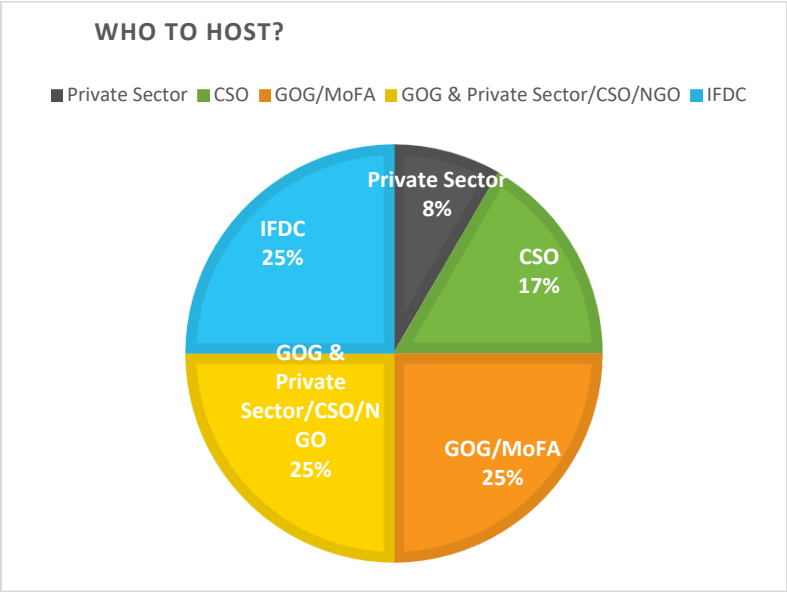
1. Enhanced fertilizer sector enabling environment.
2. Improved fertilizer (formulas/blends/compositions) production quality.
3. Improved fertilizer subsidy program implementation (through the PFJ).
4. Improved fertilizer availability, accessibility, and application.

In effect, the GFP should aim to address the challenges of improving access, affordability, availability, and utilization of good quality fertilizer, as that will enhance the opportunity and prospects of a fertilizer industry to thrive.

4.6 Stakeholder Views on Hosting and Funding

Hosting of the GFP would require funding of certain administrative, management, and coordination activities of the platform and its secretariat. This will have implications on the effectiveness and sustainability of the platform. A high percentage (25% each) of the stakeholders

surveyed were of the view that the MoFA, GOG, and private sector/NGOs/CSOs, or IFDC (a development partner) should host the platform. Many (17%) thought that it should be hosted by the private sector, whereas a few (8%) mentioned hosting by a CSO. Figure 8 illustrates the stakeholders’ views on who should host the GFP.



Source: Stakeholder Survey, May/June 2020.

Figure 8. Stakeholder Views on Who Should Host the GFP

In view of the fact that it is a collaborative effort or partnership mainly between the public and private sector, it is suggested that the GFEP secretariat, under the GOG secretariat, should host the GFP. This would require trust and confidence building and creation of a level playing field among stakeholders in order to ensure the effectiveness and sustainability of the GFP.

Regarding funding of the GFP, the majority of the stakeholders (41% each), indicated this should be done by *cost-sharing* and the *private sector*. A few (9% each) of the stakeholders said funding the GFP should be done by the *GOG only* and *GOG with donor/DP funding*, as seen in Figure 9.

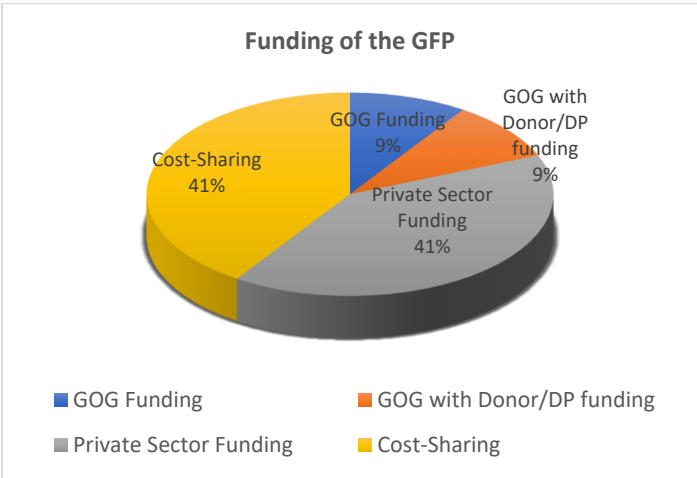


Figure 9. Stakeholder Views on Funding the GFP

Interestingly, participant discussions at the GFEP stakeholders roundtable meeting indicated that funding is so important that the GFP should ultimately aim to fund its own secretariat and activities. Accordingly, funding sources mentioned included: (1) membership dues; (2) NGO/development partners; (3) private sector; (4) voluntary contributions from participating members; (5) government budget; and (6) fees for services provided to members, such as business documentation and consultation as well as proposal and business case writing (see FERARI Research Note No. 3).

In effect, for the sake of sustainability of the platform, GOG funding through leveraging its power to raise revenue must be explored. This could be done through special levies and a specific budgetary allocation. Over time, the GFP could generate additional revenue through provision of services, in addition to member contributions or sponsorship and subscription. However, in seeking to establish a more permanent body, transition to a dues-based model would require a period of continued third-party funding to bridge the funding gap as the GFP builds a value proposition for members.

To summarize, fertilizer stakeholders in Ghana can be broadly categorized as the public sector, private sector, knowledge partners, and development partners. As constituents of the GFP, the critical and priority stakeholders that should be members are largely identified under these four broad categories.

Interestingly, the survey revealed majority stakeholder approval and overwhelming endorsement of the GFP as a strategically important mechanism that will support efforts in addressing fertilizer issues to attain sustainable sector growth and development.

The stakeholders acknowledged that the GFP might experience possible hindrances, such as lack of funding, commitment, participation, information sharing, effective decision-making, and implementation capacity in meeting its goals of improved distribution, availability, accessibility, and affordability of quality fertilizers among farmers and an enhanced business-enabling environment along the fertilizer value chain.

Nonetheless, there was high stakeholder optimism that the possible challenges the GFP might face will be surmountable. This brings into focus the need to draw lessons from similar multi-stakeholder platforms within Ghana and other countries in SSA.

CHAPTER 5: LESSONS FROM VARIOUS AGRICULTURAL MULTI-STAKEHOLDER PLATFORMS IN GHANA AND SUB-SAHARAN AFRICA

Chapter 5 reviews the various MSPs in Ghana and SSA in order to draw from the knowledge, factors for success, and lessons learned from these to help shape the GFP. Presented in this chapter are an inventory of five MSPs: MoFA's Medium-Term Agriculture Sector Investment Plan (METASIP) steering committee, Agriculture Public-Private Dialogue Forum (APPDF), led by the Private Enterprise Federation (PEF), the National Seed Trade Association of Ghana (NASTAG), the Kenya Fertilizer Platform (KeFERT), and the Mozambican Association for the Promotion of Fertilizers (AMOFERT). Notably, the lessons drawn from these agricultural MSPs are crucial for establishment of the GFP, as demonstrated in the ensuing sections.

5.1 Agricultural MSPs in Ghana

The three types of agriculture sector MSPs in Ghana are described as follows: (1) the government-led METASIP steering committee; (2) private sector-led APPDF; and (3) industry-led NASTAG.

5.1.1 METASIP Implementation Mechanism

METASIP, as the implementation strategy for Ghana's food and agriculture sector development policy (FASDEP II), was aligned with the AU Comprehensive Africa Agricultural Development Programme (CAADP). The METASIP implementation mechanism was designed by MoFA PPMED with the objective to enhance non-state actor participation in the agriculture sector-wide development program to meet CAADP goals, as well as the UN Millennium Development Goals. It is also called the Ghana CAADP country team.

The METASIP implementation mechanism is a multi-stakeholder platform with representation from the government/public sector (MDAs, Parliament) and private sector, knowledge partners (research organizations, universities, and academia), CSOs, and development partners. It is described as a government-led because it is coordinated and hosted by the government; however, it is presided over by the private sector and supported (activity funded) by the donor community (development partners).

It exists to drive and develop the implementation of agriculture sector policies in Ghana, with a 13-member multi-stakeholder representative steering committee, chaired by the private sector. It comprises stakeholder dialogue forums, such as the Agriculture Sector Working Group (ASWG), the annual Joint Sector Review (JSR), and the six Strategic Analysis and Knowledge Support Systems (SAKSS) nodes (based on the six METASIP program areas and FASDEP policy objectives).

In terms of financing and sustainability measures, METASIP activities are funded from the MoFA PPMED budget, which is challenging, because of the general GOG budget constraints. This makes it a major recipient of donor/development partner support, particularly in the execution of activities and meetings. *See Box 1 for details on the METASIP MSP implementation mechanism.*

Box 1. Medium-Term Agriculture Sector Investment Plan (METASIP)

Background: In October 2009, Ghana held a roundtable conference in Accra, during which a compact was signed between the government and its partners in the agriculture sector. This compact stipulates the agreement of the signatories to coordinate their activities for the implementation of the FASDEP II agenda in the six policy objectives through the METASIP interventions. The plan was designed to achieve the goals of the CAADP, which is the NEPAD framework to develop agriculture in the African continent.

Objective: The objective of METASIP is to create a performance-based system with participation by key stakeholders based on principles of inclusive and effective policy dialogue within and across countries, review and shared responsibility, and strengthened and expanded partnerships and alliances, including ECOWAS and AU complementarities and cooperation, to boost growth, increase incomes, and reduce poverty.

Structure and Governance: The implementation mechanism at the national level identifies the various stakeholders that will be responsible for ensuring the effective implementation of the METASIP, the various levels of governance, the arrangement for engaging stakeholders at the various levels, and the functions of these levels in implementation.

Membership and Representation: The overall structure in terms of governance, coordination, and participation proposed for the effective implementation and review of METASIP is: (a) steering committee, (b) policy dialogue, (c) A National Strategic Analysis and Knowledge Support System (SAKSS), and (d) a secretariat.

A) Steering Committee: The primary function of the steering committee is to see to overall successful implementation of the METASIP. The members have a mandate in the sector based on the institutions they represent. They are expected to support and advocate for the outcomes of plan objectives. The composition of the steering committee includes the signatories to the Ghana CAADP Compact: (a) key ministries (represented by MoFA, Ministry of Finance and Economic Planning [MOFEP], and the National Development Planning Commission [NDPC]); (b) Parliamentary Select Committee on Agriculture and Cocoa Affairs; (c) key private sector actors (National House of Chiefs, Food Security Policy Advocacy Network [FOODSPAN], Ghana Agricultural Workers Union [GAWU], FBOs, and PEF); (d) Agriculture Sector Development Partner; (e) financial institutions, and (f) research/academia. The steering committee is chaired by a non-state actor representative from the private sector.

Stakeholder groups: The public sector (government) interests in METASIP implementation will be represented by: (a) development partners, currently represented by 13 agencies who endorsed the signing of the CAADP Compact; (b) Parliament, through the Parliamentary Select Committee on Agriculture and Cocoa Affairs; (c) Government, represented by MoFA and MOFEP, with a larger membership of agriculture sector-related ministries – MLGRD, MOTI, MES, MRT, MLF, MOH, MOE, NDPC; and (d) research and development institutions, under the national agricultural research system (NARS) through the focal institution, CSIR.

The private sector interests in METASIP implementation will be represented by: (a) farmer-based organizations, led by GNAFF, PFAG, FONG, APFOG, and NFFAWAG, which facilitate the strengthening of FBOs, including formalizing an apex body to participate in effective dialogue with government and other partners and at the regional and international level; (b) private sector enterprises, through the PEF and its six associations and their members – FAGE, Association of Bankers, Ghana Employers Association, Chamber of Commerce, Chamber of Mines, and Association of Ghana Industries; (c) civil society organizations, through the Food Security Policy Advocacy Network (FOODSPAN), representing 40 organizations (at the time of compact signing) across Ghana, including NGOs and think tanks; (d) GAWU, which has membership across the regions of Ghana, representing agriculture labor/workers; and (e) traditional rulers, through the National House of Chiefs, representing all the regions of Ghana and also through the Regional House of Chiefs, each representing the traditional authorities in each political region of Ghana.

B) Policy Dialogue: Participation will include the expanded membership of the steering committee, and platforms will include the annual Joint Sector Review (JSR).

C) Strategic Analysis and Knowledge Support System (SAKSS): The main function will be to coordinate a collaborative work in a network and ensure storage and dissemination of products to improve the design and implementation of policies and strategies. SAKSS will include institutions in the NARS, local think tanks, and others.

D) Secretariat: The composition of the secretariat will include professionals and administrative support. The secretariat will work under the Director of PP MED of MoFA in close liaison with the implementing entities of the METASIP.

Funding Mechanism: An initial three-year budget will be developed to facilitate the startup to be sourced from partners. Eventually, existing institutions' own annual budget should be aligned through their mandate to address the sector needs.

Source: MOFA 2011, METASIP Implementation Mechanism, MoFA PP MED, March 2011.

METASIP implementation is embedded within the MoFA system, which makes it government-led with heavy private sector and CSO (or non-state actors) representation, and so its funding is mobilized as part of the government annual budget for the sector ministry. *See the details of how METASIP is embedded in the GOG system in the organogram in Figure 10.*

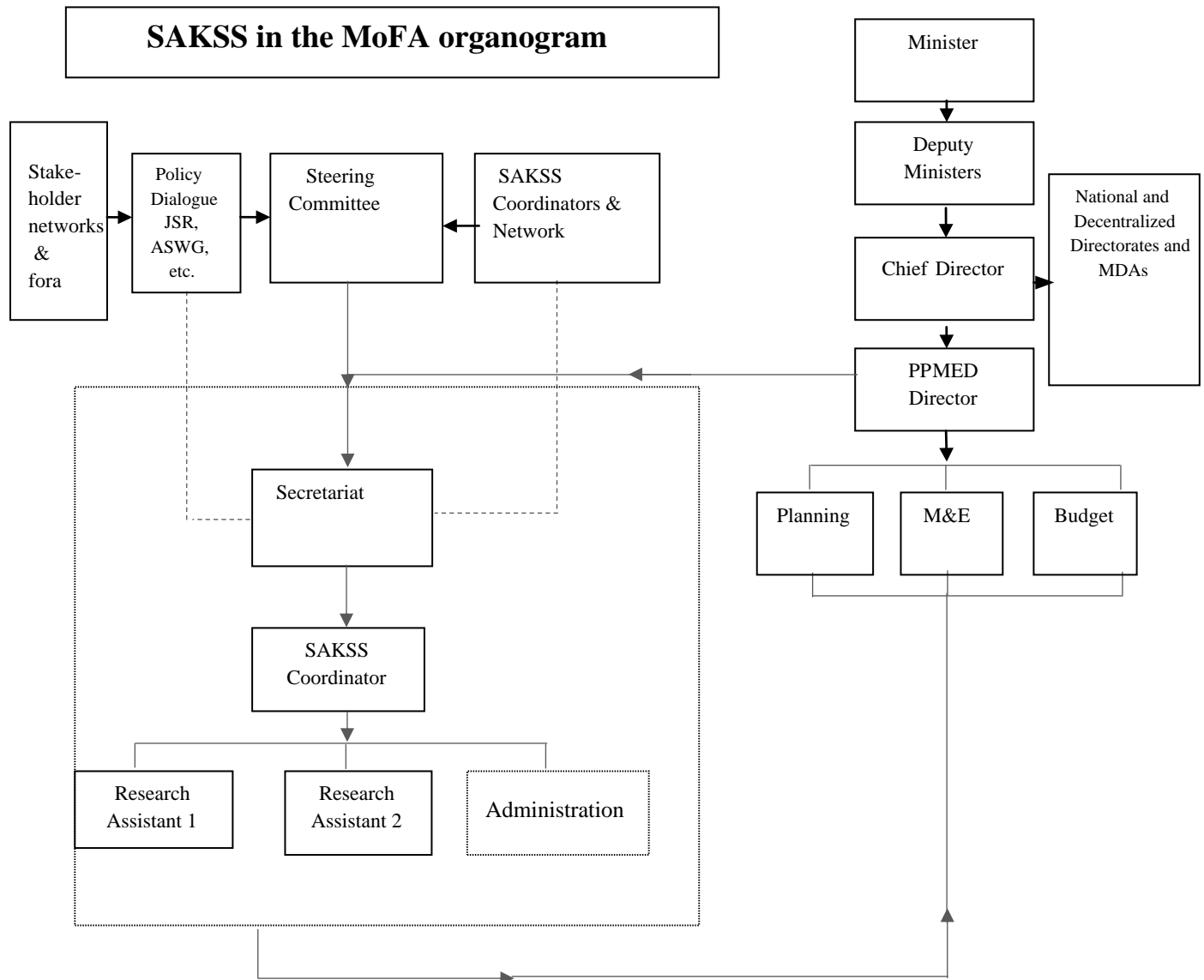


Figure 10. Organogram of SAKSS in the MoFA System (Source: MOFA, 2011)

5.1.2 APPDF

The APPDF is a public-private sector dialogue mechanism, established by PEF, to facilitate interaction among agriculture sector stakeholders and value chain actors in Ghana. It was meant to promote actor linkages and facilitate discussion, development, and implementation of agricultural policies in Ghana.

This dialogue mechanism, with membership of the public sector (policymakers and regulators) and the private sector (farmers, traders/agribusinesses, CSOs), was hosted and coordinated by the main private sector umbrella organization, PEF. The stakeholder membership forum is co-chaired by two representatives, one each from MoFA and a private sector organization. The APPDF is a private sector-led MSP, with representative leadership of the public sector from MoFA's PPMED.

In terms of financing and sustainability, APPDF meetings were initially supported with a development partner (donor) funding for a year of its existence, and it has been faced funding challenges since then. Although a number of donors expressed interest in supporting the APPDF, there are other constraints in terms of membership representation and differences in interests, as well as a lack of commitment and clarity of member contributions challenges. *See Box 2 for details on the APPDF.*

Box 2. Agriculture Public-Private Dialogue Forum (APPDF)

Background: APPDF, an initiative of the Private Enterprise Federation (PEF), was established in 2010 to provide a structured and formal mechanism for dialogue between the public and private sector in the development of agriculture in Ghana. PEF is the apex national institution for advocacy and promotion of private sector business development and the private sector signatory to the CAADP in Ghana. The APPDF was established through a Memorandum of Understanding between MoFA and 26 other signatories representing stakeholders in the sector.

Objective: The APPDF is to serve as a platform for regular dialogue and collaboration between public and private sector stakeholders in agricultural policy design, implementation, and monitoring. The APPDF is to bridge the “consultation gap” between the public and the private sectors to enhance the formulation and implementation of agricultural policies and programs, leading to an improved regulatory environment for doing business (investing) in agriculture and the agribusiness sector in Ghana. This is to foster inclusive growth in the agriculture and agribusiness sector, thus furthering Ghana’s agribusiness, food security, and improved nutrition agenda.

Functions: The mission of the APPDF is to provide an arena for all agricultural stakeholders (from both the public and private sectors) to collectively discuss and address constraints in the sector. Key activities include: holding regular public-private dialogue meetings; establishing mutual beneficial strategies and action plans for collaborative activities; and sharing knowledge and experiences to enhance activities in the agriculture sector. Matters/issues to be addressed by the APPDF include: constraints and opportunities in the development of the agricultural sector; formulation of agricultural policies; monitoring and evaluation of programs/projects; and any other matters that affect the growth and development of the sector.

Structure and Governance: Plenary Assembly (all members); the Executive committee and its sub committees, such as the issues/technical committee; membership committee; and financing and fundraising committee. The sub-committees, or working groups, are for relevant subjects. There are quarterly meetings of the Plenary Assembly and whenever necessarily fixed at the secretariat; working groups shall meet as and when necessary. There are two co-chairpersons, one representing MoFA and the other one representing the other organizations in the agriculture sector; the chairpersons jointly preside over all dialogue meetings.

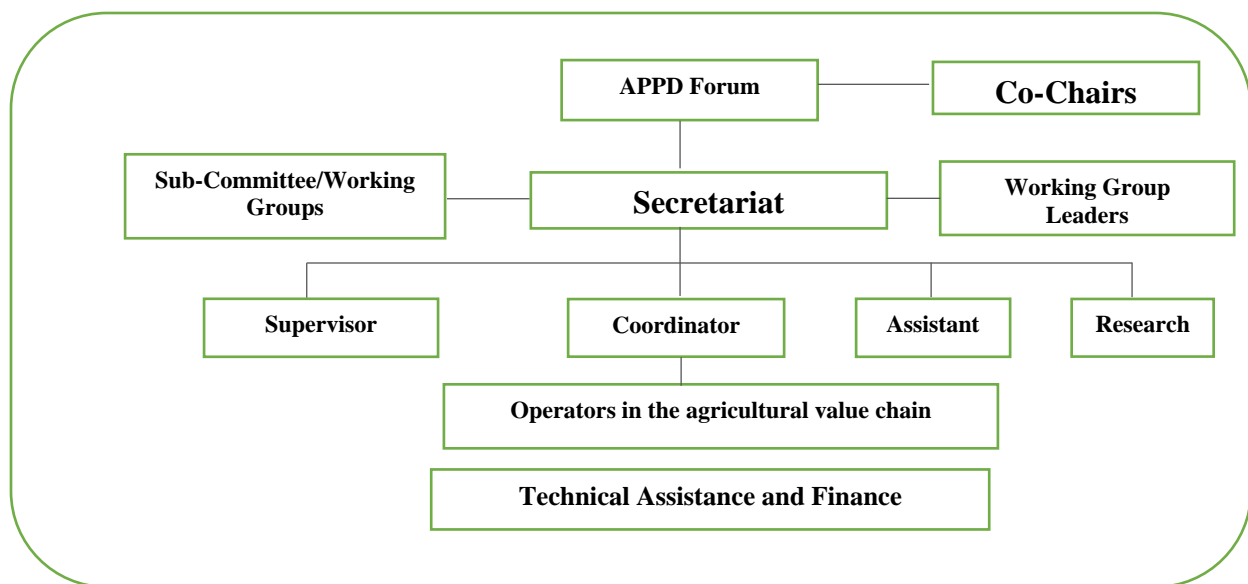
Membership and Representation: Membership is open to MoFA and all other interested organizations that represent stakeholders along the agricultural value chain. Members are not required to pay fees. Members attending other APPDF-related activities near their permanent residence are not compensated for the cost incurred in terms of venue, accommodation, transportation, or other ancillary expenses.

Secretariat: The PEF hosts the APPDF Secretariat and, in this role, monitors progress on issues brought up by the private sector and coordinates overall activities of the forum. This coordination function includes organization and support for the forum, working groups, and other private sector development-related activities.

Funding Mechanism: The APPDF was supported by the Centre for International Private Enterprise (CIPE), Washington D.C., from June 2010 to July 2011 but has not been able to hold further meetings since then due to organizational and financial constraints.

Source: Agricultural Public Private Dialogue Forum (APPDF) Memorandum of Understanding, PEF, April 2011.

The organogram of the APPDF shows co-chairing leadership between the public sector and private sector, with the private sector hosting and coordinating this MSP. Figure 11 shows the organizational structure of the APPDF.



Source: PEF (2011).

Figure 11. Organizational Structure of the APPDF

5.1.3 NASTAG

NASTAG can be described as an industry-led MSP in Ghana because it comprises actors mainly along the seed value chain. It is an amalgamation of members of private sector associations in the seed sector, such as SEEDPAG, Seed Trade Association of Ghana (STAG), CropLife Ghana, and GAIDA. The idea of convening the associations to form this MSP emanated from their leadership with the support of a donor/development partner, the USAID/Ghana Feed the Future Agriculture Policy Support Project (APSP). The APSP supported the establishment of NASTAG with funding and technical assistance.

NASTAG aims to promote the competitiveness of the seed sector and to ensure the production of quality seeds for the domestic and international markets. It seeks to achieve its goals through *capacity building, information dissemination, business facilitation, and advocacy* for improvement of the legal and regulatory environment in Ghana. In addition to its advocacy on the implementation of the national seed policy and national seed plan, NASTAG developed and began implementing a five-year strategic development plan (2018-2022). Accordingly, this seed sector MSP has been a welcome development for the public sector (policymakers, regulators), as they recognize the necessity and partnership of such a platform.

This MSP's membership is open to organizations/institutions in the seed value chain from both the public and private sectors (although the public sector members do not have voting rights); it established its own secretariat (not hosted by any of its members), headed by an executive officer with three support staff. It has an elected seven-member executive council and three sub-committees: (1) advocacy and communication; (2) technical; and (3) business and ethics. The executive council is composed of: *president, vice-president, general secretary, treasurer, and three zonal representatives (northern, middle, and southern)*. It is affiliated with the African Seed Trade Association (AFSTA), headquartered in Nairobi, Kenya.

This seed sector value chain platform is financed by member contributions (subscription and membership fees), fees charged for business facilitation and services to members (e.g., PFJ) and capacity building support to members, and implementation of donor/development partner-funded projects. Although it was initiated and supported by development partners (USAID's APSP and the Feed the Future Ghana Agriculture Technology Transfer Project), it is becoming financially self-sustaining through implementation of a sustainability/strategic development plan. The effectiveness of this MSP is a major draw for DPs. *See Box 3 for details on NASTAG.*

Box 3. National Seed Trade Association of Ghana (NASTAG)

Background: NASTAG is an amalgamation of value chain actors associated with the seed industry. It was legally registered on February 1, 2016, as a private entity under the Companies Act 1963 (Act 179) of Ghana, as a not-for-profit membership-based association. It was formally launched on August 24, 2017.

NASTAG is dedicated to supporting the competitiveness of Ghana's seed value chain through business and technical capacity building of its members, promotion of effective collaboration among and between actors in the chain, advocacy, regulation and standardization, and provision of general seed information. It has positioned itself to support the industry players to develop their niche to the fullest potential for individual and collective benefits, ultimately contributing to enhancing agricultural production to improve farmers livelihoods and agriculture in Ghana.

Objective: NASTAG's constitution mentions 15 objectives that can be summarized in four broad goals: (1) build the capacities of seed industry players for business effectiveness and competitiveness; (2) serve as the balanced voice for advocacy issues, representing global, regional, and national seed enterprises – seed producers, traders, research, and relevant government institutions; (3) improve communication between seed stakeholders in Ghana, West Africa, and the entire world by providing necessary seed industry information, such as a statistical database on Ghana seed production and trade; and (4) develop as a vibrant, representative, accountable and financially sustainable organization.

Functions: Its mission is to promote the interest of the members by upholding high standards in supplying improved seeds for increased crop production in Ghana through advocacy programs; capacity building of members in technical skills, business, and ethics; promotion of public-private partnerships; and the promotion of improved technologies for the development of member businesses. NASTAG embraces the following core functions: ensure equal recognition of all members, all of whom provide the association with direction; encourage consensus-driven decision-making; promote member participation and prioritization of common issues; pursue alliances with other similar groups that can contribute to the association's objectives; and maintain the highest level of ethics and transparency accompanies all activities.

Structure and Governance:

The Executive Council: The executive council comprises a seven-member elected council (including president, vice president, national treasurer, general secretary, three zonal representatives – northern, middle, and southern), and three statutory sub-committees of five members, each drawn from the executive council, namely *Advocacy & Communication*, *Seed Business & Ethics*, and *Technical committees*. NASTAG holds annual general meetings and quarterly executive council meetings, chaired by the president. The members from the public sector institutions, such as the research institutions, do not have voting privileges.

Membership and Representation: The membership of the association is open to the following legal entities in Ghana on payment of an entry fee as determined from time to time by the executive council established under Article VII Paragraph 20(a) and accepting to abide by the Code of Ethics and Practice of NASTAG: (a) Ordinary members with voting rights – (i) private commercial enterprises incorporated under the Companies Act 1963 (Act 179) or private international companies registered in Ghana for the purposes of producing, processing, and marketing of seed. They deal exclusively in seed or have seed as a major component of their enterprise and (ii) private seed trade associations registered under the Companies Act, 1963 (Act 179). Each ordinary member shall have one voting right and shall have the right to be elected to the executive council. (b) Associate members without voting rights – (i) seed enterprises registered overseas and whose substantial business is outside Ghana; (ii) NGOs involved in extension services and distribution and marketing of seeds; (iii) material inputs and services suppliers; (iv) government enterprises, government agencies, government departments, divisions or programs involved in research and training, other support to national public and/or private seed producers, or which deal in seed; (v) other organizations or individuals involved in seed production, processing, and marketing; and (vi) honorary members.

Currently, NASTAG has 45 members, up from 32 founding members at inception, who are mostly in the private sector from all over Ghana. Membership comprises entities such as seed companies/producers, distributors, and retailers, apex groups of farmers, and agro-input and service providers, including PFAG and CropLife Ghana, research institutions such as CRI and SARI of the CSIR, and UDS.

Secretariat: NASTAG established its own secretariat, headed by an executive secretary and two support staff. This was possible with an 18-month institutional strengthening and capacity building project under the Feed the Future Ghana Agriculture Policy Support Project (APSP), which included an embedded technical advisor and funding of activities.

Funding Mechanism: Membership subscription fee and annual dues; management and administrative fee for development partner project implementation; fees charged for service to members; and event hosting and organization.

Source: NASTAG Constitution and 5-year Strategic Plan, 2018-2022.

Key similarities among these MSPs are that they are donor-supported, public-private sector institution/organization-based membership (multi-stakeholders), with the aim of increased non-state actor (private sector) participation in the policy and regulatory environment and promotion of agricultural value chains. Notably, a lack of sustainable funding (budget constraints), lack of commitment/participation due to issues of stakeholder representation and effective decision-making, and competing interests are key challenges affecting the effectiveness and sustainability of these MSPs.

The governance structures do not appear to be a problem among these Ghanaian MSPs or a major challenge in their effectiveness as a platform.

5.2 Fertilizer Sector MSP in SSA

KeFERT and AMOFERT are two fertilizer sector MSPs in SSA reviewed in this study. IFDC played a significant role in setting up these fertilizer-focused MSPs.

5.2.1 KeFERT

KeFERT arose from the realization of the need for a dialogue mechanism for public and private sector stakeholders to interact (discuss and address) on fertilizer sector issues. It has two co-chairs (one representative each from industry and government ministry/public sector), a steering committee (comprising public and private sector representatives), ad hoc and sub-committees, and a secretariat managed by a coordinator.

KeFERT started as an informal platform, but there was a strong indication of plans for formalization/registration, mobilization of support from donors and member subscription, and options for government funding from levies on imports. *See Box 4 for details on KeFERT.*

Box 4. Kenya Fertilizer Platform (KeFERT)

Background: The KeFERT concept began with a national fertilizer conference in Nairobi in October 2018, where a presentation on a platform proposal was made. Participants discussed the possibility of addressing key fertilizer sector cross-cutting challenges and unanimously agreed to form a credible, representative, and effective platform. Consequently, a team was chosen to develop a white paper for the operationalization of the platform, including stakeholder identification, vision, mission, objectives, roles, and activities.

Management and Organizational Structure (Administrative Structure and Members): KeFERT has two co-chairs (1st co-chair is Fertilizer Industry Representative [if not available, to appoint someone from industry] and 2nd Co-chair is a MoALF&I representative [if not available, to appoint someone from MoALF&I]). The platform also has a steering committee, comprising voting members (Fertilizer and Animal Foodstuffs Board from 2020; Council of Governors nominee; KALRO; Tegemeo; two farmer institutional representatives and three representatives from the Fertilizer Association of Kenya (FAK): local fertilizer manufacturers, fertilizer blenders, fertilizer importers, local producers of fertilizer raw materials (inorganic/organic), i.e., Full Members of FAK, non-voting facilitating partners (KMT, IFDC, AFAP). Ad hoc members are called in as needed (other fertilizer sector stakeholders noted above). Sub-committees are formed around specific technical issues.

Operationalization, Legal Standing, Powers, and Financing Mechanisms of the Platform: Operationally, KeFERT has a coordinator (full-time or part-time), office space, accounting and administrative (secretariat) support from the initial host (IFDC, which is *midwifing* the process) at conception.

Regarding legal standing, KeFERT began as an informal platform at the initial stage, but options or formalization/registration will be reviewed during the establishment stages (e.g., company, society, etc.). The platform advises and convenes external partners and is subject to its own internal decision-making processes.

Funding Mechanism: Mobilization for support from development partners/donors for start-up period; member subscriptions (industry and stakeholders); government funding; options for government levies on imports to be evaluated, e.g., Agrochemical Association of Kenya (AAK) model via Fertilizer and Animal Foodstuffs Board (FAFB).

Source: Overview of White Paper for Kenya Fertilizer Platform (KeFERT), a forum for Public-Private Dialogue (PPD); Ministry of Agriculture, Livestock, Fisheries and Irrigation, Nairobi, Kenya. Presentation by Alexander Fernando, IFDC Regional Director, East and Southern Africa, December 5, 2018)

5.2.2 AMOFERT

AMOFERT was established as a public-private dialogue mechanism in Mozambique to push the implementation of fertilizer policy and national fertilizer program and to work toward attaining the *Abuja Declaration* fertilizer use target. Initially, an installation commission was established to *midwife* the platform process. AMOFERT has a general assembly of members, a multi-sectoral representative coordinating committee with an elected president and vice president. AFAP provided a secretariat for the platform. The platform has been formally registered as a fertilizer industry association in Mozambique. Although its establishment was strongly donor-supported, its activities are also funded by membership subscriptions. *See Box 5 for details on AMOFERT.*

Box 5. Experience in Establishing a Fertilizer Platform in Mozambique

Background: AMOFERT emerged as a dialogue mechanism for fertilizer sector stakeholders to participate in the implementation of the national fertilizer program, fertilizer regulations developed by the Ministry of Agriculture, as well the directive emanating from the *Abuja Declaration*. It was thought of as a way to address challenges such as: *low use of fertilizers, which has been recognized as a critical constraint; retail distribution network scarce, skills weak; lack of market integration (no incentive for fertilizer use), and an entry point for dialogue with regional fertilizer forum.*

Objectives: Generally, AMOFERT's objective is to establish a dialogue mechanism on policies and debate on issues related to the fertilizer value chain, aiming at promoting sustainable use of fertilizers by farmers for increased production and productivity in Mozambique, specifically for interactions with the public sector (policymakers) for a favorable environment in development of a fertilizer value chain; private sector for quality fertilizers; and research institutions for recommendations on appropriate fertilizers for different agroecological zones. The association also promotes sensitization, debates, seminars on specific themes, and studies on issues (mapping and analysis of fertilizer value chain). It disseminates study results and debates for consensus and to establish a basis for creation of Mozambique Fertilizer Association.

Organizational Structure: AMOFERT was initially led by an installation commission, with representatives from the Ministry of Agriculture, AFAP, IFDC, USAID, and AGRA. The installation commission was responsible for organizing the first meeting/general assembly of the platform. The general assembly elected a president and vice-president of the platform and selected members for the Coordination Committee, and the Coordination Committee, in turn, indicated members for the secretariat.

General Assembly: Participation in the fertilizer dialogue platform was open to all actors in the fertilizer value chain: public sector, private sector, cooperation partners, NGOs (national and international), farmer associations, financial institutions, research and academic institutions, among others. Participation of all members takes place in the general assembly. However, daily operations of the platform are the responsibility of the coordination committee and secretariat.

General Assembly Functions: Propose and elect members of the Coordination Committee; appreciate and approve work plan submitted by the Coordination Committee; propose and provide recommendations on issues deserving attention of the Coordination Committee.

Coordination Committee: The Coordination Committee is composed of a multi-sectoral team along the fertilizer value chain in order to maximize knowledge and experiences from various sectors in the value chain. The composition and number of members of the Coordination Committee was agreed on in the launching general assembly of the platform. Agenda and venue for meetings of the Coordination Committee is agreed on by members of the committee.

Coordination Committee Functions: Develop and propose action plans for the achievement of platform objectives; represent the platform in national and international fertilizer fora; provide advice to the platform and its members on issues related to fertilizers; and identify and invite specialists for specific studies and report on specific themes that require attention of members of the platform.

Secretariat Functions: Organize meetings of Coordination Committee and general assembly; implement activities according to the action plan approved by general assembly; and maintain internal and external communications.

From Platform to Association: By Mozambican law, the most appropriate mechanism for institutionalization led to an association, the Mozambique Association for Promotion of Fertilizer Use (AMOFERT), and it is officially registered. With objectives that are basically same as the platform, AMOFERT's vision and mission are as follows: *Vision:* A dynamic and competitive fertilizer value chain which stimulates the development of agriculture sector. *Mission:* AMOFERT functions as a vehicle to facilitate and stimulate the development of the fertilizer value chain through the congregation of the various actors, operating directly or indirectly in the sector, for the implementation of common objectives through dialogue and cooperation.

Some Achievements and Issues: Strategic plan elaborated and approved; studies of fertilizer cost structure; Fertilizer Act: 2016; consultations completed; Draft Act submitted to the Government of Mozambique.

Participation in Regional Conferences: 2015: JHB (ESAF/FERTASA); 2015: Lusaka (ESAF/COMESA/ACTESA); 2016: DAR (ESAF); 2017: Cape Town (Argus); 2017: Maputo (ESAF).

Strategic Activities: (1) Promote policies and regulations – technical advice to develop the Fertilizer Act; (2) promote the increase in the demand for and access to quality fertilizers, train Directorate of Agriculture and extension agents, promote the use of balanced fertilizers and technology packages, and design and implement the subsidy program; (3) stimulate national production of fertilizers and reduction of prices of fertilizers at farm level; (4) promote access to finance for fertilizer, train on preparation of business plans, facilitate credit lines and bank guarantees, deal with issues not in the government agenda; registration through three ministries (Agriculture, Health, and Environment), which can take up to four months; require blends to be registered, and create awareness of the need for accurate fertilizer data collection systems.

Source: "Experience in Setting a Fertilizer Platform in Mozambique," presentation by Carlos B. Zandamela, Nairobi, Kenya, October 16, 2018.

5.3 Lessons Drawn for the GFP's Design and Operationalization

Lessons, such as the necessity for and objectives of the GFP, are presented in this section, which will lead to design and operationalization considerations based on the review of the five agricultural MSPs and Ghana's fertilizer stakeholder discussions. Other important aspects in this section include a discussion of the GFP's effectiveness and sustainability in terms of its activities, coordination, hosting, and funding to help clarify the GFP process in the country. To begin with, there is the need to establish the reasons for the GFP and its objectives, followed by its design and operationalization.

5.3.1 *Why the GFP?*

Agriculture plays a major role in Ghana's economic growth and development, as it is crucial to poverty reduction, employment, and food and nutrition security. Fertilizer is a major input for increasing agricultural productivity and promoting inclusive and sustainable agricultural growth and development. Attaining fertilizer sector targets requires close collaboration among key stakeholders and actors across the sector. These stakeholders include the private sector (fertilizer companies, smallholder farmers, input dealers, traders, processors, agri-finance providers), government/public sector institutions, development partners (bilateral and multilateral donor agencies, non-governmental and civil society organizations) and knowledge partners (research, universities, and academia).

The lack of a clearly defined and focused fertilizer platform to attract and realize inclusive investment opportunities has inhibited stakeholders and actors in the value chain from building lasting partnerships that will create impact at scale. In addition, there are policy and regulatory issues that are hampering the efficiency and scalability of operations in the fertilizer sector to ensure the availability, accessibility, and affordability of quality fertilizer among farmers. Furthermore, negative experiences between the private sector and the government have brought to the fore the need for an effective dialogue mechanism on fertilizer issues. In view of all these factors, this study seeks to establish how the GFP could be designed and operationalized in support of inclusive and sustainable fertilizer sector growth and development. The GFP could also leverage stakeholder participation to support implementation and coordination of the GFEP five-year strategic plan (2020-2024), as shown in Figure 12.

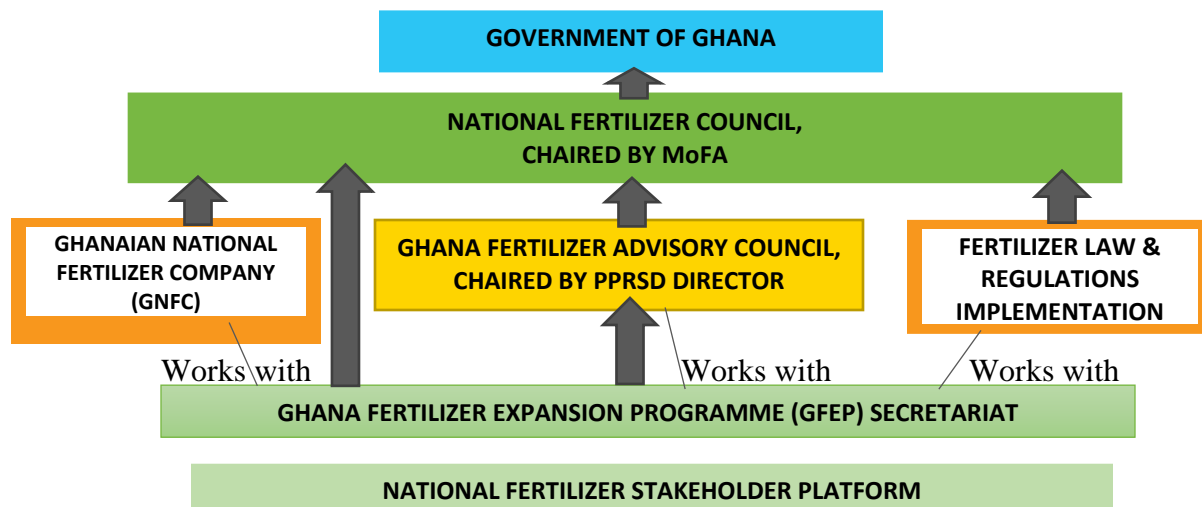


Figure 12. GFEP Implementation and Coordination Structure in the Five-Year Strategic Plan (2020-2024)

5.3.2 Proposed Objectives of the GFP

Based on the analysis of fertilizer sector issues and review of the MSPs, the proposed objectives of the GFP are to:

- Support, facilitate, and mobilize stakeholders to create partnerships and productive investments for increased agricultural productivity, improved livelihoods, and food and nutrition security through inclusive and sustainable growth and development of the fertilizer sector.
- Organize the fertilizer stakeholders into an active advocacy group for policy reforms, which engages in regular and constructive dialogue with GOG.
- Provide networking and information-sharing opportunities for stakeholders in the fertilizer sector on agribusiness, investment opportunities/gaps, potential partners, and projects while ensuring effective and efficient utilization of quality fertilizers.
- Provide the opportunity for learning from best practices, partnerships, and collaborative value chain linkages while addressing challenges, harnessing opportunities, and creating or enhancing the fertilizer sector-enabling environment.

Accordingly, the GFP is expected to deliver value in the fertilizer sector through five key functions in response to stakeholder priorities:

1. Identify and develop projects and partnerships to increase incomes and catalyze investment in the fertilizer value chain.
2. Identify policy barriers and build an evidence base to influence policy change.
3. Link members with necessary services, such as training, business development, market data, and finance.
4. Collect and disseminate information on topics relevant to members/stakeholders.
5. Create working relationships that extend beyond discrete projects and partnerships.

5.4 Operationalization of the GFP

As indicated, the majority of fertilizer stakeholders have endorsed the GFP, in spite of concerns about commitment, participation, funding, information confidentiality, and effective decision-making. With stakeholder optimism for overcoming the perceived hindrances, emphasis should be placed on guiding certain principles in the march toward the realization of the GFP. The GFP must be *inclusive and demand driven, sustainable, pragmatic and action oriented, and evolving* and must *leverage existing strengths*. Operationalization of the GFP requires definition and design of the structure or format, as discussed in the ensuing sub-sections.

5.4.1 Proposed Structure

Lessons drawn from the existing MSPs review and stakeholder discussions so far point to the need for a formalized GFP structure with clearly defined rules of engagement (as displayed in Figure 13): general member forum, steering committee (executive council), joint public-private leadership structure, sub-committees, ad hoc committee, and secretariat (hosting and coordinating).

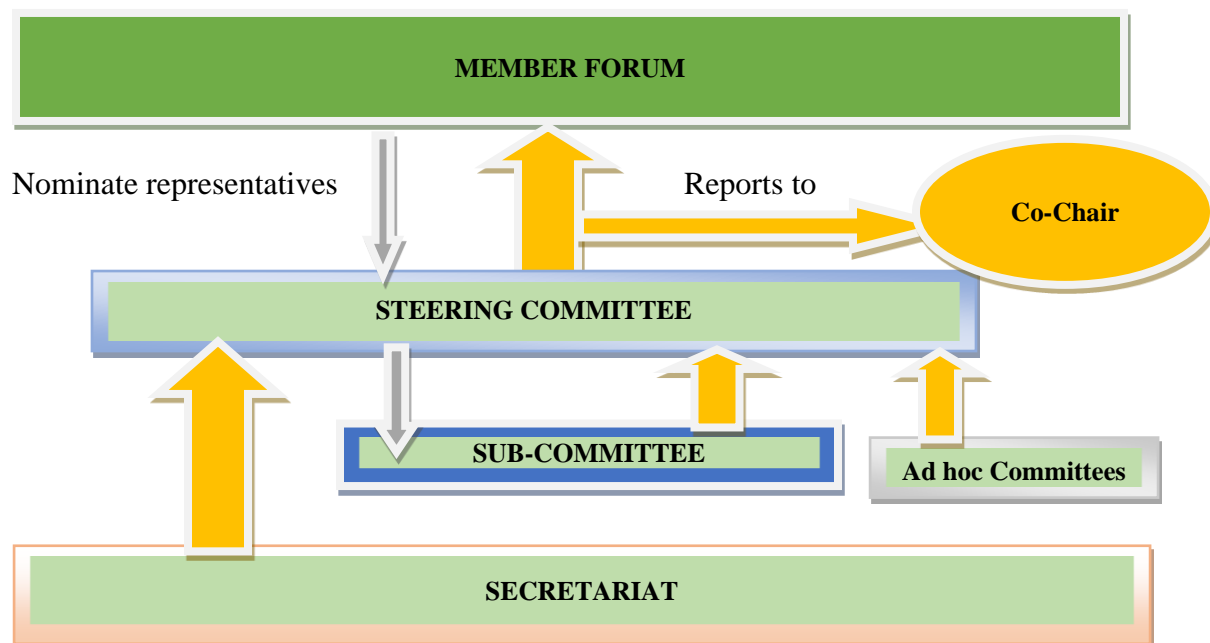


Figure 13. Proposed Structure of the GFP

Importantly, this structure can and should evolve over time with initial activities undertaken. The membership, leadership, governance, management, and coordination issues are presented in the ensuing sub-sections.

5.4.1.1 Member Forum

A multi-stakeholder platform requires linkages, interaction, and learning mechanisms among members (Adekunle and Fatunbi, 2012). Each stakeholder group (i.e., GOG/public sector, private sector, knowledge partners, and development partners) carries out tasks they do best based on their

competencies, resource domain, and mode of operation, and so membership of the GFP should be representative of all active stakeholders in the agriculture sector and fertilizer value chain.

The member forum will comprise voting and non-voting (observer) members from the approximately 20 identified stakeholder groups presented in this report. It will be responsible for strategic decision making on which value chain/policy to focus on by all voting GFP members. The member forum could initially hold plenary quarterly meetings (this could decrease over time) and be responsible for nominating representatives to sit on the steering committee.

The member forum will elect two co-chairs: one representing the public sector institution (MoFA/GFEP) and another, on a rotating basis, from domestic agri-businesses, the private sector, or CSO (NSA).

5.4.1.2 Steering Committee and Sub-Committees

As noted by Adekunle and Fatunbi (2012), actors in MSPs are organized in partnership or teams to bring about mutually desirable changes. The teams are made up of competent actors who have an incentive to jointly innovate. They usually include sources of the key competencies and knowledge (both technological and non-technological) required to address the problems, opportunities, and/or entry points that prompt their establishment.

A platform steering committee (or executive council) of about nine to 11 representatives, with seats specific to each stakeholder group in the member forum, shall be constituted and expected to conduct quarterly meetings. Observer (non-voting) members can sit on the steering committee but will not vote. The steering committee voting members shall be composed of nine member representatives of MoFA/GFEP, research institute (CSIR-SRI/-SARI/-CRI), policy institute, farmers/end-users, and fertilizer businesses (fertilizer manufacturer/blender, distributor, retailer/agro-dealer). Key development partners, such as IFDC, AGRA, and USAID, can be non-voting members in the steering committee (IFDC/Patrice Annequin, 2019).

The GFP steering committee shall be nominated/elected representatives mostly from the approximately 20 identified essential or priority stakeholder groups based on thematic areas or their locus in the value chain or in the membership forum. The steering committee is responsible for tactical decision-making. The representatives will serve at least a two-year term (except the MoFA/GFEP representative [co-chair], which will be a permanent seat).

Within the steering committee, there will be sub-committees (task teams) of members who will come together to practically resolve challenges and develop specific projects. Each sub-committee will nominate a private sector or public sector member as a leader. The sub-committees will make proposals to the steering committee, which will vote on day-to-day decisions. The steering committee shall take larger strategic decisions to the membership forum for their deliberations and endorsement.

The sub-committees (task teams of three to five members), formed from the steering committee, will have specific responsibility, as it will be formed around specific technical and non-technical issues (e.g., subsidy [DCS]; quality [PPRSD]; production [GOG]; agronomy and soil science [SRI], value chain optimization, and communication/intelligence).

5.4.1.3 Leadership

The leadership of the steering committee and the membership forum shall be the two co-chairs (i.e., the 1st and 2nd co-chairs from the public sector/MoFA/GFEP and private sector/fertilizer industry). The steering committee shall be supported by the sub-committees and ad hoc committees (as and when needed).

5.4.1.4 Coordination

As observed from effective practice, the GFP will require a secretariat consisting of a coordinator and administrative support (at a minimum). The GFP secretariat should eventually be embedded into the MoFA/GFEP system to guarantee its sustainable operational decision-making and execution.

As noted, the purpose of the secretariat is to facilitate the operations of the GFP and to execute tasks as determined by the steering committee. The coordinator shall work with the head of the host institution in reporting to the GFP steering committee on relevant and related specific matters.

5.5 Achieving Effectiveness and Sustainability of the GFP

5.5.1 Governance

In terms of governance, it is proposed that the member forum meet quarterly in plenary and make strategic decisions on the platform's direction based on proposal from the steering committee. The steering committee shall meet more frequently, as they serve as the tactical decision-making body of the platform while providing strategic guidance to the member forum, with the support of the sub-committee and ad hoc committees. The secretariat will present reports to the steering committee, as it shall be responsible for operational decision-making and execution of the platform's functions.

5.5.2 Inclusiveness and Representation

Although membership of the GFP shall be open to all interested agriculture sector and fertilizer value chain actors, participating members must accept the principles of commitment to: (i) action; (ii) inclusive and sustainable agricultural development; and (iii) the platform. These principles will create the right mix of institutions at the table, ensuring that each member actively and inclusively contributes to the platform.

Like most MSPs, stakeholder interest in the GFP should be sustained partly by an arrangement that ensures that all partners have a contribution to make and an obvious benefit to derive from the activities (Adekunle and Fatunbi, 2012). Emulating successful platforms, a small core group of stakeholders (mainly from the private sector) will commit to investing their time to champion the development of the platform.

5.5.3 Proposed GFP Activities

As noted by IFDC/Patrice Annequin (2019), the GFP should:

- Hold fora on cross-cutting issues, identify constraints, reach consensus, and recommend best-practices.
- Engage experts or institutions to undertake technical studies on identified issues.

- Support implementation of programs to guide public and private decision making and investments.
- Maintain internal and external communications related the platform and fertilizer sector activities.
- Mobilize resources to address priority actions.

5.5.4 *Hosting and Funding of the GFP*

As has been realized, hosting the GFP will require funding of certain administrative, management, and coordination activities. In view of the fact that it is a collaborative partnership among non-state actors (such as the private sector, CSOs/FBOs/NGOs, and DPs) and the public sector, as mostly seen in the MSPs reviewed and the stakeholder survey, the GFP should eventually be embedded into the GOG/MoFA/GFEP secretariat.

Since the GFP seeks to establish a more permanent (sustainable and functional) body, a transition to a dues-based model should be inherent. This will require a period of continued third-party (DP/NGO/CSO) funding to bridge the funding gap as the GFP builds a value proposition to attract and retain committed and motivated members.

For the sake of sustainability of the GFP, GOG funding (through special levies and a specific budgetary allocation) and leveraging of its power to raise revenue should be explored. Over time, the GFP can generate additional revenue through provision of services and implementation of activities, in addition to member contributions or sponsorship and subscription. Incidentally, these action points for effective realization of the GFP, as well as a timeline, were also identified and noted by participants at the stakeholder roundtable meeting held in Koforidua April 7-8, 2021.

From the foregoing, important lessons to help in the design and operationalization of a representative and functional GFP are as follows:

1. Structure is not so much an issue if formalization is the ultimate direction of the MSP, as the registration and regulation requirements are basic. Consequently, the GFP, as seen in most MSPs, must be a formalized structure. This is logically in line with the process of going through certain phases beginning with negotiation and dialogue, through formalization to implementation, continuous implementation, and improvement. As witnessed, the GFP has started with the stage of negotiation and dialogue with the stakeholder interactive surveys and research analysis.
2. Membership and leadership can be problematic if there is no understanding, consensus, or buy-in of stakeholders in terms of democratic practice. Following the overwhelming stakeholder endorsement of the GFP concept and with identification of priority members accomplished, the platform must be legally registered to attain key fertilizer stakeholder representative membership and ultimately a clearly defined structure with rules of engagement and interactions within and outside. Also, it will need joint public and private sector leadership in the form of co-chairing and a secretariat to coordinate and manage information exchange and platform activities.
3. Funding is a major challenge, particularly if it is initiated with and dependent on donor support and a fund mobilization strategy is not established. The GFP must develop a financial resource sustainability strategy to ensure that funding of stakeholder interests is effectively executed in order to provide value proposition to attract, retain, and sustain membership.

4. Sustaining member interest, participation, and commitment is a challenge if there is not a strong independent secretariat to coordinate the affairs, create a level playing field, mediate various interests, and support leadership in the discharge of their responsibilities. An organizational development strategy will be needed in order not to lose focus. The GFP must be engaged in relevant activity development and strategy implementation to maintain stakeholder participation and commitment.

These lessons constitute major considerations for further stakeholder discussions in order to make significant strides toward the formalization of the GFP in an effective and sustainable manner (see IFDC FERARI Research Note No. 3).

CHAPTER 6: STAKEHOLDER ROUNDTABLE DISCUSSION OF THE GFP PROCESS

Chapter 6 presents a review of discussions among key fertilizer stakeholders at a roundtable meeting organized by the IFDC FERARI program in collaboration with the GFEP. This meeting provided the atmosphere for participating fertilizer stakeholders to discuss sector issues and the proposed GFP. The meeting sought to reach a consensus and resolution on the design and operationalization of the GFP. The discussions enabled the production of a roadmap for the effective realization of a representative, functional, and sustainable fertilizer multi-stakeholder platform, encapsulated in the GFP.

6.1 Stakeholder Roundtable Discussions

The IFDC FERARI program, in support of and collaboration with the GFEP, organized a stakeholder roundtable meeting for fertilizer stakeholder at Capital View Hotel in Koforidua, April 7-8, 2021. Twenty-four representatives of stakeholders from the public and private sectors, farmer-based organizations (FBOs), civil society organizations (CSOs), research organizations and academia, and development partners participated in this meeting.

Key during the meeting agenda was a discussion of updates on the GFEP process and the fertilizer sector, with particular emphasis on the proposed GFP, to facilitate stakeholder interactions (dialogue, information exchange, coordination, addressing sector bottlenecks and constraints, consensus building, avoiding duplication, and maximizing synergy) for enhanced fertilizer sector growth and development in Ghana.

The stakeholder roundtable meeting activities and processes included key stakeholder remarks and input, presentations, and discussion of updates on GFEP and fertilizer sector issues and FERARI's GFP study report, as well as group and plenary discussion. The participants, in line with their expectations and issues discussed, concretely developed an action roadmap and resolution toward the establishment of the GFP to help drive the implementation of major fertilizer sector sustainable growth and development agenda/initiatives in Ghana.

6.2 Next Steps in the GFP Process

As realized from similar platforms, the success of the GFP is first contingent upon fertilizer stakeholder understanding, consensus, and buy-in. In this regard, the roundtable meeting provided the environment for participants to discuss and review the proposed structure/format and operationalization of the GFP with regard to findings from the stakeholder survey and lessons drawn from some agricultural MSPs in Ghana and other SSA countries. In effect, the stakeholders spent time building upon the ideas presented in the GFP study updates and further determined strategic steps moving forward with the GFP process. (See FERARI Research Note No. 3 for details on the GFEP fertilizer stakeholder roundtable meeting held in Koforidua, April 7-8, 2021.)

The roundtable meeting participants agreed that key decisions and action points captured at this event (as discussed in FERARI Research Note No. 3) should be shared with all participants. This is expected to engender more stakeholder involvement and buy-in for effective realization of a functional, representative, and sustainable GFP. In addition, this was meant to ensure continued

discussions and address identified fertilizer issues for the attainment of the sector goals and targets in the country (IFDC FERARI Research Note No. 3).

In addition to pronounced stakeholder endorsement of the GFP concept, participants at the roundtable meeting agreed that interested stakeholders should work toward its realization by the end of 2021. Consequently, the identified action points culminated into a roadmap with a timeline as follows:

1. The organizers and facilitators (IFDC FERARI and GFEP), with immediate effect and within the second quarter of 2021, should execute the follow actions:
 - Disseminate key documents discussed and developed, such as group discussion reports, resolution, and action points/roadmap, from the meeting with all participants.
 - Finalize the roundtable meeting resolution and share it with stakeholders for signing. Participants are expected to sign the resolution by the second quarter of 2021.
 - Work on membership or stakeholder representation. Write to introduce the GFP to potential members (providing a clearly defined platform structure and membership).
2. Stakeholder sub-groups are to be strengthened to ensure their effective representation in the GFP as follows:
 - AFAP, AGRA, and NASTAG to strengthen GAIDA.
 - AFAP and the West African Fertilizer Association (WAFA) to organize the importers/blending companies.
 - MoFA to strengthen the FBOs. The participants understand that these sub-groups need to be organized separately as units to allow for their effective representation on the platform.
3. Follow through with deliberations and decision making on setting up the GFP at the stakeholder roundtable meeting at Koforidua, with the following key action points:
 - In line with the majority of the participants' endorsement of a formally structured network, as compared to a loose network, the GFP must be legally registered to allow effective engagement among members and with GOG and development partners.
 - The GFP secretariat should be arranged based on a mutual agreement among the public sector, private sector, and CSOs/DPs.
 - The members should ultimately fund the GFP secretariat and activities, possibly with funding sources including *membership dues, CSO/NGO/development partner funding, private sector funding, voluntary contributions from members, GOG budget allocation, and charges from services to members (including business documentation, consultation, proposal, and business case writing for members)*.

Concretely, the fertilizer stakeholders mutually understand that the GFP is a workable and realizable idea. Accordingly, they favored a GFP with a formal structure, which means it must be a legally registered, membership-based stakeholder dialogue platform to facilitate interactions among actors, such as GOG/public sector, private sector, CSOs, and DPs, on fertilizer issues in Ghana.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

From the GFP study findings, stakeholder analysis, and discussions, the following conclusions were drawn:

1. Evidence abounds on key fertilizer sector issues that provide reasonable grounds for the initiation and development of a functional, sustainable, and representative GFP.
2. Despite efforts and initiatives over the years, there is the urgent need for improved availability, affordability, accessibility, and utilization of quality (balanced) fertilizers, which will require concerted and coordinated efforts among fertilizer sector actors.
3. There is a pronounced need for stakeholder involvement, particularly non-state actors, in the development and implementation of GOG's fertilizer development law, regulations, policy, programs, and initiatives in the country.
4. Fertilizer stakeholders in Ghana are excited about and in favor of establishment of the proposed GFP, as they believe it is a constructive concept that will support and contribute meaningfully to the sustainable fertilizer sector growth and development agenda espoused in the GFEP.
5. The existence of the GFP will greatly facilitate stakeholder interactions and dialogue to allow effective synergy of efforts, information exchange, collaboration, and coordination. Further, the stakeholders are convinced that the establishment of the GFP will enhance equitable distribution of benefits along the fertilizer value chain.
6. The GFP must be a formalized structure with joint public and private sector leadership, representation of key stakeholders, clearly defined rules of engagement, and a secretariat for effective information exchange, coordination, and management.

7.2 Recommendations

The following recommendations are made for the effective establishment of the GFP:

1. The IFDC FERARI program and partners should facilitate dissemination and discussion of this GFP study report among stakeholders to enhance awareness and understanding and promote decisive actions toward the realization of the GFP.
2. In this regard, there should be more outreach activities for actors in the fertilizer value chain through deliberate and concerted efforts, such as special invitations, consultations, and visitations and development of information and educational communication materials on the GFP and its aims or goals, objectives, and potential benefits and opportunities in the fertilizer sector.
3. The GFEP and development partners, such as IFDC, USAID, AFAP, and AGRA, should identify, consult, and discuss with other interested development and implementation partners to identify key areas of collaboration and support to avoid duplication while maximizing synergy among stakeholders in the GFP.
4. To register impact, the GFP must concentrate on addressing fertilizer issues of value and relevance to stakeholders that will foster continued engagement, participation, commitment, and effective decision making and activity implementation.

5. The GFP should attach great importance to the development and implementation of financial resource mobilization and monitoring and evaluation strategies to enhance value proposition for sustained stakeholder interest and commitment.
6. To realize effective establishment of the GFP, stakeholders should strive to implement the roadmap that emerged from the stakeholder discussions at the April 2021 meeting in Koforidua.
7. GFP processes and activities should be properly documented in order to identify areas or issues for further research and analysis, particularly on organizational, behavioral, and socio-economic development and management among fertilizer sector actors and industry players.

APPENDICES

Appendix I: Reference

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Appendix II: Interview Guide for Stakeholder Survey

	Fertilizer Sector Stakeholder Interview Guide, May/June 2020
	Introductions
1.	Meeting with ... [Name] of ... [institution/organization]
2.	What is your role in fertilizer sector?
3.	What are the challenges in the fertilizer sector?
4.	How are you addressing the challenges (current efforts)?
5.	What solutions can you suggest for these challenges in the sector?
6.	What channels/platforms exist for redress (of the aforementioned challenges)?
7.	What are your views of the National Multi-Stakeholder Fertilizer Platform in Ghana?
8.	Could you suggest your five top priority stakeholders to be part of the platform?
9.	What are the possible challenges that such a platform could face?
10.	What are your views/suggestions on how could these challenges be addressed?
11.	Who should fund the National Multi-Stakeholder Fertilizer Platform?
12.	How frequently should the platform meetings be?
13.	What do you think should be priority issues for the National Fertilizer Platform?
14.	How do you seed the future of the fertilizer sector?
15.	What activities would you propose for such a platform?
16.	What are the (likely) effects of the COVID-19 on your business?

Appendix III: List of Stakeholders Surveyed, May-June 2020

#	Stakeholder and Location
Development Partners	
1.	Financial Inclusion for Smallholder Farmers in Africa Project (FISFAP), AGRA, CSIR Office Complex, Airport Residential Area, Accra
2.	African Fertilizer and Agribusiness Partnership (AFAP), County Office, West Legon, Accra
Government / Public Sector	
3.	Pesticide and Fertilizer Registration Division, MoFA-PPRSD / GFEP, Pokuase, Accra
4.	Crop Services and Disease Management, MoFA-PPRSD, Pokuase, Accra
5.	Pesticide and Fertilizer Regulatory Division, MoFA-PPRSD, Pokuase, Accra
6.	Fertilizer Desk, MoFA - Directorate of Crop Services (DCS), Accra
7.	MoFA Agricultural Extension Services Directorate (DAES) Ministries, Accra
8.	Policy Unit, MoFA-PPMED, Ministries, Accra
9.	Fertilizer Statistics Desk, MoFA-SRID, GNPA Building, Ga Mashie, GPO, Accra
10.	CODAPEC Office, COCOBOD Head Office, Annex, Accra Central
11.	Ghana Standards Authority (GSA), Accra
12.	Parliamentary Select Committee on Food, Agriculture and Cocoa Affairs, Office of Parliament, Osu, Accra
13.	Extension Office, Department of Agriculture, Bolgatanga East District, UER
14.	Extension Office, ICOUR Ltd., Bolgatanga, UER
15.	Extension Office, Department of Agriculture, Savelugu Municipal, NR
Private Sector – Fertilizer Businesses	
16.	OmniFERT, No. 28 Church Crescent, Labone, Accra
17.	OCP Ghana Limited, Airport Residential Area, Accra
18.	Yara Ghana, West Airport, Accra, Bostal Avenue #2, Roman Ridge, Accra
19.	RMG Ghana Ltd, Airport West, Accra
20.	Agricultural Manufacturing Group (AMG) Ltd, Dzorwulu, Accra
21.	Chemico Ltd., Mankoose Roundabout, Tema Heavy Industrial Area
22.	Accra Compost and Recycling Plant - ACARP (organizer fertilizer), Adjen Kotoku near Medie, Greater Accra
23.	Ganorma Agrochemical Ltd, Tamale.
24.	Antika Company Ltd, Wa, UWR
25.	Simple Prince Company Ltd., Bolgatanga, UER
26.	Big Ajar Farms, Wa, UWR
27.	Ariku Company Ltd., Bazua, Binduri District, UER
Associations / NGOs – Farmers, Input Dealers	
28.	Apex Professional Farmers Organization of Ghana (ApFOG), Tamale, NR
29.	Heritage Seeds Company Ltd, Tamale, NR
30.	Wumpini Agro-Chemicals Ltd, Tamale, NR
31.	CropLife, Ghana, Dzorwulu, Accra
32.	Zet Agro Chemicals Ltd (input retailer), Tamale, NR
33.	Ghana Agri-Input Dealers Association (GAIDA)-NR, Tamale, NR
Research and Academia/Universities	
34.	Savanna Agricultural Research Institute (SARI) – CSIR, Nyankpala, NR
35.	Faculty of Agriculture, Agronomy Department, UDS Nyankpala Campus, P.O. Box TL 1882, Tamale
Financial Institutions	
36.	Agribusiness Business Banking, ABSA Bank Ghana, J.E.A. Mills High Street, Accra

Appendix IV: Participants in the GFEP Stakeholders Roundtable Meeting, Capital View Hotel, Koforidua, Ghana, April 7-8, 2021

#	Name	Designation	Organization	Location
Development Partners				
1.	Dr. Williams K. Atakora	Country Coordinator	IFDC-FERARI	Accra
2.	Yakubu Iddrisu	Fertilizer Platform Specialist	IFDC-FERARI	Accra
3.	Dr. William Adzawla	Economist	IFDC-FERARI	Accra
4.	Dr. Prem Bindraban	Program Leader	IFDC-FERARI	Accra
5.	Fred Gyasi	Statistics/Data Specialist	AfricaFertilizer.org/EnGR AIS	Accra
6.	Dr. Asseta Diallo	Senior Program Officer, Soil Fertility & Fertilizer Systems	AGRA	Accra
7.	Nana Aisha Mohammed	Ghana Country Programme Manager	AFAP, West Legon	Accra
8.	Victorine Goly		IFDC-FERARI	Accra
Government/Public Sector				
9.	Ernest Osei Assibey	Assistant Director	GFEP/MoFA-PPRSD, Pokuase	Accra
10.	Michael Owusu	Deputy Director,	MoFA Directorate of Crop Services (DCS)	Accra
11.	Dr. Solomon G. Ansah	National Seed Specialist and Director	MoFA Directorate of Crop Services (DCS)	Accra
Private Sector – Fertilizer Businesses				
12.	Dominic Donkoh	New Business Development Manager	OmniFERT, Labone	Accra
13.	Richmond Dogbe	General Agronomist	OCP Ghana Limited, Airport Residential Area	Accra
14.	Dennis Ablorh	Sales Agronomist	OCP Ghana Limited, Airport Residential Area	Accra
15.	Berchie Isaac Opoku	Commercial Manager (South West Region)	Agricultural Manufacturing Group (AMG) Ltd, Dzorwulu	Accra
Associations/NGOs – Farmers, Input Dealers				
16.	Augusta Clottey	Executive Officer	National Seed Trade Association of Ghana (NASTAG), Dzorwulu	Accra
17.	Bismark Owusu Nortey	Programme Officer	Peasant Farmers Association of Ghana (PFAG)	Kotobabi-Accra
Research and Academia/Universities				
18.	Prof. Paul Bosu	Deputy Director General	CSIR	Accra
19.	Eugene Dela Setsoafia	Ph.D. student	-	Accra
20.	Solomon Amoabeng Nimako	Ph.D. student	-	Accra
21.	Seth Tetteh	Ph.D. student	-	Accra
22.	Dr. Comfort Freeman	Senior Lecturer/Supervisor	University of Ghana	Accra
23.	Ikram Hissane	Intern	IFDC-FERARI	Accra
24.	Pierre Diene	Intern	IFDC-FERARI	Accra

FERARI

FERTILIZER RESEARCH & RESPONSIBLE IMPLEMENTATION

FERARI is an international public-private partnership that builds science-based approaches to site-specific fertilization for widespread adoption by farmers in Ghana for improved food and nutrition security. This calls for a transformation of the fertilizer and food systems that must be driven by evidence-based agro-technical perspectives embedded in multi-stakeholder processes.

To support this transformation, the following institutions have partnered to implement the Fertilizer Research and Responsible Implementation (FERARI) program:

- International Fertilizer Development Centre (IFDC)
- Mohammed VI Polytechnic University (UM6P)
- OCP Group
- Wageningen University and Research (WUR)
- University of Liège (ULiège)
- University of Ghana (UG)
- University for Development Studies (UDS)
- Kwame Nkrumah University of Science and Technology in Kumasi (KNUST)
- University of Cape Coast (UCC)
- University of Energy and Natural Resources (UENR)
- Akyenten Appiah-Menka University of Skills Training and Entrepreneurial Development (AAMUSTED) College of Agriculture Education
- Council for Scientific and Industrial Research in Kumasi (CSIR-SRI) and in Tamale (CSIR-SARI) and its subsidiary (CSIR-SARI-Wa)

FERARI operates in conjunction with the Planting for Food and Jobs program of the Government of Ghana (GOG) to embed development efforts into national policy priorities to reach impact at scale. It trains five Ph.D. and two post-doctoral candidates and dozens of master's-level students in building the evidence base for its interventions.

FERARI conducts hundreds of fertilizer response trials on maize, rice, and soybean, on-station and also with farmers, and demonstrates them to farmer groups in the northern and middle belt of Ghana. It conducts surveys among farmers and actors in the value chain to understand the drivers for use of fertilizers and other inputs and the marketing of the produce to enhance farm productivity and income. It helps the GOG to establish a Ghana National Fertilizer Platform, developing its soil mapping expertise toward an information platform.

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Developing Agriculture from the Ground Up