

POLICY BRIEF



FERARI

FERTILIZER RESEARCH & RESPONSIBLE IMPLEMENTATION



ANALYZING POWER DYNAMICS AND SCALING POTENTIAL OF THE PROPOSED GHANA FERTILIZER PLATFORM

Achieving a food-secure society has been a priority for successive governments of Ghana. One of the interventions implemented to support this aim is the promotion of fertilizer use by farmers through subsidies. For the fertilizer sector to be effective and sustainable, its actors must convene to address prevailing challenges and allow scaling of operations. Therefore, the Ministry of Food and Agriculture (MoFA) is catalyzing the establishment of the Ghana Fertilizer Platform (GFP), with support from IFDC's Fertilizer Research and

Responsible Implementation (FERARI) program. A FERARI study (Diene et al., 2021)¹ revealed that unbalanced power relations could hamper proper functioning of such a platform. Therefore, empirical evidence and information were gathered through stakeholder interviews on power relations and scaling as a step to help improve the design, operation, effectiveness, and sustainability of the platform. The required information reached a level of saturation at 20 respondents.

FERTILIZER STAKEHOLDER PLATFORM AND VALUE CHAIN SCALING

A scaling pathway is a methodology that distinguishes 10 components and provides a structured and transparent way of analyzing the scaling potential of the value chain and power balance among stakeholders. The stakeholders expressed their confidence in these components on a five-point Likert scale. The results (Figure 1) show that the stakeholders are highly confident that technology, awareness and demand, business cases, and public sector governance are adequate for scaling the GFP. However, value chain, finance, knowledge and skills, collaboration, evidence and learning, and leadership and management must be improved before scaling.

Specific parameters under each component were also examined. For instance, stakeholders believe that the GFP could be compatible and relevant within the Ghanaian context through creation of better technologies for the fertilizer sector. Key under awareness and demand was the great desirability by the stakeholders for an established platform.

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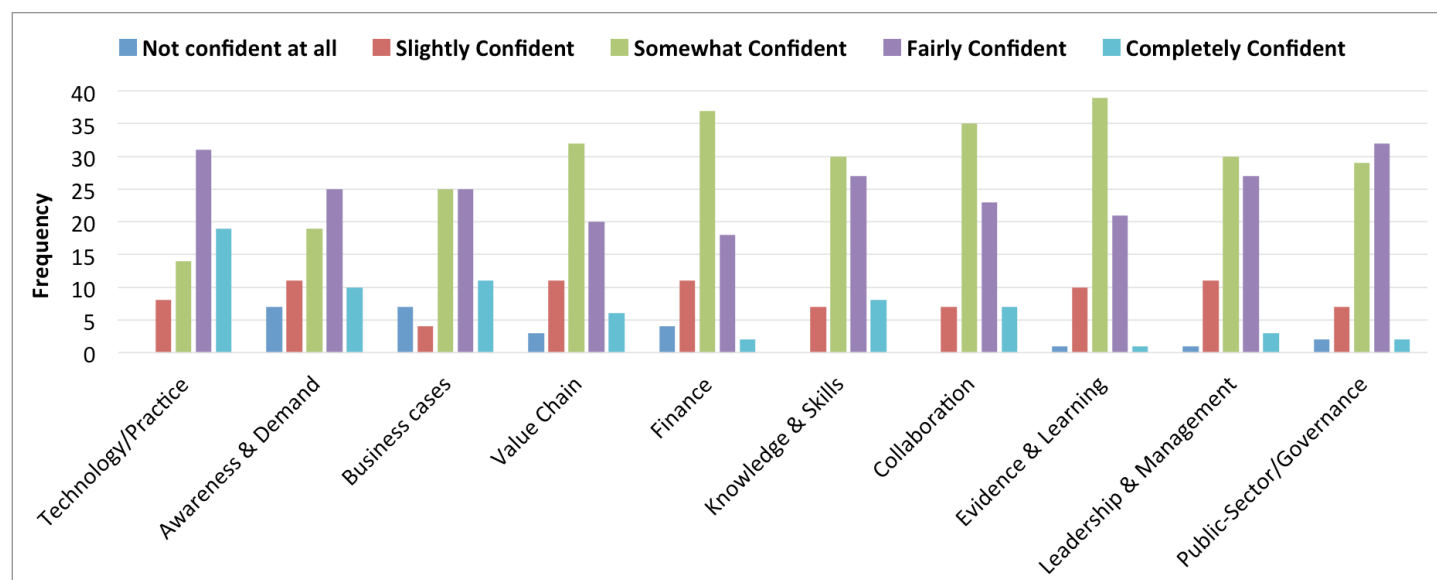
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Visit the FERARI project online at:

<https://www.ifdc.org/projects/fertilizer-research-and-responsible-implementation-ferari/>

¹ Diene, P.P., Bindraban, P.S., Laamari, A., Adzawla, W., Iddrisu, Y., Atakora, W.K., 2021. Power Dynamics and Scaling Potential of the Proposed Ghana Fertilizer Platform. IFDC FERARI Research Report No. 8.

Figure 1. Frequency score of the scaling components of a fertilizer platform.



SCALING OPPORTUNITIES FOR THE FERTILIZER VALUE CHAIN

Table 1 summarizes the willingness and ability of the stakeholders to contribute to scaling operations of the fertilizer sector through the GFP. The capacity (resources, expertise, information) of each stakeholder category, i.e., public, private, and public-private partnership (PPP), varies and the category that can perform a successful scaling task is the most relevant. The majority agreed with the establishment of the platform and considered the need for a “champion” to drive the vision and for clear accountability procedures to be relevant. Scaling vision and external support were also considered relevant.

The major challenges that can affect scaling of the fertilizer sector are financial challenges and absence

of credible data for effective decision-making. Lack of associations for some actors, mainly importers and blenders, potential lack of collaboration, and lack of a champion are also major challenges. A critical pathway to overcome scaling obstacles is trust based on the PPP principle, with no stakeholder dominance or unrepresented key stakeholders.

Scaling opportunities for the fertilizer value chain through the GFP are based on three pillars:

1. Its design should consider the local context of fertilizer issues and adoption by all critical stakeholders.
2. It should be an expertise-based platform, in which methods, training, and monitoring are research and knowledge based.
3. Support must be provided by the public sector.

Table 1. Scaling pathway decision tree

ATTRIBUTE	CATEGORY ►	PRIVATE	PUBLIC	PPP
Capacity to drive the scaling up process and coordinate various actors		Yes	–	–
Willingness and ability to pay for the GFP		Maybe	Maybe	Yes
Capacity to diffuse adoption of the GFP		No	Yes	–
Capacity to drive financial innovation or mobilize and make available affordable financing for GFP members		No	Maybe	Yes
Capacity to create demand for the GFP		No	Yes	–
Capacity to provide training, technical assistance, and extension support for the proper use of the GFP		Yes	–	–
Capacity to spread the benefits resulting from adoption of the GFP along the value chain		No	Maybe	Yes
Capacity to develop the value chain with widespread adoption of the GFP		Maybe	Maybe	Yes
Frequency of “Yes”		2	2	4

Notes: Capacity means having resources (capital/finance, labor/skill, and equipment/support) and data/information. “Yes” means total willingness and/or ability to perform the task; “No” means unwillingness and/or inability to perform the task; “Maybe” means limited willingness and/or ability to perform the task. “–” means there is already a category with the willingness and ability to perform the task.

POWER RELATIONS AND DECISION-MAKING

The scaling analysis shows that the public sector wields “power over,” i.e., it controls the fertilizer value chain in Ghana, mainly because the fertilizer market is driven by the government’s fertilizer subsidy program. The private sector fertilizer business group has “power to,” i.e., the businesses have a central place in the sector that gives them legitimacy in the sector. Other forms of power, i.e., “power with” (capacity of stakeholders obtained through collaboration on a collective interest) and “power within” (stakeholders’ self-recognition of their power to and power within), are less pronounced in the fertilizer sector. The expressions of power in the fertilizer sector tend to be more visible because of the commonly used mediums.

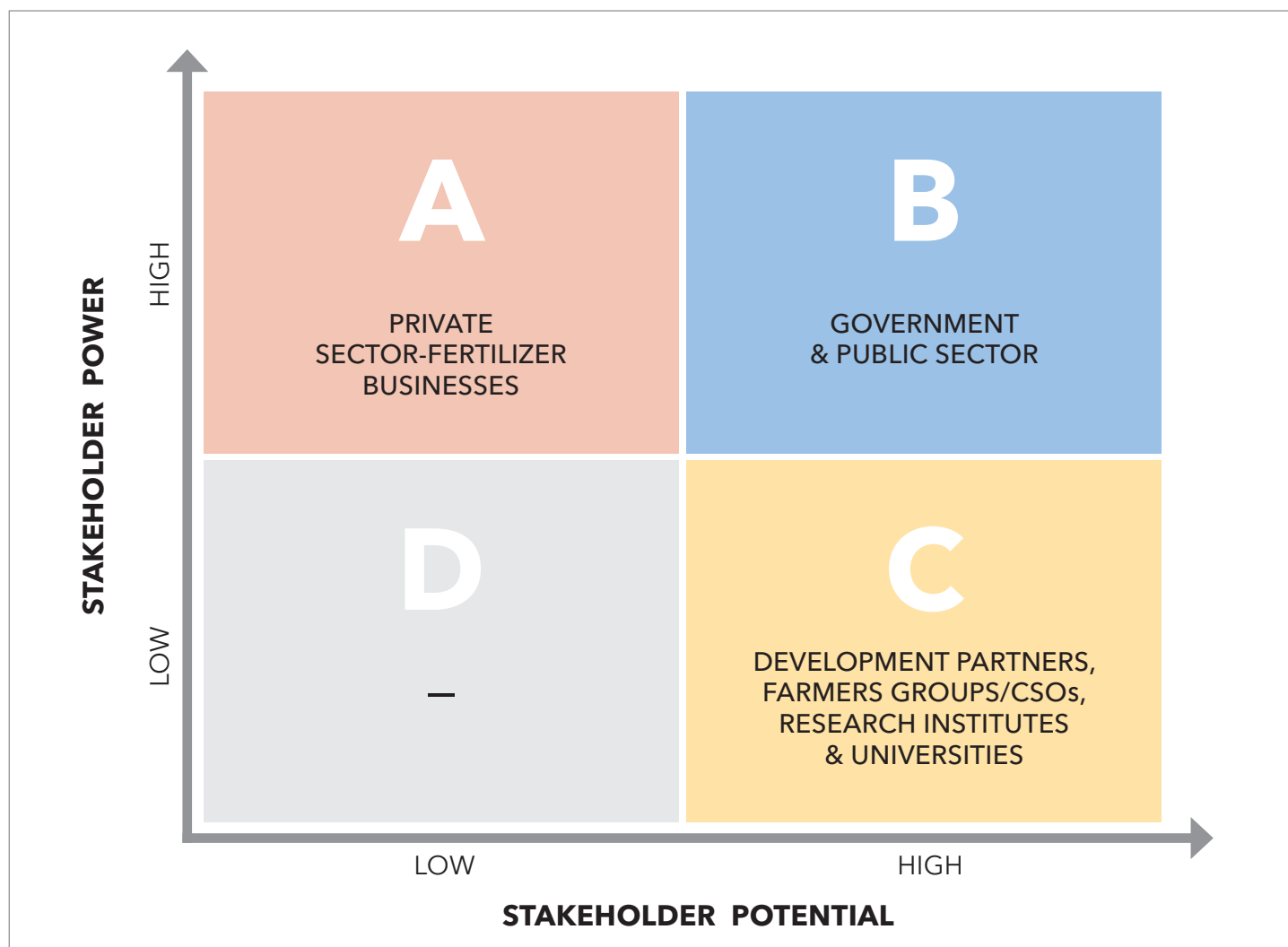
Overall, development partners wield power through funding; the public sector through market dominance, information, and data sharing; the private sector through expertise and its ability to support activities; farmer groups through large membership; and research institutions through expert knowledge.

Generally, the most power to influence policies or institutions and marshal others into decision-making

is held by the public sector, followed by fertilizer businesses, development partners, farmers, and knowledge institutions. Because the public sector also can sanction the other actors, addressing fertilizer sector concerns is highly dependent on government decisions.

- ✓ **Quadrant A:** These stakeholders have high power but low potential and include private sector actors (importers, blenders, distributors, retailers). This group should not be dominated by the stakeholders in Quadrant B.
- ✓ **Quadrant B:** These stakeholders wield high power and high potential and include the public sector. A strategy of collaboration and engagement is required to manage their dominance.
- ✓ **Quadrant C:** These stakeholders have high potential but low power. The group includes development partners, farmers, and research institutions that are identified as worthy to be involved, with capacity and interest. However, some development partners wield power that allows them to be in Quadrant B.
- ✓ **Quadrant D:** No stakeholder was found in this group.

Figure 2. Stakeholder power–potential matrix.



IMPROVING POWER EQUITY WITHIN THE GFP

The stakeholders' opinions on how decisions should be made and the form of power that should be exercised on the platform were assessed under five regulation models (Table 2). The stakeholders do not agree that the GFP should be regulated by those exercising authoritarian or legitimate power. Handling of power relations on the platform through punishment was considered relevant or less relevant by an equal number of stakeholders, while four indicated it as a very relevant regulation model.

Table 2. Ghana Fertilizer Platform power regulation.

GFP REGULATION MODEL	RELEVANCY FREQUENCY			
	VERY REL.	RELEVANT	LESS REL.	NOT REL.
Positive rewarding	6	10	3	0
Punishment	4	7	7	1
Authority dominant	0	4	6	9
Legitimacy dominant	0	0	5	14
Expertise dominant	5	12	1	1

This coercive power is particularly recommended when there is a threat on the proper functioning of the platform by a stakeholder. Overall, the stakeholders favored positive rewards and expert dominance on the platform, which supports the need for a “champion.”

CONCLUSIONS

Fertilizer value chain scaling requires a design that is adapted to the local context for easy adoption, establishment of a science-driven decision-making process, and existence of a sustainable funding mechanism. Raising actors' awareness, engagement, and skills, as well as effective communication and collaboration, should be reinforced to prevent issues arising from power differentiation that may threaten the value chain development at scale. Strategies to cope with power-potential differences of stakeholder groups are collaboration of the public and private sector, involvement of development partners, capacity strengthening of farmer groups, and secured interest of research institutes and universities.



Participants at the National Fertilizer Roundtable Meeting held in Koforidua, Ghana on April 7, 2021.