

NATIONAL SEED TRADE ASSOCIATION OF GHANA



FINAL REPORT

Implementation of the Grant Project:

**“Promoting Policy and Regulatory Reforms for the Development of the Ghana Seed Industry:
Strengthening the Role and Activities of the National Seed Trade Association of Ghana
(NASTAG).”**

USAID/Ghana Feed the Future Agriculture Policy Support Project (APSP)

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AGRICULTURE POLICY SUPPORT PROJECT

EXECUTIVE SUMMARY

Transformation of Ghana's agriculture sector in terms of increased productivity and food and nutrition security could be accelerated if all seed value chain actors harness their resources under an apex association to champion seed sector reforms in Ghana. In this regard, a unified force as in the National Seed Trade Association (NASTAG) is a promising step taken to develop the seed industry. Hence the formation of NASTAG in November 2015 at a seed sector stakeholders' workshop funded by the USAID Ghana Feed the Future Agriculture Policy Support Project (APSP). It was subsequently registered as a new legal entity on February 1, 2016.

The vision of NASTAG is to be the apex organization for promoting the growth of the seed industry through the improvement of members' businesses and the use of quality seed for improved livelihoods in Ghana. Its mission is to fulfill the interests of the members through a strong advocacy program and the capacity building of members in technical skills, business, and ethics. NASTAG and its membership is committed to increase the quantity, quality and efficient distribution of seeds in Ghana that will contribute to assure adequate food security.

NASTAG since November 2016 has been implementing an 18-month project under a grant support from the USAID FTF APSP titled: ***"Promoting Policy and Regulatory Reforms for the Development of the Ghana Seed Industry: Strengthening the Role and Activities of the National Seed Trade Association of Ghana (NASTAG)"***. The project seeks to achieve the following strategic achievable objectives:

1. Improve environment to increase private sector participation and investments in the seed industry;
2. Strengthen the business linkages in the seed value chain in Ghana and;
3. Strengthen institutional capacity of NASTAG to engage public stakeholders on policy reforms and program implementation to modernize the Ghanaian seed industry.

It is expected by the end of this project that:

1. Public-private sector engagement on the seed industry development would have increased;
2. A vibrant and viable seed industry that is contributing to food and nutrition security in Ghana would be visible and;
3. NASTAG would have been firmly established as a vibrant and strong umbrella organization and serving the interest of private sector seed companies and other auxiliary groups along the seed value chain.

The grant implementation commenced with the sealing of an agreement, which was officially signed at a brief ceremony on November 23, 2016 at the APSP office, Cantonments, Accra. May 31, 2018 marked the official closure of the implementation of the project activities.

Key accomplishments per agreed targets in the grant contract

- ✓ NASTAG successfully established a substantive Executive Council (EC) and three functioning sub-committees namely; Seed Business Development and Ethics, Advocacy and Communication, and Technical Standards Committees. The important governance structures have met their activity targets under the grant.
- ✓ The Association held five (5) zonal sensitization forums on the National Seed Policy, National Seed Plan, the Seed Law (part II of the Act 803, 2010) and other relevant policy and programs for a total of 275 stakeholders from the Northern, Middle and Southern zones across the country in the Northern, Central, Eastern, Volta and Ashanti Regions.
- ✓ On advocacy activities, NASTAG held awareness on biotechnology; and conducted public-private dialogue meetings on seed regulations with MOFA/ PPRSD/CSD/NSC and the parliamentary select committee on food and agriculture in collaboration with other partners. This resulted in heightened exposure and recognition of NASTAG as the lead seed sector advocacy organization in the country.
- ✓ One key event organized by NASTAG that consolidated its lead role in seed industry development was the first ever National Seed Value Chain Business Networking Forum on May 23 -24, 2018 in Accra. In the run up to this event, NASTAG conducted two separate regional level seed business networking forums for seed producers in the Ashanti and Volta regions respectively.

- ✓ Over the period, the NASTAG has been strengthened: The Secretariat is now well-furnished, equipped with 3 permanent staff and an Independent Consultant, who served as APSP Technical Advisor in the immediate past. Under the grant project, the NASTAG staff and executive members received training on Advocacy Plan & Strategic Plan (SP) development, empowering the Association with a finalized 5-year SP developed from the initial draft 3-year SP. Consequently, NASTAG has successfully executed advocacy campaign in its participation in the Government Of Ghana's Planting For Jobs (PFJ) Campaign; won a bid and supplied 640MT of OPV Maize seeds in 2017, and subsequently won another contract to supply a total of 800MT of Maize and Rice Seeds for 2018 PFJ implementation. During the grant period, NASTAG also held its first Annual General Meeting (AGM), where they elected substantive Executive Council, adopted the Constitution and subsequently got the Association officially launched. Members have also benefited from APSP's capacity building on quality seed management for 20 seed enterprises, out of which 14 of them fully developed and, are implementing their own Seed Quality Management Manuals.
- ✓ Under the grant, NASTAG produced and disseminated over 20 communications materials, within the period from December 2017 to May 2018. These range from print as in, one-pager/brochure, press statement / release, article in the AFSTA Magazine, media published reports, to electronic media such as radio and television discussions.

Conclusion

NASTAG's active participation and sterling performance in organizing and hosting of major seed sector events/activities, collaborative activities with stakeholders such as the public-private dialogue, implementation of the GOG's flagship programme - PFJ campaign for 2 years running, and seed value chain actor capacity building, place the Association on the right course to filling the development void that existed for a very long time. This has put the Association in very good position to champion and advocate for the seed industry development, in fulfilment of the aspirations of the APSP, while confirming that the grant has been worthy in all respects of development cooperation in the country.

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LIST OF ACRONYMS

ADVANCE	USAID FtF Agriculture Development and Value Chain Enhancement project
AFAP	Africa Fertilizer and Agribusiness Partnership
AFSTA	African Seed Trade Association
AGRA	Alliance for a Green Revolution in Africa
APSP	USAID Ghana Feed the Future Agriculture Policy Support Project
ARIPO	African Intellectual Property Organization
ATT	USAID Ghana Feed the Future Agriculture Technology Transfer Project
CABI	Centre for Agriculture & Biosciences International
CDI	Centre for Development Innovations
CoP	Chief of Party
CSD	Crop Services Directorate
CSIR	Council for Scientific and Industrial Research
CSIR	Council for Scientific and industrial Research
CSO	Civil Society Organization
DPs	Development Partners
EC	Executive Council
ECoSIB	Agric Impact - Entrepreneurship for Commercial Seed Incubation Business project
ECOWAS	Economic Community of West African States
ES	Executive Council
FBO	Farmer-Based Organization
FtF	Feed the Future
GOG	Government of Ghana
GSID	Ghana Seed Inspection Division
IEC	Interim Executive Council
IFPRI	International Food Policy Research Institute
ISU	Iowa State University
JSR	Joint Sector Review
MDAs	Ministries, departments and agencies
MESTI	Ministry of Environment, Science, Technology and Innovations
MOFA	Ministry of Food and Agriculture
NASTAG	National Seed Trade Association of Ghana
NGO	Non-Governmental Organization
NSC	National Seed Council
NSP	National Seed Plan
OFAP	Open Forum on Agricultural Biotechnology in Africa
PFAG	Peasant Farmers Association of Ghana
PFJ	Planting for Food and Jobs program
PPRSD	Plant Protection and Regulatory Services Directorate
SEEDPAG	Seed Producers Association of Ghana
SMIF	Seed Market Industry Framework
SP	Strategic Plan
STAG	Seed Trade Association of Ghana
ToR	Terms of Reference
USAID	United States Agency for International Development
WASP	USAID / West Africa Seed Program

1.0 INTRODUCTION

This final report covers the entire 18-month activity profile of the grant implementation and accomplishments. It is cumulative recordings of project implementation activities contained in the contractual monthly reports submitted to APSP since the inception of the grant in November 2016. This chronology of impactful experiences, culminated in the consolidation of NASTAG as the major private sector organization championing the development of Ghana's seed sector. Consequently, this report provides a snapshot of the essential components and accomplishments of the project implementation for the period, from November 2016 to June 2018, as well as the way forward in the seed sector after completion of the grant implementation.

Presented in this report are; the background to the formation of the NASTAG; the APSP grant implementation and achievements; and the key results from the perspectives of strengthening NASTAG to champion the creation of enabling environment for enhanced private sector participation, through regular institutionalized public-private dialogue.

The report also takes a closer look at NASTAG efforts in the development and dissemination of policy communication materials as a fundamental strategy in meeting set objectives in advocacy, and projecting NASTAG as the mouthpiece of the private seed sector stakeholders and value chain actors.

As concluding part, the report presents the issues of sustainability plans, consolidating the gains NASTAG has chalked moving forward with the implementation of the grant.

2.0 BACKGROUND

2.1 The Ghanaian Seed Sector and the Formation of NASTAG

NASTAG was conceptualized in November 2015 at a seed sector stakeholders' workshop funded by the USAID Ghana Feed the Future Agriculture Policy Support Project (APSP). At the workshop, a resolution was passed and signed by representatives of all the relevant stakeholders present for the amalgamation of all seed value chain actor associations within the country. Factors that motivated the resolution by the stakeholders at the workshop were as follows:

- a. The different individual associations were advocating for their interests as it related to them in the value chain.
- b. The splinter groups were all making representations and seeking support from the same sources (government and donor agencies); this created confusion and delayed actions.
- c. The market size in Ghana is relatively small and it was felt that under the ECOWAS Regulations, there was the need to bring the value chain players under one umbrella to take advantage of the benefits of the ECOWAS Treaty (free sale of approved varieties in the ECOWAS sub-region). The ECOWAS Regulations is comprehensive and takes care of all aspects of the value chain.
- d. The African Seed Trade Association (AFSTA) requested for an umbrella national association representing all the associations of the value chain for the purposes of dialoguing on how to grow the seed industry in Ghana.
- e. The need for a formidable national umbrella association for the value chain players became obvious to the various splinter associations.

NASTAG was registered as a new legal entity on February 1, 2016. Although a relatively new Association, it is important to indicate that the founding members of the Association had relevant past experiences that impacted significantly on the rapid establishment and growth of NASTAG. Two such vibrant associations with past experiences from which NASTAG founding members emanated are; the Seed Producers Association of Ghana (SEEDPAG) and the Seed Trade Association of Ghana (STAG). These Associations were the brain behind the formation of the NASTAG. In the past, the SEEDPAG and STAG had been active in the coordination of local production and supply of improved maize seeds, improved seeds of sorghum, cowpea, soybean and the development of improved planting materials of roots and tubers (yam and cassava). The SEEDPAG and STAG led the advocacy for the passage of the Plant and Fertilizer Law, Act 803, 2010. SEEDPAG and STAG also

contributed to the drafting of the National Seed Policy which was approved by the Government of Ghana. They actively participated in drafting and advocating for the approval of the harmonized ECOWAS Seed Regulations. Additionally, they have also participated in the preparation of the National Seed Plan (NSP).

Until its first annual general meeting in August 2017, NASTAG was governed by an Interim Executive Council made up of members from the Seed Sector with rich experiences in overseeing the management of the Association. As a nascent organization seeking to assert itself as the mouthpiece and champion for increased public-private sector interactions/collaborations in seed sector reforms in Ghana, NASTAG is faced with the following critical issues:

- Inadequate funding for NASTAG after May 2018
- No funding for the implementation of the National Seed Plan (NSP)
- Legal enabling environment incomplete
- Underdeveloped seed market
- Lack of trustworthy statistical data on seed production and trade
- Insufficient exposure or recognition of NASTAG

NASTAG's Vision: Is to be the apex organization for promoting the growth of the seed industry through the improvement of members' businesses and the use of quality seed for improved livelihoods in Ghana.

NASTAG's Mission: Is to fulfill the interests of the members through a strong advocacy program and the capacity building of members in technical skills, business, and ethics. NASTAG and its membership is committed to increase the quantity, quality and efficient distribution of seeds in Ghana that will contribute to assure adequate food security.

NASTAG's Objectives: The Constitution of NASTAG mentions 15 objectives that is 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. To develop as a vibrant, representative, accountable and financially sustainable organization.

NASTAG's Strategic Activities towards the attainment of its objectives inter alia are:

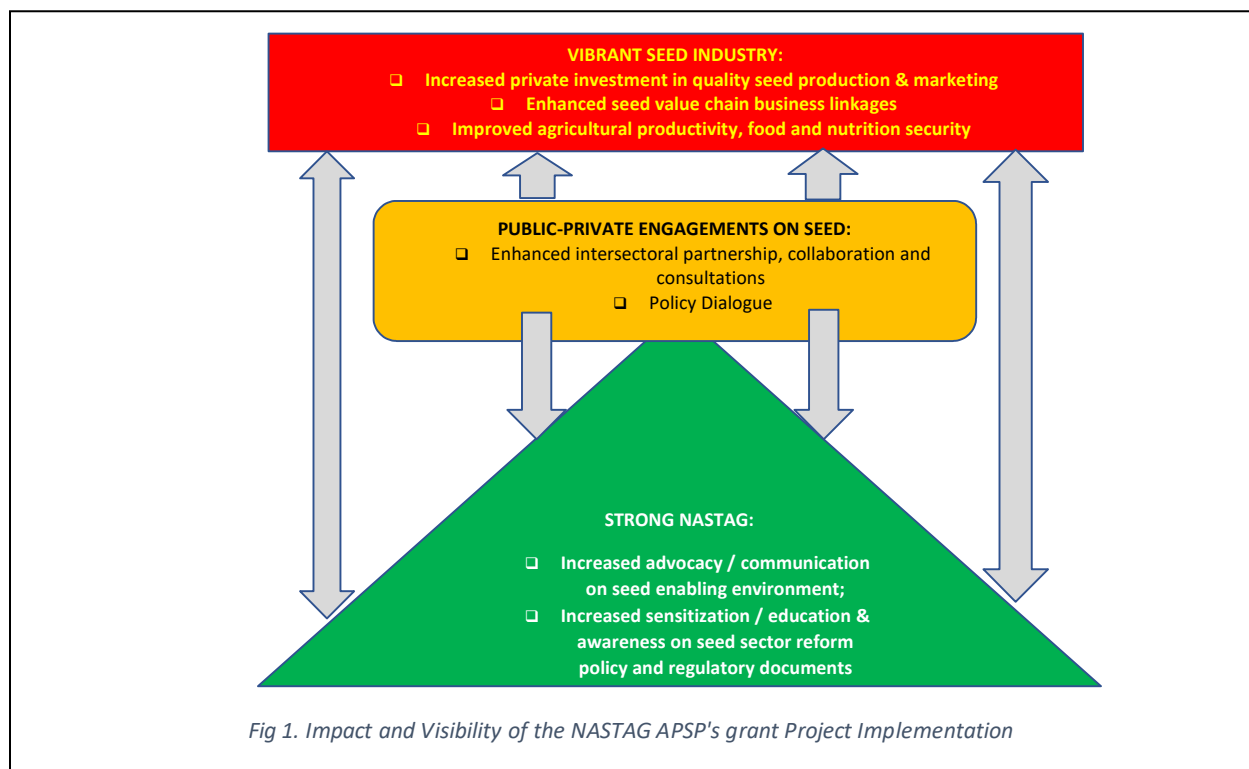
- a) Providing a forum for interaction and information exchange among its members.
- b) Promoting and seeking the business interests of its members and promoting business linkages among its members.
- c) Supporting members with services needed for their business profitability and growth.
- d) Advocating for good policy environment for the development of the seed industry in Ghana.
- e) Representing interests of the seed industry nationally and internationally.
- f) Promoting the development of the seed industry for the betterment of crop production in Ghana and within the West African sub-region.
- g) Improving communication among seed stakeholders in Ghana, West Africa, Africa and the entire world by providing necessary seed industry information; holding meetings, seminars, workshops, attending International Seed Federation (ISF) and AFSTA congresses and other relevant national and international fora.
- h) Interacting with the National/Public institutions (e.g. Ministry of Food and Agriculture, MOFA), Ministry of Environment, Science, Technology and Innovations (MESTI), Research Institutions, etc.) and International organizations (Development Partners, United Nations Agencies, Research Institutions, Other seed industry players etc.) involved in seed activities to promote the interests of the seed industry.
- i) Promoting activities that will lead to harmonization of seed regulations in Ghana, West Africa and other regions to facilitate trade in seed.

- j) Developing statistical database on national seed production and trade.
- k) Promoting the use of improved quality seed
- l) Providing an organization which can advise and be consulted by government on matters of regulations, rules and general policy affecting the seed industry.
- m) Promote harmonious working relations with the plant breeders' associations in Ghana and ASSINSEL (FIS).
- n) Arbitrate in any disputes between members.

2.2 The APSP Grant: Development Framework, Strategic Objectives & Expected Results

During the period November 2016 to June 2018, NASTAG implemented the 18-month APSP grant project, titled: *“Promoting Policy and Regulatory Reforms for the Development of the Ghana Seed Industry: Strengthening the Role and Activities of the National Seed Trade Association of Ghana (NASTAG)”*.

The **development framework** for this grant is illustrated on Figure 1 as follows:



To have a vibrant seed industry, there should be an institutionalized public-private seed sector engagement, facilitated and led by strengthened NASTAG, as the major seed value chain actors' organization, including the private seed sector.

The grant sought to achieve the following strategic achievable objectives:

1. Improve environment to increase private sector participation and investments in the seed industry;
2. Strengthen the business linkages in the seed value chain in Ghana and;
3. Strengthen institutional capacity of NASTAG to engage public stakeholders on policy reforms and program implementation to modernize the seed industry of Ghana.

The expected results at the life of grant / project include:

1. Public-private sector engagement on the seed industry development would have increased;
2. A vibrant and viable seed industry that is contributing to food and nutrition security in Ghana would be visible and;

- NASTAG would have been firmly established as a vibrant and strong umbrella organization and serving the interest of private sector seed companies and other auxiliary groups along the seed value chain.

Table 1 presents the project activities implemented under each strategic achievable objective.

Table 1: APSP Grant Project Strategic Objectives, Activities Implemented & Expected Results

Strategic Objectives	Activity to be Implemented	Expected Output
STRATEGIC OBJECTIVE 1.0 Improve environment to increase private sector participation and investments in the seed industry	1.1 Establishment of Special Working Committees; Hold EC and Sub-Committee meetings	3 committees established; 15 meetings / activities held - 3 EC meetings
	1.2 Policy sensitization forum on National Seed Policy, National Seed Plan & Act 803 (2010)	4 zonal activities organized; 300 stakeholders targeted
	1.3 Advocacy activities on the plant breeders bill, Biotechnology usage & implementation of the National Seed Policy, National Seed Plan & seed law (Act 803, 2010)	Awareness on BT; PPD meetings on Regulations; Meeting with MOFA/ PPRSD/CSD/NSC; meetings with PSC FACA
STRATEGIC OBJECTIVE 2.0 Strengthen the business linkages in the seed value chain in Ghana	2.1 Organize One (1) seed value chain actors' networking /business	1 Seed business Conference held for a target of 100 participants
	2.2 Develop communication strategy and use for the dissemination of sector information to members, policy makers & stakeholders.	6 policy communication materials developed in line with communication strategy
STRATEGIC OBJECTIVE 3.0 Strengthen institutional capacity of NASTAG to engage public stakeholders on policy reforms and program implementation to modernize the seed industry of Ghana	3.1 Equip and staff NASTAG secretariat for effective Associations operation	Secretariat furnished, equipped with 3 permanent staff & APSP Technical Advisor Embedded
	3.2 Train NASTAG staff and executives on Advocacy Plan & Strategic Plan (SP) development.	1 training on SP development and another 1 on Advocacy Planning held; SP developed
	3.3 Hold AGM & Launch NASTAG	AGM held; Implemented
	3.4 Capacity building training on Quality Seed Management for NASTAG members.	Quality Management (QM) training implemented for 20 seed enterprises

This project thus sought to consolidate NASTAG into a viable seed sector organization capable of galvanizing all seed value chain actor individuals, associations and organizations within the agriculture sector into a formidable force for holistic seed industry growth and development in Ghana.

2.3 Grant Implementation Mechanisms & Processes

The grant implementation commenced with the official signing and sealing of an agreement at a brief ceremony on November 23, 2016 at the APSP office, Cantonments, Accra. This paved the way for the release of the first tranche of funds for effective commencement of the grant implementation.

Going forward, a project inception meeting was held on December 15, 2016 at the NASTAG office to kick start the full running of the secretariat. As part of building and strengthening the secretariat, APSP embedded a Policy Advocacy Specialist at the Secretariat as part of the agreement in the Grant; contributing significantly to NASTAG meeting its overall objective of the grant also.

To effectively commence the implementation of the project, the NASTAG secretariat staff received one-hour training on Chemonics International / APSP's standards of business conduct ("Living our values") in line with Chemonics Inc. / USAID Contracting agreement for the APSP. It was held in NASTAG Secretariat on Friday January 13, 2017. Facilitated by the Grants team of APSP, the training touched on issues of ethical business conducts regarding potential ethical violations and the resources available for reporting.

Three months into the project implementation (by March 2017), NASTAG and APSP held a grant implementation review meeting which resulted to the review of some of the project activities. For example, instead of delegating zonal NASTAG representatives to conduct sensitization forums on the seed sector reform documents, it was agreed that these zonal sensitization sessions be clustered and led by relevant MoFA Headquarters staff and NASTAG members for a total of 300 participants over the grant period. The budget was thus revised accordingly to enable NASTAG achieve the stated results.

The second Grant joint review meeting of the grant implementation in September 2017 saw the submission of an expanded proposal by NASTAG to APSP for additional funding support based on discussions initiated in the process of the grant implementation in the second quarter. The final expanded proposal within the same 18-month period established the following agreements:

Table 2: Summary of the modification in the NASTAG Expanded Proposal for Additional Funding

Activity	Nature of Change (Modification / New)
Modified activities in the original grant proposal	
3.1.1 Establish three (3) special working committees :	Increased from 2 to 3 committees (on: (a) Advocacy and Communication; b) seed business development & ethics; and c) technical standards) with membership reduced from 7 to 5 for each committee, and a total membership of 15 persons
3.1.2 Organize policy sensitization forums on improving the enabling environment for private sector investments in the seed industry:	Reduced from 6 to 4 zonal forums for at least 240 public and private sector stakeholders sensitized at 4 zonal forums
3.3.1 Hire an additional full-time program officer :	One additional full-time staff (Program Officer) needed to be hired for improved working results and strengthened NASTAG secretariat for effective public and private sector engagement for seed industry development, increasing to 3 full-time staff.
Entirely new activities in the expanded proposal	
3.2.2 Implement communication campaign on newly released varieties :	Developed from the JSR 2017 presentation recommendations on unlocking the seed sector potentials. It would entail media campaigns organized, seed fair/exhibition/demonstration held to help increase farmers' awareness and uptake of improved varieties, and strengthen seed enterprise and researcher linkages
3.2.4 Implement activities on the PFJ program :	Emerg ed from NASTAG's APSP-sponsored draft strategic plan, and would involve TV and Radio discussions on the role of private sector in PFJ held, aimed at ensuring that locally produced seed by NASTAG members delivered to the PFJ, and strengthened public-private partnerships and improved market access and quality for local seeds.
3.2.5 Promote private sector participation in early generation seed production :	Developed from the JSR 2017 presentation recommendations on unlocking the seed sector potentials; to get - signed licensing agreements between NARIs and seed enterprises to produce foundation seeds, approved guidelines for private sector production of foundation seeds, established PPP in seed infrastructure management, accredited private sector seed certification, and strengthened business linkages among seed value chain actors.

It was expected that implementation activities contained in the approved expanded proposal would consolidate the impact of NASTAG in the seed industry, and also make possible the institutional change legacy APSP intends to leave after its closeout in September 2018.

NASTAG in the process of the activities implementation submitted monthly technical narratives and financial reports with an annual comprehensive report submitted in January 2018.

3.0 ACCOMPLISHMENTS FROM PROJECT ACTIVITY IMPLEMENTATION

3.1 Improved environment to increase private sector participation and investments in the seed industry

Activities planned and implemented to achieve this strategic objective were:

- a) Establishment of Special Working Committees
- b) Sensitization forums on Seed Sector Reform Documents (Seed Law, Policy, Seed Plan and other relevant programs)
- c) Advocacy activities on the Plant Breeders' Rights Bill, Biotechnology usage and implementation of the national seed law and seed regulations

Key Accomplishments

- ❑ Conducted 5 sensitizations forums on seed sector reforms documents (Seed Law, Policy, Plan and "Planting for Food and Jobs") for a total of 276 public and public seed sector stakeholders in the Northern, Middle and Southern zones of Ghana.
- ❑ Won a contract and supplied 640MT of OPV maize seeds to the farmers under the GOG's PFJ in the Southern Zone of Ghana; Won another contract and commenced supply of 800MT of Maize and Rice Seeds to the PFJ for 2018 cropping season.
- ❑ Two members of NASTAG have been elected onto the National Seed Council, while 4 members are serving on the Technical Variety Release and Registration Committee.
- ❑ NASTAG is officially launched and recognized by the GOG, MOFA and development partners as the major seed value chain actors' umbrella Association in Ghana.
- ❑ Successfully organized the maiden National Seed Value Chain Business Networking Forum in Ghana, attracting over 100 participants seed public and private stakeholders, including Development Partners, and the media.
- ❑ Developed and disseminated over 20 seed sector policy communication materials for stakeholder consumptions

3.1.1 Establishment of Substantive EC and Special Working Committees

Prior to NASTAG's first Annual General Meeting (AGM) and official launching of the Association in August 2017, an Interim Executive Council (IEC) established at its formation managed and coordinated the Association's strategic activities; participating and representing its members at various stakeholders national and international forums and advocating for the private seed sector recognition and engagements. Under the grant support, the Interim Executive Council supported the secretariat to successfully plan and facilitate the association's members meeting a day to its maiden AGM. The meeting resulted in the adoption of the associations Constitution by 32 founding members and the election of substantive Executive Council members through free, fair and transparent elections facilitated by a legal officer from the Attorney Generals Department.

The actual day of the official launch of the Association saw the seven (7) substantive Executive Council Members officially inducted into office in a brief ceremony. This included the President, the Vice President, Treasurer, General Secretary and three zonal representatives for the Southern, Middle and Northern zones of Ghana. The official launch of the Association proceeding is reported in fully under *section 3.3.3- NASTAG official Launch*



Fig 2: A session of Participants at the Maiden AGM

A follow up task to the election of the EC members was the formation of sub committees to work in collaboration with the EC. The establishment of three (3) Special Working Committees (SWC) was a key target in strengthening of NASTAG. It is also an essential provision of the adopted constitution of NASTAG (Article III – Legal Status; Section 7–d) as one of the organs of the Association. The SWC are expected to ensure that action on key strategic issues affecting the seed industry are addressed in a well-coordinated and timely fashion, to meet the interests and expectations of members and active seed industry players.

Consequently, the committees were established at the maiden meeting of the substantive EC on September 26, 2017. They include; i) *Technical Standards Committee (TSC)*, ii) *Seed Business Development and Ethics Committee (BDEC)* and iii) *Advocacy and Communication Committee (ACC)*. Each Committee consist of five (5) members (at least one (1) member from the EC). The Chairpersons were elected at this maiden EC meeting: Benjamin Kemetse (M&B Seeds) as the Chairman of the TSC; Kwabena Adu-Gymafi (Agri Commercial Services Ltd.) as the Chairman of the SBDEC; and Alex Bokuma (Lexbok Investments Ltd.) as the Chairman of ACC.

Since their formation just like the EC, the committees conducted meetings and also developed key documents such as: “Criteria for assessing new membership applications”; Association By-laws / Code of Conduct / Ethics (draft state)”. Several other meetings conducted focused on issues referred by the Executive Council on specific issues relating to the seed sector that required development of strategies to meet with the Ministry of Agriculture, issues affecting members businesses, issues affecting members and period assessment of new applicants.

In April 2018, a joint EC and the SBDEC meeting was held in Accra to discuss / review and approve activities for the first ever upcoming National Seed Forum concept notes and plans put together by the secretariat. The President of NASTAG also used the opportunity to update members’ on issues from the National Seed Council (NSC). Members also thoroughly discussed the preparations for key events such as the Northern Ghana Seed Platform meeting, feedback on Strategic Plan and its implementation roll out, full account of PFJ for 2017, and 2018 PFJ seed supply.

Relating to the upcoming national seed forum, the EC helped to identify some of the relevant institutions to participate in the forum as potential collaborators in the future in developing the seed sector in Ghana. Such periodic meetings of the Association EC and SWC put NASTAG members at the help of affairs, helping them to understanding issues surrounding the seed sector the Secretariat’s plans towards the growth of their respective businesses.

The effective established NASTAG EC and SWC and their activities provided a strong indication of well-functioning governance structures and systems helping in consolidating the Association as the leading seed value chain actors’ organization in Ghana.

3.1.2 Sensitization forums on Seed Sector Reform Documents

Seed value chain actors including both public and private seed sector stakeholders, need to be aware of all the relevant seed sector policy and regulations, such as the *Seed Law*, *National Seed Policy*, *Seed Plan* and Relevant

Programs, to contribute meaningfully in the sector reforms process. Under the grant, NASTAG embarked on series of stakeholder sensitization/education forums on seed sector reform documents across the three zones in Ghana. The purpose of the forums was to: i). draw attention of both public and private sector actors to national reform documents; ii) get a common understanding of their contents; iii) identify each stakeholder’s roles and responsibilities in the operationalization of the documents; and iv) more significantly enhance public-private collaboration and dialogue to facilitate the effective implementation of the documents. Essentially, this activity was designed to increase awareness and enhance the understanding of the seed public and private sector stakeholders on the seed law, seed policy, seed plan and relevant seed policy regulations and programs.



Fig 3: A group picture of participants after a Sensitization Forum Meeting

Owing to its significance in terms of establishing strong basis for active stakeholder participation in the development of the seed industry, the project implementation review process allowed for the activity expansion to include; GOG’s newly launched agriculture sector development program dubbed PFJ, presentations of the seed policy and plan, and the role of the private sector in the implementation of seed sector reforms in Ghana, bringing out the lead role of NASTAG.

The seed sector reform documents developed by MOFA provide the framework and guidelines for operating the seed system in Ghana. As such, they serve as the most relevant documents to guide and enhance the roles of the seed value chain actors in developing their businesses and the seed industry in Ghana. In view of the importance of the seed sector to the success of GOG's PFJ program, it is imperative to enhance key stakeholders' knowledge and understanding of these relevant documents. More importantly, seed value chain actors need to understand their critical roles from private sector perspectives, in order to effectively contribute their quota to agriculture sector development, food and nutrition security and increase incomes.

At each forum, the core presentations on the Seed Policy and Plan were made by government / Ministry of Agriculture (Crop Services Directorate), while the role of the private sector in the implementation of the seed plan was facilitated by a NASTAG EC member. Other discussions and presentations covered the current government flagship PFJ Campaign, and NASTAG as the umbrella organization for seed value chain actors in Ghana.

Of strategic importance, each sensitization forum was evaluated with the administration of a pre and post evaluation set questionnaire general impression of participants. Within the 18-month period of project implementation, a total of five (5) sensitization forums on the seed sector reform documents were held for stakeholders in the Northern, Middle and Southern zones across the country but covered representatives from all 110 regions of Ghana. The table 3.1.2 presents the attendance breakdown at the sensitizations forums held at the five (5) locations and on specific dates:

Table 3. Seed Sector Stakeholders at The Sensitization Forums at Five Zonal Locations

Stakeholder category		Number of Participants by Location and Gender										Total
		Tamale (09/03/2017)		Cape Coast (30/06/2017)		Koforidua (31/10/2017)		Ho (02/11/2017)		Kumasi (22/02/2018)		
		Male	Fe m	Male	Fem	Male	Fem	Male	Fem	Male	Fem	
Seed Enterprises (SEEDPAG, NASTAG & Agro-dealers)		20	1	11	1	14	1	21	5	14	-	88
Farmers (ApFOG, PFAG, etc.)		13	-	3	2	8	-	-	-	10	4	40
Research / Academia		1	-	2	0	-	-	-	-	-	-	3
Regional & District DOAs		12	-	23	2	6	-			13	2	58
NGOs/CSOs		14	3	6	3	1	-	-	-	1	-	28
Media		5	-	1	-	2	-	5	3	3	-	19
Organizers / Resource Persons (NASTAG, MOFA & APSP/FTF)		11	2	6	2	4	2	3	2	6	2	40
		76	6	52	10	35	3	29	10	47	8	
Total		82		72		38		39		55		276

Source: Meeting Attendance Registers (List of Participants at the Sensitization Forums in Annex I)

Participants included development partners in agriculture especially seed producers, farmers, researchers and representatives from the regional department of Agriculture and the Ghana Seed Inspectorate Division (GSID) offices. The wide range of participants in these meetings served as a good forum to digest the implications of the policy and plan, their implications; providing a clearer understanding of the role of the private sector in the implementation of the Seed plan. The pre-presentation evaluations on the documents at these forums revealed that, on the average 50% of the participants had not seen or heard of these documents, let alone understood its implications and their own respective roles within the industry. In this context, the forums were effective in underscoring the important role that the private sector plays in the seed industry, and to discuss and agree on the priority activities that NASTAG should work on along with the GoG to create the enabling environment for increased private sector participation in the industry.



Fig 4: Stakeholder sensitization in session at Ho

In all, 276 (comprising 239 males and 37 females) seed sector stakeholders participated in the five (5) sensitization forums held in the Northern, Middle and Southern zones respectively. The result is that, on the average, participants' awareness on the seed sector reform documents and related programs increased by 50%.

These were identified as one relevant platform that contributed effectively to building a good public-private sector collaboration and dialogue for the agriculture sector development, as it set the tone to clarifying issues of interest to both public and private sector stakeholders. In effect, the forums afforded the relevant stakeholders a sound basis to conceptualize and/ initiate the development of a collaborative programme towards the seed industry development in Ghana.

Besides the increased awareness created on the seed sector reformed documents and the enhanced understanding of the value chain actor roles in the seed industry development, the participants going forward, gained confidence to increase the production and distribution of improved quality seeds to meet the demands of farmers, using also the PFJ campaign, to contribute to increased agricultural productivity.

3.1.3 Advocacy on Plant Breeders Rights Bill, Biotechnology Usage and Implementation of the Seed Law & Seed Regulations, National Seed Policy & National Seed Plan.

Improving the enabling environment for increased investment in the seed sector is possible when the legal, policy and regulatory framework provide the needed incentives and encouragement for all-inclusive participation of seed value chain actors, particularly the private sector. This entails effective enforcement of the Seed Law (part II of the Plants and Fertilizers Act 803, 2010), implementation of the National Seed Policy and its implementation Plan, and parliamentary enactment of the harmonized Ghana Seed Regulations and the Plant Breeders' Rights (PBR) Bill and increased Biotechnology usage.

NASTAG, under the APSP grant, was expected to advocate for seed sector policy and regulatory reforms towards improved enabling environment for increased private sector investments in the seed sector. This is crucial in the bid to register major transformation in agriculture sector through increased use of improved quality certified seed among farmers. Accordingly, advocacy activities on seed sector reforms carried out under the grant were as follows:

Enactment of the PBR Bill & Awareness on Biotechnology Usage: The participation of NASTAG in the 2017 AFSTA Congress in Senegal brought it closer to the African Intellectual Property Organization (ARIPO). Following NASTAG's discussion held with the representative of ARIPO, Mr Emmanuel Sackey on the sidelines at the AFSTA 2017 in Dakar, Senegal, a meeting was facilitated by the Registrar General's Department at the Coconut Groove Regency Hotel in Accra on June 15, 2017, to push for the passage of the PBR Bill. NASTAG and AFSTA were significantly represented and mandated to work closely with the Registrar-General's Department, MOFA and the Peasant Farmers Association of Ghana (PFAG) to facilitate the passage of this Bill.

At the maiden National Seed Value Chain Business Networking Forum in Accra in May 2018, a presentation on the PBR Bill was also made to provide updates on status of the Bill. The presentation called for the seed sector stakeholders' support in getting the Bill passed into Law, which has been awaiting enactment by the Ghanaian Parliament for the past 18 years.

Implementation of the National Seed Law, Policy and Plan: Key among advocacy activities conducted by NASTAG on these issues were: collaboration with allies in working for parliamentary approval of the harmonized Ghana Seed Regulations (the Legislative Instrument for the Seed Law - Act 803, 2010); pushing for reconstitution of the National Seed Council (NSC); and possible operationalization of the Seed Fund as enshrined in the Act 803, 2010. The advocacy activities entailed holding public-private sector dialogue meetings, particularly with the MOFA and its relevant directorates and agencies.

In June 2017, NASTAG collaborated with PFAG and MOFA - CSD in holding discussions on the passage of the Seed Regulations to facilitate and enhance seed businesses development. Although the Sector Minister gave a lot of assurances, as mentioned in his speeches delivered at NASTAG launch in August 2017 and later at the National Seed Forum in May 2018, the Seed Regulations remained unapproved. However, the reiterated assurances on the passage of the regulations by the Executive provides an indication that this matter is being given serious attention, and the delays might be emanating from the Legislature.

On the last count, NASTAG's follow-up on the seed regulations in December 2017 revealed that the documents had been submitted to the parliamentary select committee on Food, Agriculture and Cocoa Affairs, for which some comments and suggestions had been provided. These comments have been submitted to the Attorney General's Departments for consideration and necessary review in legal languages. Following this (which NASTAG, MoFA and PFAG would be working collaboratively on) a sensitization of the stakeholders would be held on the final document prior to laying it in parliament.

Another in-road made by NASTAG in its efforts to influence development of the seed industry was its participation in the 2017 Joint Sector Review (JSR) Meeting, which was made possible through serious advocacy. This annual event brought together representative stakeholders of the agriculture sector, including the government regulators / policy makers and private sector players, donors / development partners community, research institution / universities, and the media to share progress made in the agricultural sector holistically, while identifying areas of focus by the sector Ministry/ government and private sector to fast track Ghana's agriculture sector growth. It is one key mechanism for ensuring mutual accountability in the agriculture sector development agenda in Ghana.

Of much interest to NASTAG was a presentation on the seed sector at the 2017 JSR, which strongly highlighted the Association's role as the private sector umbrella body in moving the seed industry forward. Since then, NASTAG had been making follow-ups and working closely with the Sector Minister and MOFA to ensure that recommendations made in the presentations were considered and implemented.

One key issue that featured in the NASTAG's dialogue session with the Sector Minister was the issue of reconstitution of the National Seed Council (NSC). This is related to the issues of outstanding approval of the *guidelines for private sector participation in foundation seed production*, the manual on *accreditation of private seed actors for seed certification*, and the *varietal registration and release manual*.

Ultimately, in November 2017, the NSC was reconstituted with 2 representations for private sector seed (incl. the President of NASTAG and another SeedPAG/NASTAG member), besides the nomination of a private sector International Seed Expert, Mr. Josiah Wobil as its Chairman. This development was borne out of NASTAG persistent advocacy for not only the reconstitution of the NSC, but also for more slots to the private seed sector in the Council. The representation of the private seed actors added more weight to already 4 representations of the private sector on the National Variety Release and Registration Committee; another key structure in the Seed Policy Architecture.

Before the end of November 2017, NASTAG with the backing of APSP team reflected on and tabled some issues of the manuals and operationalization of the Seed Fund (as enshrined in the law, Act 803, 2010), through the private sector representatives to the NSC for discussion at its first business meeting on December 14, 2017.

The private sector representation on the NSC is a major boost to ensuring that all outstanding issues, especially in favour of the private sector seed businesses are given the required attention to help develop the seed industry in Ghana. Most importantly, securing the NSC approval of these three pending pro-private sector seed documents at their sittings was expected to strengthen seed value chain business linkages, enhance private seed sector investments and guarantee development and uptake of high quality improved certified seeds for improved food and nutrition security in Ghana.

3.2 Strengthened Business Linkages in the Seed Value Chain in Ghana

Activities planned to achieve this strategic objective in the project include:

1. One (1) seed value chain actors' networking /business forum held
2. Communication strategy developed and in use for the dissemination of sector information to members, policy makers and stakeholders

3.2.1 One (1) Seed Value Chain Actors' Networking/Business Forum and others

By way of sustainability and continuity of some interventions under the Feed the Future Programmes in Ghana, a number of activities were carried out successfully and jointly with NASTAG through its establishment with support by APSP. In this respect, NASTAG has been in the fore front, carrying out national level programmes while gathering lessons learnt in the process to sustain and continue when some of the Feed the Future programme like APSP get over. Such events included within the grant period, the 2nd and 3rd Northern Ghana Seed Platform meetings, the first ever national Seed Forum, the annual Pre-season Planning and Networking Forum amongst others in collaboration with the Agricultural Technology Transfer Project.

The following provides a summary of some the task accomplished in addition to the National Seed Forum which formed a main part of the grant activities.

Organization and Facilitation of the first National Seed Value Business Networking Forum:

Under the grant, NASTAG held the first ever National Seed Value Chain Business Networking Forum in Mensvic Grand Hotel, East Legon, Accra, for over 100 seed value chain actors and stakeholders. Held in Accra on May 23rd and 24th, 2018, the forum ought to continuously advocate for improved policy, regulatory and investment environment to enhance private seed business. It also aimed at fostering stronger business linkages and networking along the seed value chain, sensitize value chain actors, create business opportunities and institutionalize public-private dialogue to promote sustainable seed industry in Ghana.

Key highlights of the maiden National Seed Value Chain Business Networking Forum are as follows:



Fig 5: Brochure developed for the Event

- The forum was attended by about 100 research/breeders, seed producers/seed enterprises, MoFA, agro and seed dealers, bankers and farmers among others, and addressed by industry leaders, including the Chairman of the National Seed Council (NSC), a representative of the Hon. Minister of Food and Agriculture who is also the Director of Crop Services and the President of NASTAG.
- There were technical presentations made on the Fall Army Worm (FAW), Seed Industry Infrastructure Development, Planting for Food and Jobs (PFJ), Seed Licensing Contract Agreement which is being promoted by APSP and Financing and Sustaining Investment in the Seed Sector.
- At the end of the forum, participants adopted a communique which commended NASTAG's management for organizing the Forum, noting that it was very successful and enhanced the awareness by all the stakeholders on the key issues confronting the seed industry as well as the business opportunities available.



Fig 6: A section of participants at the Seed Forum



Fig7: Panelist discussion of Planting for Food and Jobs and its impact on the Seed Sector in Ghana

○ USAID initiatives, through APSP and Agriculture Technology Transfer Project were commended and asked for a good transitional arrangement to enhance continuity of the initiatives.

○ Among other aspects, the communique advised research institutions to adopt and use licensing agreements to expand research business, earn revenues and help enhance seed uptake and called on MoFA to use the PFJ to enhance NASTAG as the main actor and conduit to reach seed producers for the seed pillar of PFJ, to minimize cost, minimize abuse, enhance seed quality and contribute to growing the strength of NASTAG.

○ NASTAG was called upon to facilitate a presentation on the Army Worm to MoFA policy team and thereby provide them with policy recommendations on more sustained ways for dealing with the army worm menace, but more importantly to adopt other biological control measures which may be more efficacious, cost effective and safer than just chemicals which bring in their wake health and environmental hazards. (See the full report on this event in the attachments).

Immediate follow up activities based on issues outlined in the communique included:

- ✓ NASTAG's meeting with the Hon. Minister of Food and Agriculture, Dr. Owusu Afriyie Akoto and the Technical Advisor, Mr. Samuel Asante-Krobea, on 20th June 2018, to discuss issues contained in the communique and officially present a copy to him.
- ✓ Publication of the communique in the Daily Graphic Newspaper, page 106 of Monday June 25, 2018 Edition, and on page 19 of the 27th June Edition of the Business and Financial Times (BFT).

Prior to this Forum, NASTAG had been holding effective smaller regional level business networking meetings for seed producers as part of its strategic objectives to strengthen seed value chain actor linkages. This includes the 6th, 7th and 8th Annual Pre-season Planning and Networking Event and the 2nd and 3rd Northern Ghana Seed Platform meetings.

Hosting and Facilitation of the 8th Pre-Season Planning and Networking Event: As part of the activities for the month of March 2018, NASTAG successfully hosted the 8th Pre-season Planning and Networking Forum at Modern City Hotel in Tamale, on March 21, 2018. This year's event brought together over 800 agricultural value chain actors on the theme: **“Quality Seed - Necessity for Food and Jobs”**. The forum offered the industry players the opportunity to discuss business opportunities for the coming season. About 30 companies and



Fig 8: Dignitaries at the Exhibition stand

organizations exhibited their products. A number of the exhibitors at the event expressed their joy that, this year's event comparatively was more meaningful as they established more business linkages and made more sales. Antiku Company Limited and Afgri / John Deere were amongst companies who expressed their excitements at participating in the event.

Mr Havor, the President of the NASTAG who gave the opening remarks, expressed his appreciation to all the Feed the Future projects especially APSP and ATT that have put NASTAG in the limelight and supporting to project the private seed sector players. Mr. Havor in his speech urged all value chain actors saying: *“Let me use this opportunity to once again*

thank the USAID Feed the Future through IFDC / ATT for supporting to grow the seed sector in Northern Ghana to this point. We sincerely appreciate the sterling impact made on the seed sector in this part of the country. Colleagues here present, as the project comes to an end, the question is “How have we positioned ourselves to sustain and increase the gains made through the donor intervention and extend it to cover the entire country?” One year from today, NASTAG would have to prove its existence; championing the pre-season and possibly the pre-harvest events with no donor intervention. This, my dear colleagues, can only become a reality if and only if we take Seed production and accompanying processes as a very serious business. Let us all put our hands to the wheel to make the private seed sector an indispensable component of the agricultural value chain in Ghana”.

Ms. Jenna Tajchman, representing USAID at the function mentioned, in her remarks also stated that, *“USAID recognize that seed quality and volume is a major issue in most agricultural value chains in Ghana. Limited availability of certified seeds restricts Ghana's ability to overcome climate change and agricultural challenges, which threatens Ghana's food security. We believe improving the seed sector is critical to Ghana's economic growth. Developing Ghana's seed sector is a top priority for USAID and its partners.”*

The Deputy Minister of Agriculture, Dr. Sagre Bambangi was the special guest and delivered the keynote address at the forum. According to him, he was happy that the theme for the event, **“Quality Seeds -Necessity for food and jobs”** was in line with the Government's Planting for Food and Jobs Campaign. *“To us in Government or the public sector, Seed is recognized as a key input to transforming the agriculture sector in Ghana; a high-quality Seed when planted would not only result in high farm yields, but also guarantee food and nutrition security, generate employment and better livelihoods for Ghanaians in the country. This is one of the reasons, the government of Ghana has prioritized Seed as one of the pillars in its flagship agriculture sector program, dubbed “Planting for Food and Jobs” (PFJ) and working very closely with the National Seed Trade Association Ghana (NASTAG) and other private sector actors to achieve the overall goal of the PFJ initiative.”* he said.



Fig 9: A section of the Participants at the Preseason Event

The above excerpts point to the fact that, there is much more to be done to ensure that the seed sector realizes its full potential. NASTAG is therefore optimistic of doing its best to collaborate very effectively with the public sector to achieve a collective result.

Northern Ghana Seed Platform meeting in Tamale:

The 3rd Northern Ghana Seed Platform meeting was held at the Radach Lodge and Conference Centre, Tamale on Thursday 19th April 2018 by NASTAG.

A total of 81 participants attended the meeting from the public and private sectors, including Breeders from SARI, officials from MOFA, Ghana Seed Inspection Division, Grains and Legumes Development Board, NASTAG Executives, members and Secretariat staff, SeedPAG, Donor Agencies and implementing partners.

NASTAG President, Mr. Thomas W. Havor, welcomed participants to the 3rd Northern Ghana Seed Sector Stakeholder Platform meeting. In his welcome remarks, he noted that the meeting was to look at issues evolving around the seed industry, particularly within Northern Ghana, i.e. the Upper East, Upper West and Northern regions. He observed that since the establishment of the Platform in 2016, participants have been able to share production trends (the demand and supply) of certified seeds produced and marketed. There has been tremendous increase in the production, demand, adoption and utilization of certified seed through the intervention of various development partners, especially the USAID Feed the Future Agricultural Technology Transfer (ATT) project and APSP on the policy front. Drawing from the impact of the platform since it was constituted in 2016, it was relevant to consider the possibility of expanding it to cover the entire country and was hopeful that NASTAG would move the process forward to the benefit of the seed sector in the entire country.

He touched on the *Fall Army Worm* menace, stating that it poses a very critical challenge to the industry and could erode the collective gains made over the years if adequate control measures are not put in place.

He congratulated members of NASTAG and SEEDPAG for the various roles they played in the supply of seeds during the implementation of the “Planting for Food and Jobs (PFJ)” programme in 2017. He assured the members that despite challenges encountered during 2017, NASTAG would work with members to supply seeds for this year and subsequent years.

He concluded by thanking all development partners especially USAID Feed the Future ATT project for fully funding the meeting and the Feed the Future Agriculture Policy Support Project (APSP) for their collaborations with NASTAG.

There were brief solidarity messages from the Chiefs of Party of the USAID Feed the Future – ATT, APSP projects, and the Deputy Chief of Party (DCOP) of the USAID Ag NRM and the Agreement Officer Responsible (AOR) for ATT. They spoke on how their collaboration with seed value chain actors contributed to the increase in seed production and distribution in the three regions of the north. They encouraged them to come together to increase production so that in the near future, Government would not import grains as seed from other countries.

There were 4 presentations and group discussions during the session. These are as follows:

- i) Prevention and control of the *Fall Army Worm* in the coming seed production season.
The life cycle of the Fall Army Worm, crops attacked mode of feeding and control measures were discussed.
- ii) 2017/2018 Planting for Food and Jobs – NASTAG’s participation and the way forward.
The Executive Secretary of NASTAG took the participants through NASTAG’s participation in the “Planting for Food and Jobs” programme for 2017. She indicated that government tasked the Association to deliver 1,200mt of OPV maize seeds to farmers but was only able to deliver 640.42mt. For 2018, NASTAG has been awarded a contract to deliver 400mt OPV maize and rice seeds each.
- iii) Seed Production trends, demand forecasts and major issues in the seed value chain.

The major presentation for the day highlighted on the certified seed adoption before the USAID FTF-ATT project started which was 11% for maize and less for rice and soybean. Various interventions made to upscale seed production and adoption include provision of a 10ha irrigation facility to SARI; provision of a cold room facility

to CRI; training of over 73 producers who were given grants; provision of 22 seed vans to facilitate seed distribution to the hinterlands; distribution of 20,000 starter packs; supported the development of the Seed Plan, provision of 3 state of the art seed laboratories etc.

As at April this year, with the aid of the various interventions, the adoption rate for maize has increased to about 40% for maize. Rice and Soybean also recorded increases.

Some challenges faced by breeders (SARI) include poorly developed rice fields, poor storage facilities, inadequate mechanization support for field work, inadequate seed conditioning and packaging equipment, inadequate skilled labour. Lack of funding for variety maintenance. These challenges have impacted negatively on development and production of breeder seed. The ATT project has through their intervention provided SARI with 10 ha irrigation facility and also financed the development of 2 maize varieties.

Participants formed 3 groups and discussed 2 questions for each group using the World Café method where each table had a table host who compiled results of discussions for each group. Discussions centred on activities of NASTAG that will help in improving availability and accessibility of foundation / early generation seeds, ways of ensuring that private sector participation in seed processing and certification lead to quality production, and practical ways increase the use / uptake of certified seeds among farmers. The outcomes were presented in a plenary for participants' inputs and general consensus building.

General, issues emanating from forums of this nature would be consolidated based on which NASTAG will collaborate with the various actors to address pertinent challenges to the seed sector.

These meetings and dialogue sessions to a large extent is boosting private seed producers' confidence in increasing their seed production business. Business facilitations of these nature are expected to go a long way to enhance private businesses with emphasis on quality standards for economic growth in the long run.

NASTAG's Participation in the GOG Flagship PFJ Programme: With the operationalization of the NASTAG secretariat through the grant support of APSP, several activities were also carried out alongside grant activities. Some of these activities are worth mentioning.

After the confirmation of the new Minister for Agriculture under the new government, NASTAG moved to strike a closer collaboration with him through submission of a congratulatory message to him. This resulted in NASTAG's maiden meeting with the Minister, where direct negotiations were carried out for government to give priority attention to the private seed sector in Ghana as a success factor for its "Planting for Food and Jobs (PFJ)" campaign as against the 100% importation of seed initially planned at the Ministry. This discussion resulted in the submission of a brief on NASTAG and the advantages of its possible assigned role in the supply of seeds to farmers under the PFJ Campaign, as well updated data on the volumes of local seeds in stock across the country to the Minister for consideration.

A further step to this was the submission of NASTAG's bid to supply Open Pollinated Varieties (OPV) of Maize seeds to farmers in response to the Tender advertised by the government. Consequently, in March 2017, NASTAG's bid was successful and the Association received the offer to supply 1,390 MT of OPV of Maize seeds to the government in support of the PFJ. These steps facilitated market for NASTAG members and created avenue for closer collaboration with the government for the voice of the private seed sector actors to be heard on policies and issued relating to the seed industry.

It put NASTAG on a high pedestal for closer and committed collaboration with government in developing the local seed sector going forward with regards to all the policy related issues. To the very maximum, this feat contributed significantly to all four specific objectives bulleted under strategic results area 3 of the grant agreement. Through these accomplishments, NASTAG members have fully appreciated the significant role the private sector is, and can further play and have therefore committed themselves to delivering the highest quality seeds to gain the confidence and recognition of the government, DPs and its entire membership, and the Secretariat as the private seed sector representative in Ghana.

Challenges of NASTAG's participation and seed supply for PFJ 2018 cropping season:

Although NASTAG participated in the PFJ in its first year in 2017, the issue of delayed payments for the seed supplied dominated discussions with members, other input suppliers and the Food and Agriculture Ministry; the stipulated period for government to honour its obligation elapsed. For instance, only 50% of the total cost of supplied seed was made within the six months contract period in August 2017.

In spite of the undue delay the in payment of the 2017 seed supplied to government, NASTAG in December 2017 also worked on the tender documents to bid for the 2018 seed supply under the PFJ initiative.

In February 2018, NASTAG had major dialogue sessions with MOFA on the adverse impact of the undue delay payment for Seed supplied under the PFJ Campaign in 2017 cropping season. Consequently, half of the remaining 50% payments due NASTAG was made, enabling most of the members to process their seeds and offset their outstanding debts. Following another series of dialogue sessions between NASTAG and MOFA led to payment of the final 25% by the Ministry in April 2018. NASTAG then immediately completed the administrative and financial arrangements for transfer of the funds to all the members who supplied seeds to enable them to continue with their business of producing seeds in the 2018 cropping season.

Further on the PFJ, NASTAG had an offer to supply seed to the PFJ for the 2018 cropping season. MoFA offered NASTAG a total of 400Mt of Rice and 400Mt of OPV maize. Under the contract signed with government for the supply of seeds, NASTAG within April 2018 linked up with members at the regional levels to establish the links for the supply of the seeds to the districts.

In May 2018, the NASTAG Secretariat continued to negotiate on behalf of members for seed supply to farmers under the second year of implementation of the PFJ. NASTAG also played a monitoring role to ensure that seeds supplied by members passed the approved test under the GSID / PPRSD. Through efficient coordination, association members supplied more than the contract quantities provided by the government. About 550MT of Maize seed had so far been supplied as against 400MT per the contract based on additional request from the Ministry, necessitating a contract review by the Ministry to reflect the quantity supplied.

However, a major challenge is difficulty in getting the Rice seed for supply to the PFJ. NASTAG thus has to encourage a lot more of its members to give some attention to Rice seeds, as they do with maize currently for a balanced market. In the light of the PFJ Campaign, it is imperative that, within the next few years the seed sector would see a holistic boost with the development of other seeds aside Maize, Rice and Cowpea. Accordingly, NASTAG will solicit for, and provide the required information and guidance needed to enable the smallholder seed producers to expand and/or diversify into other crops.

NASTAG's participation in high level meeting / events: Invitation to participate, host, plan and partner in holding high level meetings / events for a nascent organization such as NASTAG is a strong indication of the growth in recognition and exposure as a leading private sector stakeholder or value chain actor organization. It also signifies the progress impact that the Association's strengthening activities is yielding in the seed industry under the grant support. NASTAG over the one-year period has been effectively represented in its active participation in many seed sector related high level meeting / events locally and internationally (*see Annex 2 for the full list of NASTAG's participation in high level meetings and events*).

It is noteworthy that, NASTAG's involvement in these events is usually driven by the spirit of collaboration, consultation, alliance-building and networking on the seed industry development issues. This continuous involvement and dialoguing with development and government at different levels, NASTAG is being put in the limelight to achieving its optimum potential, while consolidating and reinforcing its efforts to representing the private sector issues in matters of the seed industry development. This giving meaning to NASTAG quest to achieve the needed exposure and recognition as leading seed industry organization

3.2.2 Develop communication strategy and use for the dissemination of sector information to members, policy makers and stakeholders

NASTAG's communication strategy rides on the back of its strategic plan. The ultimate goal is to improve information flow on the seed industry among stakeholders in Ghana, West Africa and the entire world through

development and dissemination of communication materials for meetings, seminars, workshops, local, national and international networking forum. The objective of NASTAG's communication strategy is to create awareness on NASTAG and seed industry development issues, develop strong linkages with key stakeholders and DPs such as, the USAID/Ghana Feed the Future projects and USAID/West Africa projects (e.g. WASP), the GoG (including the MOFA, CSD, PPRSD, GSID, GGLB), the research and academic institutions, the private sector, agriculture-related civil society organizations and the media. In effect, the communication strategy works to: 1) Enhance NASTAG's exposure and recognition; 2) Enhance seed marketing to reach all farmers, increasing yields and improving livelihoods; and 3) Advocate for and contribute to an efficient and evidence-based agricultural legal environment.

Highlights of the communication strategy as outlined in the project proposal included development of a website, policy communication materials and media outreach / campaign for the consumption of stakeholders, beneficiaries and target audiences.

Website development: Under the grant support, NASTAG developed a framework for its Website, and continued to populate the site with relevant information on its activities, useful and timely for members and stakeholders' consumption. As part of the process NASTAG's logo was updated through the grant support among others, to ensure that it attracted a lot of attention.

In closely related move in July 2017, some IEC members and the ES met with a consultant at AGRA who was proposing to develop a National Seed or Agricultural Electronic Platform. Significant inputs were made from NASTAG and it is envisaged that, amongst other outcomes, the development of the platform will contribute to enhancing private sector seed businesses while promoting the use of improved seeds across Ghana.

Development of communication materials (print): In June 2017, NASTAG developed one-pager brief profile on the Association, a flyer on NASTAG's progress so far and its objectives, and a media publication on the sensitization on the seed policy and seed plan: <http://agricinghana.com/2017/07/07/nastag-holds-sensitization-on-seed-sector-reform-documents-for-stakeholders/>

Other publications developed for stakeholders' consumptions include: i) Article titled "Ghana Seed Trade Association begins its transformative agenda" highlighting nascent NASTAG's accomplishments in promoting the private sector in the Ghanaian seed industry reforms. This featured in the AFSTA E-REVIEW (An AFSTA electronic newsletter, Vol: 073, July 2017); ii) NASTAG Launch brochure developed, printed and distributed on the day of the launch in August 2017; iii) the National Seed Value Chain Networking Forum brochure developed in May 2018; iv) a press statement titled "NASTAG salutes Ghanaian Farmers" published in the Daily Graphic Newspaper, page 47 of December 1, 2017, in commemoration of the 33rd National Farmers' Day; and v) communiqué emerging from the National Seed Forum published in the Daily Graphic Newspaper on June 25, 2018.

Very strategic and targeted congratulatory messages developed and delivered were: A letter to the Hon. Minister of Food and Agriculture, Dr. Owusu Afriyie Akoto, titled "NASTAG congratulates Dr. Owusu Afriyie Akoto, a Minister designate for Food Agriculture", dated January 23, 2017. This congratulatory message was again shared with the Minister, when NASTAG's representatives paying a courtesy call to him in his office in February. This was meant to tighten relationship with the Minister's office by way of grounds preparation for enhanced immediate future collaboration.

Another letter to the Chairman of the National Seed Council, Mr. Josiah Wobil titled "NASTAG congratulates the National Seed Council members elected and inaugurated into office", dated October 23, 2017. This letter also highlighted the critical issues confronting the seed sector reform process in Ghana, and the need for increased private sector participation in the seed industry to make it more competitive and profitable.



Fig 10: NASTAG Progress so far

One solid communication developed was the expansion and finalization of the NASTAG 5-years strategic plan document in April 2018. The abridge version of this important blueprint was printed and distributed to participants at the National Seed Value Chain Business Networking Forum in May 2018. These would further be shared with potential donor partners to inform NASTAG development directions collaboratively with potential partners.

Radio and TV discussion programs held: Since the seed industry has farmers as its customer, NASTAG under the grant worked closely with the Peasant Farmers Association of Ghana (PFAG); building a very close working relationship as a strategy to secure markets for local seeds produced and ultimately contributing to sustaining the seed sector businesses. This resulted to PFAG registering as a member of NASTAG and PFAG and the latter has since committed to consulting NASTAG on issues relating to seeds for our mutual benefit. The end results envisaged are enhanced business linkages, farmers appreciating the significance of use of certified seeds through rigorous sensitization and increased use of locally produced seeds through the agro-input dealers, thereby increasing agricultural productivity with increased used of high quality seeds.



Fig 11: Discussion on the Seed Sector on GTV

As part of its collaborative efforts, NASTAG with PFAG held joint discussions on the linkage between the ECOWAS seed regulation and the yet-to-be-approved harmonized National Seed Regulation, on Radio and Television in June 2017. The discussions focused on the current seed situation in Ghana and the collaborative effort to make quality seeds accessible and affordable to encourage the utilization of improved varieties for higher yields. Both discussions ended with a call on the media

to support the sector through collaboration with NASTAG by publishing its interventions to grow the agriculture sector in Ghana.

In Sept 2017, another TV Discussion was held on NASTAG's participation in the 2017 PFJ program. Issues covered included NASTAG's participation in a forum in Northern Ghana to drum home the benefits, successes, challenges, and the way forward on the implementation of the Planting for Food and Jobs (PFJ) Programme. This provided the opportunity for NASTAG representatives to clearly articulate seed companies/ producers' role in the implementation of the PFJ, and recommendations for its future success. The TV discussion funded under the APSP grant took stock of NASTAG's participation and made policy recommendations to the PFJ's future implementation. The panelists were; Mr. Amos Rutherford Azinu, a NASTAG EC Member, Mr. Charles Nyaaba, a Programme Officer, PFAG and Mr. Kwesi Korboe, USAID Embedded Technical Advisor at MOFA.

Also, hosted on Radio GBC24 Worldview Programme moderated by Mr. George Asekere, another discussion offered the opportunity for the panelists to share how NASTAG sees the PFJ to the benefit of the local seed industry, how it could collaborate more effectively with government to satisfy farmers' needs in terms of packaging, reaching the last farmer with certified seeds, and how NASTAG and MoFA could work effectively together to ensure that local seed companies / producers produce to their best maximum in reference to critical policy issues of concern to the private seed businesses.

By participating in the government's initiative, Planting for Food and Jobs in which NASTAG played a significant role through the supply of seeds, there was the need to do assessment at different levels to identify the successes, challenges and way forward for the benefit of all the stakeholders (seed businesses and government's), and the progress in subsequent years programme implementation for enhanced / collective benefit.

With the APSP grants support three NASTAG EC members joined the host of the Saturday evening worldview programme on GBC24 on December 16, 2017 to discussion on the successes, challenges and the way forward on the implementation of the PFJ Campaign from the Seed sector perspective. A critical recommendation to government through this medium was the need for timely payment



Fig 12: A screen shot of on- going TV discussion

for seeds supplied under the programme in the future as a prerequisite to boosting the interest of the private seed sector in contributing to agricultural development in the country in general.

The over 20 key communication materials developed for stakeholders' consumption over the 18-month grant implementation period are presented on Table 3.2.2 as follows:

Table 4: Communication Materials Developed & Location / Dissemination Media		
#	Communication Materials Developed	Location / Dissemination Media
1.	Website on NASTAG	Under construction on the internet;
2.	One-pager profile on NASTAG	Distribution at all sensitization forums and meetings of stakeholders and members
3.	Flyer on NASTAG progress so far	Distribution at all sensitization forums and meetings of stakeholders and members
4.	Power-point presentation on the Overview of NASTAG	Presentations at all sensitization forums and meetings of stakeholders and members
5.	NASTAG Launch Brochure	Develop, printed and distributed before / on the launchings and meetings of stakeholders and members in August 2017
6.	Two (2) Television Discussion Program on GTV: On the seed industry issues including NASTAG's or local seed producers' participation in the PFJ	Ghana Television Discussion Program on ...[date] at ...[time]
	Media reportage / coverage on NASTAG activities:	
7.	A media publication on the sensitization on the seed policy and seed plan	http://agricinghana.com/2017/07/07/nastag-holds-sensitization-on-seed-sector-reform-documents-for-stakeholders/
8.	Article titled "Ghana Seed Trade Association begins its transformative agenda"	Published in the AFSTA E-REVIEW (An AFSTA electronic newsletter, Vol: 073, July 2017)
9.	Seed traders' association to be launched in Accra	Http://ghanaweb/GhanaHome-page/NewsArchive/Seed-traders-association-to-e-launched-in-Accra-572750
10.	NASTAG officially launches tomorrow	Agricultinghana.com/2017/08/23/nastag-officially-launches-tomorrow/amp
11.	Local seed industry needs government support	Myjoyonline.com report on NASTAG Launch: https://myjoyonline.com/news2017/august-29th/local-seed-industry-needs-more-govt-support
12.	Press Statement on 33 rd National Farmers' Day Celebration	Published on page 47 of the Daily Graphic Newspaper, December 1, 2017 edition
	Strategic and targeted communication developed:	
13.	1) Congratulatory Letter to the Hon. Minister for Food and Agriculture	"NASTAG congratulates Dr. Owusu Afriyie Akoto, Minister Designate for Food and Agriculture" dated January 23, 2017; presented to Hon. Minister when the NASTAG representative visited him in his office.
14.	2) Congratulatory Letter to the Elected Chairman and members of the National Seed Council	"NASTAG congratulates the National Seed Council members elected and inaugurated into office", dated October 23, 2017; Delivered to Chairman and acknowledged receipt with a reply
15.	Radio discussion on the PFJ – opportunities and challenges	GBC24 Worldview on June 16, 2018
16.	Finalized NASTAG 5-year Strategic Plan – abridge version	Distributed copies for participants at the National Seed Forum
17.	Brochure for the National Seed Value Chain Business Networking Forum in Accra, May 23-24, 2018	Distributed copies for participants at the National Seed Forum
18.	Report on the National Seed Value Chain Business Networking Forum	GTV
19.	Report on the National Seed Forum	Business & Financial Times Newspaper
20.	Coverage of the National Seed Forum	Myjoyonline.com
21.	Communique of the National Seed Value Chain Business Networking Forum	Published in Daily Graphic on page 105 of the June 25, 2018 edition
22.	Communique of the National Seed Value Chain Business Networking Forum	Published in the Business and Financial Times on page 19 of the June 27, 2018 edition

Undoubtedly the development of the information, education and communication materials has impacted positively on development of the seed sector and industry as whole; awareness of the key seed sector reforms issues and the role of NASTAG and private seed sector actors in the seed industry has increased among stakeholders in Ghana. Hitherto issues about seed and its importance in the transformation of the agriculture sector for improved food and nutrition security and poverty reduction among agricultural producers was not that visible.

3.3 Strengthened Institutional capacity of NASTAG to engage public stakeholders on policy reforms and program implementation to modernize the seed industry in Ghana

Activities planned to meet this strategic Objective in the project include:

1. Equipping and Staffing NASTAG secretariat for effective Associations operation
2. Advocacy Planning and Strategic Plan (SP) development training for NASTAG staff and executive members
3. NASTAG Annual General Meeting and Launching

4. Capacity building training on Quality Seed Management for NASTAG members

3.3.1 Equip and staff NASTAG secretariat for effective Associations operation

In December 2017, the major activity on formalizing the Secretariat Staff Positions and furnishing the Secretariat entailed; regularization of two secretariat temporary staff positions including a substantive Executive Secretary supported by the Accounts Officer. The two worked together within the period to go through the process to commence the procurement of items required to furnish the office for its full operation.

All items were procured by the end of January 2017. Additionally, furniture and equipment expected to be transferred from APSP to NASTAG upon request were released to the Secretariat. The staff also commenced work on a quarterly plan development for the project activities implementation in addition other non-project activities and this is submitted as an attachment to the report. Effective January 2017, a significant time was devoted to fully operationalizing the NASTAG secretariat, as all equipment required were fully ordered and delivered to the secretariat. The Secretariat also made significant progress in information gathering and completion of all government statutory company registration requirements of all agencies / departments, such as registration with the Social Security and National Insurance Trust (SSNIT), the Department of social welfare (currently required of all non-organizations) and the Ghana Revenue Authority.

As expected, the Secretariat needed to have its required internal control manuals such as, the procurement, financial, human resource, and communication manuals in place. By October 2017, the final detailed draft copies of the operational manuals on Financial Management, Human Resource Management, Communication and Procurement had been completed by a Consultant and submitted to NASTAG. These manuals are expected to guide in the daily operations of the Secretariat.

As part the implementation of the activities and management of the secretariat through the support of the APSP Grant, the membership of NASTAG increased steadily over the period within the 18 months grants period. From 11, the association's membership increased to 36 by February 2018. Using the set criteria developed by the technical sub-committee of the EC, other membership application are currently under review for approval including, Qualiseeds, Agriseeds, K Asempa Enterprise, Ganorma Enterprise, Bless Farms and UDS Faculty of Agriculture. These and many more including the recent activities of the association such as the first national seed forum with outcome in a form of communique are pointers that, NASTAG is becoming more relevant to industry players for the immediate future seed sector growth. The numerical steady growth of the Association is expected to strengthen it to influence policies of government to benefit the growth and development of the seed sector businesses.

3.3.2 Advocacy Planning and Strategic Plan development training for NASTAG staff and Executive Members

Part of the interventions toward making the Association the mouth piece of private seed sector, selected members and the secretariat staff received training on Advocacy Plan development in December 2016. Six (6) persons comprising two (2) NASTAG interim executive members, three (3) secretariat staff and one (1) APSP staff benefitted from the three-day training workshop funded through the grant support. The participants gained a good insight into the concepts and principles of advocacy which enhanced their knowledge on how to plan successful advocacy initiatives. This consequently contributed significantly to developing strategies to drum home some of the issues for government's attention in a mutually agreeable manner. Further amongst other things, the knowledge gained would help in the effective implementation of the National Seed Plan, and other relevant policy documents. This directly ties to the overall objective of the project of ensuring that NASTAG is capacitated to champion advocacy for the seed sector reforms and to serve as a catalyst for improved agriculture productivity in Ghana. The training was facilitated by Dr. Joe Cortes representing the Seed Science Centre, Iowa State University.

In another training forum, the same consultants trained three NASTAG secretariat staff and two IEC members on strategic plan development in February 2017. The 3-day training enhanced capacities of the beneficiaries who

contributed significantly to the development of NASTAG's strategic plan as part of its activities for the year. The resultant effect of the training was the development of a 3 - year draft strategic plan for the Association which was later revised into a 5- year results based Strategic plan through additional financial support from the Agriculture Technology Transfer Project (ATT) based on a tripartite agreement amongst APSP, ATT and NASTAG.

It is important to mention that, the 3 - year strategic plan upon completion was shared with the Executive Council and some members of the association for review. The consolidated comments with commendations received revealed the need to expand the strategic plan from a 3-year to a 5-year plan and additionally transform it from its state of activity-based to a results-based Strategic plan. This resulted in the requested to the USAID Agricultural Technology Transfer Project to expand and revise the SP into a 5- year comprehensive document. Thus, three consultants from the Wageningen University - Centre for Development Innovation facilitated the process to expanding and finalizing the plan.

Notwithstanding the reorganization of the Strategic Plan, activities stipulated in the draft plan were gradually being implemented toward accomplishing the Association's overall goal notably:

1. Provision of improved seeds to farmers through the government and negotiations held to secure NASTAG's participation in the PFJ program, as this fed into the strategic objectives 2 of the draft Strategic plan;
2. Lobbying MoFA to the Minister of Food and Agriculture to inaugurate the National Seed Council (NSC) to approve outstanding issues for implementation of activities in support of the private seed sector, for example in the production of foundation seeds as outlined in strategic objectives 5 and 6 of the Strategic Plan and;
3. Working with the respective units of MoFA for the presentation of the harmonized Ghana seed regulation to parliament which is expected to be preceded by a workshop for the Parliamentary Select Committee for Food, Agriculture and Cocoa Affairs, as outlined in objective 5 of the Strategic Plan.

The details of the Strategic Plan development is as follows:

Facilitation of Consultation Meeting on the Expansion of NASTAG Strategic Plan:

The consultation meeting took place from January 22-27, 2018 by the Consultants namely, Nico Rozemeijer and John MacRoberts, (from CDI, Wageningen University). They were in Ghana to consult with relevant stakeholders in a series of interactive sessions. This included meeting with the APSP team, NASTAG Executive Council and selected members, Yonifah Seeds, National Seed Council Chairman, AGRA (Dr. Issifu Kapran), Agri Commercial Services, and Mr. Sylvester Adongo (Ex MOFA regional Director & Seed Producer), RIC, SARI & ATT. The consultants also contacted other persons recommended via email to make inputs into the Strategic Plan. They devoted the month of February 2018 to desk work for the write-up followed with a validation workshop and finalization of the plan March 2018.

Strategic Plan Validation Workshop:

The consultative meetings were held in January 2018, to restructure NASTAG's draft 3-year SP into a 5-year results based one. The information gathered from the consultative meeting was used by the consultant to carry out a desk work in February 2018.



Fig 13: Participates in a Group Discussion

The month of March 2018 was thus dedicated to preparation for a working meeting to validate the 5- year Plan put together by the consultant's and was subsequently held March 26, 2018 at the Airport West Hotel in Accra bringing together a total of 35 participants. This was made up of 16 NASTAG members, 4 NASTAG staff, 3 APSP Staff, 2 IFDC/ ATT Staff, one (1) USAID staff, and other 3 other development partner representatives



Fig 14: A session of the group at the Strategic Plan validation meeting

(CABI, AGRA and GGC) in addition to the two (2) consultants. The consultants adopted the “World Café Method” to moderate the session that helped participants to thoroughly discuss and internalize the draft plan comprehensively. Participants at the end of the session were extremely satisfied with the process; helping them to deeply understand the road map NASTAG was about to chart whilst using the opportunity to draw relevant lessons to their own benefit.

Going forward, the final approved plan was submitted to the Executive Council officially on 20th April whilst the secretariat plans to officially roll the 5-year plan out and further action.

The Consultants, namely, Mr Nico Rozemeijer and Mr Abishkar Subedi were contracted from the Centre for Innovation Development, Wageningen University in the Netherlands.

Currently, NASTAG is getting the required recognition as a number of international organizations and approaching the Association for collaboration. While efforts are in place to make NASTAG a self-sustaining entity through the initial support from APSP, it is expected that implementation of defined activities in the strategic Plan in the next two to four years would require the support of other development partners to contribute to the overall achievement of NASTAG's goal.

Other Engagements during the Grant Implementation

Continuous engagements with the partners continues to strengthen NASTAG commitment to collaborate for a strong and vibrant Association with a clear sense of direction. Within the period, the secretariat facilitated a meeting to bring both new and old NASTAG EC members to a roundtable discussion with the two main USAID FTF projects supporting the full establishment of the Association, at the Fiesta Royal Hotel in Accra. The half-day meeting brought together a total of nineteen (19) persons made of eleven (11) NASTAG members, three (3) ATT Project staff from Tamale and five (5) APSP team. The event provided the opportunity for both old and new EC members to interact with the APSP and ATT teams; share ideas on the way forward in building the Association to become a self-sustaining institution, while ensuring that the private seed sector gains a firm ground to continuously advocate for the desired policy environment that promote private sector seed business. Mr. Thomas Havor, the President of NASTAG moderated the meeting. Issues raised ahead of the meeting that required NASTAG's responses on some policy issues were responded to, led by the ES with contributions from the NASTAG team. The NASTAG team used the opportunity to update the two project teams (that included both Chief of Parties and their deputies) on how far NASTAG has come on the policy front. Concerns were raised on NASTAGs participation on some major decisions at the policy level. On this, the teams were informed that: i) Four (4) NASTAG members are on the National Variety Release and Registration Committee; ii) Two (2) NASTAG members were nominated onto the National Seed Council (NSC) and iii) Proposition for a private sector person to Chair the NSC were identified as critical and successful strives made through lobbying of government towards supporting the private seed sector to grow.

Concluding, Mr. Havor appreciated the participation of all especially the CoPs of both projects. He reiterated continuous work / implementation of the APSP grant in the same direction in the light of the extended proposal; dialogue with ATT to define a clear cut support to NASTAG towards achievement of Association's objectives based on the one year ATT project extension; effectively coordinate activities and inform both parties on activities being carried out with the two projects to avert duplication of efforts; and intensify NASTAG's advocacy activities to enhance the policy environment for the development of the seed industry.

3.3.3 NASTAG Launch

The Annual General Meeting culminating into the election of the substantive Executive Council members of the Association (as discussed above) together with the official launch of the association had to be rescheduled from the first quarter of 2017 to the third quarter due to government transition which required time for the new Minister of Agriculture Dr Afriyie Osei Akoto nominated to be vetted and approved. This move became eminent due to the significance of the seed sector and a priority to the new government. It was thus envisaged that the participation of the Minister and his team in the launch of a new seed sector lead Association – NASTAG would fast track NASTAG collaboration and establish quick and firm relationship with the Ministry.

Consequently, the secretariat and the Executive Council devoted the month of July 2017 to all preparatory works towards the AGM and ultimately the launch of the association by which time the Minister had been approved.

Under the Theme, ***“Developing Agriculture through a strong private sector-led seed industry”*** NASTAG was officially launched by the Deputy Minister of Agriculture in charge of Crops, Dr. Sagre Bambangi on behalf of the Hon. Minister, Dr. Afriyie Owusu Akoto. Held at the Coconut Grove Regency Hotel on August 24, 2017, the event brought together over 120 participants from across the country (including all 32 registered members of NASTAG), under the chairmanship of a representative the Executive Director of the CORAF – Mrs. Azara Ali Mamshie. Participants included representatives of USAID Ghana FTF APSP; USAID Ghana ATT; USAID Project Rice Sector Development in Ghana (AfricaRice); African Seed Trade Association Ghana (AFTSA); Alliance for a Green Revolution in Africa (AGRA); the Council for Scientific and industrial Research (CSIR) and other affiliate Research Institutes as well as well-meaning stakeholders in the seed sector and the media.



Fig 15: some dignitaries at the NASTAG launch

On behalf of USAID Ghana, Ms. Jenna Tachjman of Economic Growth Office, and representation of the Mission Director - USAID Ghana in her remarks reiterated the contribution of the seed sector towards economic growth. She said *“we believe improving the seed sector is critical to Ghana’s economic growth. Developing Ghana’s seed sector is a top priority for USAID and its partners, and today’s launch is a milestone for the sector’s growth”*.



Fig16: Some participants at the launch with the dignitaries

Dr. Bambangi in his key note address said *“NASTAG has offered a unique platform for both public and private seed sector stakeholders to interact meaningfully and collectively to address the challenges and constraints affecting the seed sector growth, and to harness resources towards reaping the fullest potential of the seed industry”* and called for an increased private sector participation along the seed value chain in Ghana contrary to the historical background where the seed industry had been dominated by the public sector.

He appreciated the establishment of NASTAG, saying *“it is very relevant, appropriate and timely, as work has already started between NASTAG and Government of Ghana for the association to supply OPV maize to selected regions across in the implementation of the government’s flagship program **“Planting for Food and Jobs (PFJ) Campaign** indicating a clear dependable and reliable partner government has found in NASTAG”*.

As part of the launch, a brief ceremony saw the seven (7) newly elected substantive Executive Council Members of the association inducted into



Fig17: Some participant at the NASTAG Launch

office spearhead activities of the association in line with its constitution and by –laws going forward for a two year period.

The highly patronized event by the development partners and government representatives reiterate the importance of such umbrella body for the seed sector in Ghana. The successful event initiated through the grant support was further supported financially by the USAID-ATT, Africa Rice, RMG Concept and Yonifah Seeds Limited.

3.3.4 Capacity building training on Quality Seed Management for NASTAG members

As part of the effort to contribute to the development of the seed sector in Ghana, the NASTAG under the grant, with the APSP and its partner, the Seed Science Centre of the Iowa State University (ISU), organized two rounds of a four-day training session for a total of 20 seed enterprise members on Seed Quality Management in Kumasi in the Ashanti Region in December 2016 and February 2017 respectively. The facilitator, Dr. Joseph Cortes, took the participants through improved process management of their seed enterprises to enable them produce high quality seeds at affordable prices to meet the seed requirements of the Ghanaian farmer, while remaining competitive globally.

The beneficiaries included 20 individual (16 males and 4 females) representatives from 18 private seed enterprises and the Crops Research Institute. At the end of the training session, the participants completed drafting Quality Management Manuals for their respective seed enterprises, covering administrative and operational procedures. The immediate results from the training were that:

- The beneficiary testified that the training was an eye-opener, indicating that the knowledge and skills acquired through the training would go a long way to improve their seed business management;
- Recognition and exposure of NASTAG as the major private sector mouthpiece for the seed sector was enhanced, as some of the members at this session fully completed their membership registration.
- The participants realizing the strategic importance of the training to the development of their seed enterprises and the seed industry as whole willingly signed on a post-training evaluation activity.

Subsequently, the trained seed enterprises received post-training evaluation and coaching visits from the training facilitator Dr. Joe Cortes (International Seed Expert) in the company of Yakubu Iddrisu (APSP Embedded Advisor at NASTAG). In all, 15 enterprises who drafted their quality manuals under visited. They were made up of eight (8) and seven (7) enterprises respectively in the Northern and Southern sectors of Ghana. The coaching and mentoring visits was devoted to offering advice on relevant issues pertaining to the production of quality seeds using quality management processes. The team further 1)inspected each of the training beneficiary's QM implementation resources (personnel and equipment/facilities); 2) reviewed corrections made by the consultant on each draft QM manuals remotely and; 3) administered Quality Management implementation questionnaire for each beneficiary.

The final round of the coaching visits made in February/ March 2018 allowed for effective tracking of the progress made on the key capacity elements in the QMs, as well as ensure finalization of the QM manuals developed for 15 seed enterprises.

This and other capacity building initiatives contributed:

- To Strengthening the seed value chain towards providing increased certified seeds at competitive prices within a robust seed sector;
- To Encouraging farmers to stop sowing their own saved seeds, as more certified quality seeds would be available at affordable prices to increase yields, maximize crop production and enhance their livelihoods; and
- Expected to in the near future liberalize seed market / industry through Ghana's harmonized its seed system protocols with those of the ECOWAS (promotes free trade amongst member states therefore facilitating farmers' access to a wide array of seed options).

The contribution of USAID/ Ghana APSP was therefore seen as a contribution to supporting Ghanaian seed producers to fully take advantage of these new protocols by meeting standards for quality seed exports per the ECOWAS guidelines.

3.3.5 Development & Expansion of NASTAG Strategic Plan

As presented in section 3.3.2, a major outcome of the APSP/ISU Strategic Planning training for NASTAG staff and Executive members was a draft 3-year Strategic Plan. This draft SP did not only receive full endorsement of the membership, but also served as a blueprint for NASTAG programming and activities such as the advocacy campaign on its participation in the PFJ, organizing of major events, and participation in key sector events that afforded the organization the needed exposure and recognition. Due to NASTAG's recognition of the fruits of the guiding document, members soon realized the need for an expanded document. Accordingly, NASTAG embarked on this drive with technical and financial support of both the USAID-APSP and ATT project resulting to a 5- year strategic Plan.

4.0 SUMMARY OF KEY ACCOMPLISHMENTS

NASTAG now has successfully established a substantive Executive Council EC and three functioning sub-committees namely; Seed Business Development and Ethics, Advocacy and Communication, and Technical Standards Committees. The important governance structures have met their activity targets under the grant. Over the grant period, NASTAG has also held its first Annual General Meeting (AGM), where they elected substantive Executive Council, adopted the Constitution and subsequently got the Association officially launched. However, NASTAG's official launching led to contributed to its full recognition by the GOG, MOFA and development partners as the major seed value chain actors' umbrella Association in Ghana. Some of the fallouts of this positive development is the increasing membership, from 32 founding members to 36, while 6 more new applications are being considered.

The Association has conducted 5 sensitizations forums on seed sector reforms documents (Seed Law, Policy, Plan and "Planting for Food and Jobs") and other relevant policy and programs for a total of 276 public and public seed sector stakeholders in the Northern, Middle and Southern zones of Ghana, at locations in the Northern, Central, Easter, Volta and Ashanti Regions.

On advocacy activities, NASTAG has held awareness on biotechnology; and conducted public-private dialogue meetings on seed regulations with MOFA/ PPRSD/CSD/National Seed Council (NSC) and the parliamentary select committee on food and agriculture in collaboration with other partners. Meanwhile, two members of NASTAG have been elected onto the NSC, while 4 members are serving on the Technical Variety Release and Registration Committee. This has resulted in heightened exposure and recognition of NASTAG as the lead seed sector advocacy organization in the country.

One key event organized by NASTAG that consolidated its lead role in seed industry development was the first ever National Seed Value Chain Business Networking Forum on May 23 -24, 2018 in Accra. This event produced a strongly worded 11-point communique, submitted to the Hon. Minister of Food and Agriculture, widely distributed and also published in the 2 national dailies in June 2018. Meanwhile in the run up to this event, NASTAG conducted two separate regional level seed business networking forums for seed producers in the Ashanti and Volta regions respectively, and also hosted and facilitated the 8th Northern annual Pre-season and Northern Ghana seed platform networking forums in March and April 2018 respectively.

Over the period the NASTAG has been strengthened: The Secretariat is now well-furnished, equipped with 3 permanent staff and an Independent Consultant, who served as APSP Technical Advisor in the immediate past. Under the grant project, the NASTAG staff and executive members received training on Advocacy Plan & Strategic Plan (SP) development, empowering the Association with a finalized 5-year SP developed from the initial draft 3-year SP. Consequently, NASTAG has successfully executed advocacy campaign in its participation in the GOG's PFJ Campaign; Won a contract and supplied 640MT of OPV maize seeds to the farmers under the

GOG's PFJ in the Southern Zone of Ghana and currently supplying a target of 800MT of Maize and Rice Seeds to the PFJ for 2018 cropping season, under another contract.

NASTAG Members have also benefited from APSP's capacity building on quality seed management for 20 seed enterprises, out of which 14 of them have fully developed and are implementing Quality Management Manuals.

Under the grant, NASTAG has produced and disseminated over 20 communications materials, within the period from December 2017 to May 2018. These range from print as in, one-pager/brochure, press statement / release, article in the AFSTA Magazine, media published reports, to electronic media such as radio and television discussions.

(See Annex 3 for Summary of accomplishments of the Grant Project Strategic Objectives / Results)

5.0 SUSTAINABILITY & PLANS

5.1 Challenges

As human endeavor, in spite of the successes, NASTAG in its implementation of the APSP grant project faced some challenges and as a result, also learnt some lessons that would help improve the implementation going forward. Some of these challenges and lessons learnt are as follows:

- The significant increase in the cost of operations. For this formative stage of NASTAG, the option is thus to continuously solicit for donor / partner support, while devise innovative income-generating service delivery schemes to raise financial resources from its membership base, to ensure activities are carried out in a timely manner.
- NASTAG was unable to fully honor its contractual obligation to supply seeds to the government under the PFJ program. This implies that seed producers have to increase the local seeds production in terms of quantity and quality to meet the growing demands for certified quality seeds. More importantly, the undue delay in payment for the seeds supplied under the PFJ could affect members access to early generation seeds.
- NASTAG was not also successful in securing credit from the banks awaiting government payments for seed supplied to the PFJ program. This became more challenging as Government was unwilling to release some funds as part payments for mobilization. However, NASTAG sees its ability to participate in supply of local seed in this government flagship programme as a maiden success and a giant step to strategically building the relationship with government for future businesses. NASTAG has realized that it would stay relevant in the seed sector reforms, only if it is able to empower itself with seed industry-related information, build strong seed database, and secure systems for seed market forecasting and linkage services for its members.

5.2 Opportunities

The implementation of the APSP grant has created enhanced awareness of the opportunities in the Ghanaian seed sector presented as follows:

- Seed has become the priority of the government, development partners and agriculture sector stakeholders: the growing realization of the strategic importance of the enhanced private sector participation in the seed sector for improved food and nutrition security, and designing and implementation to strengthen the private seed sector.
- It is become imperative that agricultural development hinges on the development, commercialization and utilization of the quality improved seeds; no country will succeed in agriculture without a seed sector development program.
- Seed value chain linkages strengthening provides the vehicle for the development of the seed industry; the seed industry has a potential for quantum leap in growth, in view of the current low uptake of certified seeds, and huge benefits that could accrue from the closure of the demand gap.

- The yawning gap between the development of climate smart varieties and the fast-changing weather conditions and climate, is necessitating the production of high quality seeds with the capacity to increase yields to meet the needs of increasing population.
- The implementation of the National Seed Policy and its implementing Plan, the seed law (part II of the Act 803, 2010), and harmonization of the regional seed regulations, and yet-to-be-passed legislative instrument, the Ghana seed regulations, provide legal/policy and regulatory framework for seed sector reforms that could lead to enhanced private participation and investment in the seed industry.

4.3 Follow-up Actions for sustainability

During the implementation of the APSP grant, the following actions were realized as very necessary in boosting all the efforts aimed at ensuring sustainability of NASTAG and its pursuit of the seed sector reforms and industrial development in Ghana:

- Execute the development of seed data collection and management system, beginning with compilation of a seed enterprises/producers' directory, in order to remain relevant and leader in the seed sector;
- Mobilization of technical and funding support to roll out the 5-year strategic plan of NASTAG should be directed at meeting those lofty goals;
- Continuous participation in the PFJ to provide seed market opportunities, while using it as an opportunity to self-regulate and ensure certification of quality seeds (quality assurance and control);
- Continue advocating for the parliamentary passage of Ghana seed regulations, and the enactment of the PBR Bill (addressing the research/breeder intellectual property rights) to encourage development of improved varieties;
- Pursue the implementation of private seed actors' accreditation for seed certification;
- Improve seed enterprises/ producers' access to Early Generation Seeds, especially foundation seeds to increased production and availability of the certified seeds;
- Support strengthening of seed value chain linkages, especially to between research / breeders and seed producers;
- Expand the Quality Management (QM) training, development and implementation of QM manuals to cover all NASTAG members for enhanced capacity of members to produce high quality seeds; and
- Continue advocate for the implementation of the seed law (Part II of the Act 803, 2010; e.g. operationalization of seed fund), provisions of the National Seed Policy for the private seed sector development, and implement private sector project profiles in the National Seed Plan.

6.0 CONCLUSIONS AND RECOMMENDATIONS

From the foregoing it can be concluded that the APSP grant to NASTAG has accomplished almost all its targets:

- NASTAG has been established, and undoubtedly the lead seed sector value chain actors and stakeholder organization fully functioning and ready to champion advocacy on sector reforms for improved policy, regulatory and investment enabling environment and seed industry development.
- NASTAG has facilitated seed value chain strengthening through successful implementation of sensitization of stakeholders on sector reform documents and programs, and organizing, hosting and facilitating major networking events, which have strengthened seed value chain linkages.
- NASTAG is fast institutionalizing public-private dialogue aimed at creating and shaping the discourse on important seed sector issues for sustainable development of the seed industry in Ghana.

To consolidate the gains made with the APSP's technical and financial support to NASTAG under the grant, and register more impactful accomplishments, the following recommendations made:

- All efforts in partnership and collaborations with NASTAG should focus on the implementation of the main components of the 5-year strategic plan such as; service delivery to members, advocacy, knowledge-sharing and organizational development;

- NASTAG work in concert with seed value chain actors and stakeholders to follow up on issues contained in the communique released from the maiden National Seed Value Chain Business Networking Forum held in Accra.
- NASTAG as private seed sector organization should be the centre for coordinating seed sector support programs of the development partners such as, USAID feed the future Ghana phase 2 program, AGRA's seed sector strengthening program, and that of GIZ etc.

ANNEXES

Annex 1: General list of Attendance in NASTAG (sensitization & launch) Events

#	Name	Organization	Position	Location	Contact
I. Northern Ghana Sensitization Meeting on National Seed Reform Documents, Held on February 10, 2017 @ Radach Hotel					
	NAME	POSITION	ORGANISATION	LOCATION	CONTACT
1.	Nuhu Abdulai	Organizer	SEEDPAG	Wa	0209719986
2.	Joshua Nyaaba	Programme Manager	EPDRA-North	Yendi	0244964627
3.	M.A. Nashuru	Farmer	PFAG	Tamale	02435210429
4.	Abdulai Jamiel	Ag. Project Coordinator	GGC	Tamale	0501298346
5.	Masud Aziz Rauf	Executive Director	RUWA	Wa	0200799614
6.	Hajia Alima Sagito	Executive Director	SIRDA	Tamale	0208404400
7.	Thomas Havor	National Coordinator	NASTAG	Mafi-dedokope	0208714626
8.	Kwabena Ameyaw	Farmer	NASTAG	Wenchi	0243707056
9.	Augusta Clotey	Executive Secretary	NASTAG	Accra	0244294738
10.	Afia O. Nyantakyi	Executive Member	NASTAG	Accra	0208138206
11.	Abdul latif Sale		SSGL	Tamale	0205982153
12.	Kwaku Minka Fordjour	RDA	MOFA/UWRCC	Wa	0244590280/ 0506448440
13.	Mahudu Abdulai	Farmer	AFFOG	Tamale	0245735549
14.	Rowland Addo	Agric officer	MOFA/DCs	Accra	0243679261
15.	Beni Joseph Walier	Deputy Director	MOFA/CROPS	Bolga	0209193344
16.	Kaasaah Emmanuel N.	Field Supervisor	Jaksally	Bole	0503434243
17.	Kwabena Adu-Gyamfi	MD	ACSL/NASTAG	Wenchi	0208727777
18.	Apraku Gyawu	MD	PAG Farms	Wench	0208221787
19.	Solomon Gyan Ansah	Deputy Director	DCS/MOFA	Accra	0208133029
20.	Lawrence Effah	Director	Effah Farms	Kintampo	0208047294
21.	David Gyan	Manager	Emmanuel Farms	Wenchi	0200594920
22.	Richard A. Atuna	Researcher	UDS	Nyankpla	0206408627
23.	Issifu Zibrila	Secretary	APFOG	Tamale	0205890962
24.	Jawad Haafiz	Regional Seed Coordinator	GSID-WA	Wa	0503113320
25.	Musah B. Lukman	Production Manager	Antika Co. Ltd	Wa	0209062161/ 0244815877
26.	Yakubu Iddrisu	Policy advocacy Specialist	USAID FIF APSP	Accra	05771730732
27.	Hakeem H. Apullah	Managing Director	ASBE	Nyankpala	0204532503
28.	Zakaria S. Iddrisu	MD	Heritage Seeds Co. Ltd	Tamale	0507776344
29.	Walter Nunez-Rodriguez	COP	APSP/USAID	Accra	0544465205
30.	Ndego Solomon	MD	CRIEP	Karaga	0244711396
31.	Nathan Biassey	Seed Inspector	GSID-MOFA	Wa	0505457834
32.	Jeremiah B. Tengan	Seed Producer	GNCCI	wa	0501316783
33.	Masahuudi Doori	Seed Producer	GNCCI	Wa	0245283670
34.	Yahaya Iddrisu	Seed Producer	GNCCI	Wa	0207718212
35.	Rev John Akaribo	Coordinator	Doone Women Assoc	Bolga	0208762380
36.	Michael Dockrey	Consultant	IFDC/ATT	Tamale	0264183153
37.	Abdul Razak Mohammed	Treasurer	SEEDPAG- NR	Tamale	0202839446

#	Name	Organization	Position	Location	Contact
38.	Kombat Issac N.	Agri Bus Devt officer	GAABIC	Tamale	
39.	Mohammed Yakubu	Farmer	AFFOG	Nyohini	0244170616
40.	Samson Konlan	Food Security Specialist	USAID FiF APSP	Accra	0244329939
41.	Mohammed Hussein	General Manager	Walsuma Agro Services	Tamale	0242537938
42.	Edem Dan Halolo	Technical Director	Green Technology Innovation	Tamale	0545594832
43.	Ariku Martin	MD	Ariku Co. Ltd	Bazua-Binduri	0244486929
44.	Zakaria Rashid	Director	URBANET	Tamale	02444070627
45.	Bridget Halolo	Director	Green Technology Innovation	Tamale	0248157313
46.	Bashiru Alhassan	Coordinator	CARD	Tamale	0243811167
47.	Joseph Y. Faalong	Director	MOFA	Kumasi	0202026411
48.	Issahaku Zakariah	Director	Mayiya Investment Ltd	Tamale	0209108146
49.	Cletus Achaab	Seed Advisor	ATT/IFDC	Tamale	0207376599
50.	Salitu Osman	Farmer	IFDC/APFOG	Sagnarigu	0249152095
51.	Mohammed Aliu	Seedpag Secretary	Seedpag	Tamale	0209948446
52.	Akai Y.C	RAO/PPRS	MOFA/PPRS	Tamale	0261370930
53.	Issac Darkwah	Project Officer	CENWOPP	Tamale	0505715517
54.	Ayisha Otiibo	Member	Seepag	Tamale	0201623057
55.	Abukari Sulemana	Farmer	APFOG	Tamale	054139197
56.	Abdul Rahaman Adam	Seed Inspector	GSID-MOFA	Tamale	0247625690
57.	Asante Japhet	Seed Inspector	GSID-Bolga	Tamale	020569757
58.	Anafo Thomas Kujo	Sales Officer	Simple Prince	Tamale	0206660887
59.	Adek Azantilow	Seed Inspector	GSID-MOFA	Bolga	0203301226
60.	Seidu Sibila	Driver	MOFA	Wa	0201837921
61.	Abu A. Mohammed	Farmer	AFOG	Tamale	0242608304
62.	Yahaya M. Iddrisu	Farmer	AFOG	Tamale	0246395538
63.	Alhaji Alidu Saifu	Farmer	AFOG	Tamale	0242254933
64.	Joseph S. Bapule		Rural Innovations Consult	Tamale	0506481811
65.	Osofo Apullah	President-Seedpag	SEEDPAG/SASSEL	Tamale	0207779044
66.	Kwadwo Aboagye	Driver	MOFA	Kumasi	0277847367
67.	Ebenerzer A. Nunoo	Accounts Officer	NASTAG	Accra	0244623785
68.	Rita Effah-Darteh	Programme Officer	NASTAG	Accra	0243467366
69.	Jeremiah Seidu	Programme Coordinator	Jaksally	Bole	0244409552
70.	Albert Oppong	Communication Specialist	IFDC-ATT	Tamale	0203792155
71.	Daniel Laryea	Cameraman	GTV News	Tamale	0244798626
72.	Nathan Quarshie	Cameraman	GTV News	Tamale	0243115030
73.	John Tibiri	Vice Chairman	I. P	Navrongo	0249274472
74.	Cletus Zumu	Coordinator	NORTHCODE	Bole	0208923936
75.	Ayine David		MOFA	Bolga	0208644069
76.	Gyereh Peter		IFDC	Tamale	0243267340
77.	Dr Victor Antwi	Deputy Chief of party	USAID-FINGAP	Accra	0245734634
78.	Issah Mintah	Editor	GBC	Tamale	02463559231
79.	Samuel Duodo		Daily Graphic	Tamale	0244012151
80.	Cesar Abagali	Regional Manager	GNA	Tamale	0208488731
81.	Alhaji Nashiru Kadri	President-Seedpag	APFOG	Tamale	0243165458

#	Name	Organization	Position	Location	Contact
82.	Mugmin Musah	Head of Programs	Grameen Ghana	Tamale	0242114717
II. Western & Central Region seed value chain actors' sensitization forum on the nation seed reforms documents, at Pempamsie Hotel – Cape Coast on June 27, 2017					
83.	J.K Essulfie	PFAG	Chairman	Baifikrom	0208089049
84.	Esi Mana	PFAG	Member	Baifikrom	0208089049
85.	Eric Degbato	Dept. Of Agric	AEA	Krobo	0243412839
86.	Fredrick Ansah	Dept. Of Agric	DAE OF CROPS	Sekondi	0243825656
87.	Nicholas Aglago	Dept. Of Agric	AEA	Ahanta West	0248620807
88.	Emmanuel Quaicoe	Evergreen Agro Ventures	Manager	Takoradi-Assakae	0546531923
89.	Caleb Mensah Asenso	Dept. Of Agric	Agro Input Dealer	Takoradi-Sekondi	0277983611
90.	Seth Frimpong	Community Education/Solutions Foundation	Project Coordinator	Mfantseman	0242384188
91.	John Eduful	PFAG	Organizer	Shama	02476427334
92.	Nana Tawia	PFAG	Member	Asando Essaman	0275409816
93.	Anthony K. Nyame	Vegetables Farmers Association	Member	Assorko Essaman	0208624384
94.	Comfort Kuma	Vegetables Farmers Association	Member	Assorko Essaman	0272840970
95.	Hubert Dela Fiawoo	Dept Of Agric	RAO-Crops	Cape Coast	0244046820
96.	King Solomon Korankye	MOFA	Regional Storekeeper	Radu	0242233116
97.	Issac A. Baah	MOFA	C/R Farmer	Cape Coast	0243375618
98.	Mabel Boahen	MOFA	DAO-WIAD	Assin South	0244602321
99.	Sylvester Gyebi	MOFA	MAO-EXTN	Elimina	0243924381
100.	Philomena Kafui Kenu	MOFA	AEA	Awutu Breku	0246111068
101.	Peter Omega	MOFA	RAO-EXTN	Cape Coast	0244219563
102.	Rowland Addo	MOFA/DCS	AO	Accra	0243679261
103.	Nuhu Ramsy Adam	DEPT OF AGRIC/KEEA	MAO-EXTN	Elmina	0249960041
104.	Ghanney Albert	UCC	Agric Extension	Cape Coast	0246394288
105.	Solomon Dazie	UCC	Agric Extension	Cape Coast	0549560457
106.	Emmanuel Fosu	MOFA	Farm Hand	Cape Coast	0242671792
107.	Yakubu Iddrisu	USAID APSP	Policy Advocacy Specialist	Accra	0577173072
108.	Thomas Havor	NASTAG/SEEDPAG	Executive Member	Nafi-Dedokope	0208714626
109.	Edith Agyarkoh Arkromond	FORUM FOR FUTURE GENERATIONS	Assistant Director	Elimina	0269113128
110.	Ato K. Henry	OKYEREKO	Vice Chairman	Okyereko	0542493528
111.	Comfort Turkson	OKYEREKO	Farmer	Okyereko	0242456990
112.	Ekow Haizel	OKYEREKO	Lateral Coordinator	Okyereko	0275070380
113.	Peter C. Eshun	MOFA/PPRSD	Regional Officer	Cape Coast	0248172880
114.	Amoako K. Eric	MOFA/PPRSD	Zonal Seed Coordinator	Central/Western	0243307245
115.	Francis Kwao	MOFA/PPRSD	Seed Inspector	Central/Western	0275300767
116.	Samuel Odoom	SEEDPAG	Seed Grower	Winneba	0243518337
117.	Emmanuel Amoah	GRACE AGRO	Agro Dealer	Winneba	0540425645
118.	Theodore G. Ntem	DEPT OF AGRIC	MAO-Crops	Winneba	0509789395
119.	Jeremy K. Bart-Addison	SEEDPAG	Member	Winneba	0244797151
120.	Wisdom Ntibrey	SEEDPAG	Member	Winneba	0243786284
121.	Gershon Wodzhah	DEPT OF AGRIC	Regional Director	Cape Coast	0244567905

#	Name	Organization	Position	Location	Contact
122.	Grace Amquandoh	GRACE AGRO	Dealer	Winneba	0249508861
123.	Eric Mante	WINNEBA AGRO	CEO	Assin Fosu	0209581565
124.	Emmanuel A. Yeboah	MOFA	Dist Crops Officer	Assin Fosu	0545098608
125.	Ruth A. Tagoe	CHARIS RELIEF LIFE FOUNDATION	Field Officer	Awutu Senya	0570095685/ 0242215690/05 06510165
126.	John K. Gyimah	MOFA	RAO-Extn	Sekondi	0249224496
127.	Abraham Appiah	MOFA	RAO-Crops	Sekondi	0245375089
128.	Kojo Sarpong Boabeng	DEPT OF AGRIC	DAO-Crops	Elimina	0243430853
129.	Ishmeal B. Koomson	MOFA	RO-PPRS	Sekondi	0277396944
130.	Theophilus Siaw Asare	MOFA	DAO-Crops	Bogoso	0557080874
131.	Luther Botwe	SEEDPAG	Farmer	Winneba	0244790680
132.	Ansah Anthony	PFAG	Financial	Okyereko	0246235398
133.	Justice Adjei	PFAG	Financial	Okyereko	0554411247
134.	Emmanuel Boham	GAIDA	Regional President	Elmina	0542860141
135.	Augusta Clottey	NASTAG	Executive Secretary	Accra	0244294738
136.	Rita Effah-Darteh	NASTAG	Program Officer	Accra	0243467366
137.	Ebenezer A. Nunoo	NASTAG	Accounts Officer	Accra	0244623785
138.	Francis Aidoo		Agro Input Dealer	Mankessim	0244534909
139.	Kafui Justice	ADOM TV	Journalist	Cape Coast	0243359263
140.	John Assefuah		Farmer	Sekondi	0209701573
141.	Samuel Akro	APSP		Accra	0208837011
142.	William Ato Kumuyi	ATOS AGRO	Agro Dealer	Cape Coast	0241807203
143.	Nana Kweigyah	FON (District Anti-Clat & Sustainable Fisheries Advocate)		Abandzie	0246909643
144.	Moses Oware	MOFA		Cape Coast	0242038902
III. Eastern Region Seed Value Chain Actors Sensitization Forum on The National Seed Reform Documents Meeting, at Nasco Hotel Conference Center - Koforidua On October 31, 2017					
145.	James Mckeown Frimpong	PRESIDENT	NASTAG/SEEDPAG	Accra	0277557432
146.	Gabriel Addo	Member	SEEDPAG/ABS FARMS	Teacher Mante	0544231490
147.	Daniel Nortey	Grower	SEEDPAG	Nsawam	0244848607
148.	Obuobi James	Grower	SEEDPAG	Teacher Mante	0243553347
149.	Nelson Bless	Representative	UVEC FARMS	Tafo Station	0244419099
150.	P. O Amoamah For: Affum Ankra	Representative	HOLLY WIND FARM	Asuom-Akyim	0244056716
151.	Eric Mintah Budu	Farmer	EREMEW FARMS	Asamankese	0544040996
152.	Nana Awuku Amoako	Farmer	NAWUKU FARMS	Aworoso	0271233346
153.	Togbe Anyorkodi VIII	Farmer	SOLO-MIKE	Takyiman Kade	0243365142
154.	Samuel Abeka	Farmer	BEST FARMS	Kwamoso	0248336378
155.	Joseph Agayaba	Seed Inspector	MOFA	Koforidua	0545117270
156.	Wellington Ampo	AEA	MOFA	East Akyim	0240276301
157.	Edmund Quaynor	Secretary	SEEDPAG/NASTAG	Koforidua	0243875839
158.	George Folley	Regional Director	DAILY GRAPHIC	Koforidua	02466403156
159.	Appiah K. Boateng	Executive Director	4 H GHANA	Koforidua	0208186304
160.	Solomon Iddrisu Ankrah	Managing Director	1ST VILLAGE ENTERPRISE	Koforidua	0244694631
161.	Thomas Havor	National President	NASTAG/SEEDPAG	Volta/Accra	0208714626

#	Name	Organization	Position	Location	Contact
162.	Amos Rutherford Azinu	Executive Member	NASTAG	Eastern Region	0245929194
163.	Henry Crentsil	Eastern Reg. Dir Of Agric	DEPT OF AGRIC	Koforidua	0244149504
164.	Ahuno Joseph	Representative	AWURADE FARMS	Bosomtwe-Honya	0207405395
165.	Benjamin Akoto	Reporter	GNA	Koforidua	0241838078
166.	Asante J. Y	Farmer	KOGH FARMS	Koforidua	0243256757
167.	Issac Noamesi	CTO (AEA)	MOFA	Begoro	0244016522
168.	Akole Gugadama	CTO (AEA)	MOFA	Somanya	0502271672
169.	Ankomfa Donkoh	RAO (PPRSD)	MOFA	Koforidua	0243437534
170.	Francis K. Adzolo	Farmer	SEEDPAG	Mepou, E/R	0246219068
171.	Ebenerzer A. Nunoo	Finance Officer	NASTAG	Accra	0244623785
172.	Rita Effah-Darteh	Programs Officer	NASTAG	Accra	0243467366
173.	Samuel Agyapong	Farmer	APSP	Accra	0208857011
174.	Anim Francis	Farmer	SEEDPAG	Somanya	0206499903
175.	Daniel Oduro	Seed Grower	FLODAN FARMS	Akuse	0244774929
176.	Evaristus K. Fosu	RAO-PPRSD	MOFA/PPRSD	Eastern	0242561641
177.	Yakubu Iddrisu	Policy Advocacy Specialist	USAID FTF APSP	Accra	0577173072
178.	Austina Tetteh	Member	SEEDPAG	Koforidua	0247615022
179.	Humphrey Appiah	Member	SEEDPAG	Koforidua	0242524222
180.	Augusta Clottey	Executive Secretary	NASTAG	Accra	02447067158
181.	E. A Frimpong	Treasurer	SEEDPAG/GT AR/ER	Somanya	0247067158
182.	M.T. Kwabla	Member	AGRO-ENOCH BENG	Awam	0242762740
183.	Rowland Addo	Snr Agric Officer	MOFA/DCS	Accra	0243679261
IV. Volta Region Seed Value Chain Actors Sensitization Meeting on the Nation Seed Reforms Documents, At Woezor Hotel, Ho, November 2, 2017					
184.	Leonard Dumatonu	RAO/PPRSD	MOFA	Ho	0249624120
185.	Monica Awuku	Managing Director	GREEN ACRES (INPUT DEALER)	Ho	0244876063
186.	George Awunno	Seed Grower	MV BROTHERS FARMS	Dzodze	0244948484
187.	Kafaba Muntari	Seed Grower	AMANFIENA FARMS	Ziavi-Lume	0208187801
188.	Billy Anyomi Agbotse	CEO	VOLTA CITY FARMS	Akrofu Xeviwofe	0245090656
189.	S. M.K. Affor	Seed Grower	MAFFOR COMPANY LTD	Ho	0243072233
190.	Mabel Affor	Seed Grower	MAFFOR COMPANY LTD	Ho	0243272664
191.	Atsutse Samuel	Out-Grower	M&B SEEDS	Ho	0509180981
192.	Dam Patience	Seed Dealer	MAVID SEEDS	Ho	0205054785
193.	Adade Janet	Seed Grower	ROYAL FARMS	Akpafu-Odomi	0247778341
194.	Edem Deletsu	Seed Grower	SAFE GH	Ho- Dzozo	0241025768
195.	Nelson Ayitey	Seed Grower	SHEFA FARMS	Adaklu	0242605200
196.	Ackuaku Edem	Seed Grower	DELMARK FARMS	Akatsi	0243340350
197.	Kafui Gati	Journalist	GHANAIAN TIMES	Ho	0244808103
198.	Fred Duhoe	Journalist	GLOBAL FM	Ho	0243736330
199.	Nartey Sampson	Processing Manager	M&B SEEDS	Ho	0244280785
200.	Annie Zottogloh	Seed Coordinator	PPRSD	Ho	0244968039
201.	Francis Yao Gankui	Seed Producer	LCIC	Akatsi	0249227872
202.	Michael Appaw	SEED GROWER	MEPACO FARMS	Jasikan	0547564581
203.	Kofi Atsivor	JOURNALIST	DAILY GRAPHIC	Ho	0202633264

#	Name	Organization	Position	Location	Contact
204.	Edem Sakre	SEED GROWER	EDEM FARMS	Ve-Kolenu	0249508084
205.	Gladys Quaye	Seed Grower	GLACO FARMS	Ho	0243735673
206.	Godwin Trom	Seed Grower	ZAWADI FARMS	Agotime-Akpokope	0207370950
207.	Innocent Atsutse	Seed Grower	BLESS FARMS	Hohoe	0244126747
208.	Prosper Agbodza	Seed Grower	PROS FARMS	Ve-Kolenu	0209047656/ 0241959037
209.	Christian Hokui	Dealer	DOLYNE	Ho	0208120032/ 0244975497
210.	Victor Ashigbe	Seed Inspector	PPRSD	Ho	0243334222
211.	Jemima Achivers	Journalist	KUUL FM	Ho	0548240901
212.	Jacob Seed Grower	Seed Grower	SANJAY FARMS	Mantse	0542857331
213.	Thomas Havor	National President	NASTAG	Mafi-Dedukope	0208714626
214.	Elorm Ayee	Journalist	GBC	Ho	0240936603
215.	Conrad Kadbury	Journalist	GBC	Ho	0541534047
216.	Vida Bamidele Asinu	Journalist	KEKELI RADIO	Ho	0543308404
217.	Cliton Ampoh	Journalist	CLASS FM	Accra	0243935038
218.	Dr. Solomon Gyan Ansah	Deputy Director	DCS, MOFA	Accra	0208133029
219.	Alfred Bedera	Crops Officer	RD OF AGRIC	Ho	0244895520
220.	Yakubu Iddrisu	Policy Advocacy Specialist	USAID FTF APSP	Accra	0577173072
221.	Ben Kemetse	CEO	M&B SEEDS	Ho	0208411722
222.	Ivy Setordjie	Journalist	JOY FM	Ho	0243932850
223.	Emmanuel Atika	Municipal Crops Officer	MOFA	Hohoe	0246627222
224.	Ackah Henry	Farm Manager	BENZENE FARMS	Vakpo	0240142334
225.	Augusta Clottey	ES	NASTAG	Accra	0244294738
226.	Rita Effah-Darteh	PO	NASTAG	Accra	0243467366
227.	Benjamin Gann			Accra	
228.	Samuel Agyapong		APSP	Accra	0208857011
V. Ashanti & Brong-Ahafo Region Seed Value Chain Actors Sensitization Meeting on the Nation Seed Reforms Documents, at True Vine Hotel, Kumasi, February 22, 2018					
229.	Rowland Addo	DCS/MOFA	Snr. Agric Officer	Adenta	0243679261
230.	Thomas W. Havor	NASTAG	President	Mafi-Dedukope	0208714626
231.	C. Y. Ocloo	MOFA	RO - PPPRS	Sunyani	0243841363
232.	Lois Karikari	MOFA	Assit. RAO Crop	Kumasi	0244958159
233.	Amenga Denis Abugi	Dept. of Agric	MDA	Nkoranza	0242787922
234.	Emmanuel O. Aboagye	B. Kaakyire Agro chem	P.A	Kumasi	0262995722
235.	Kofi Sarfo		Farmer	Kintampo South	0546980719
236.	Boateng Lawrenc	Biemso Co-operative	Farmer	Biemso	0546344482
237.	Simon Abdulai	NASTAG	E.C member	Chinderi	0207094460
238.	Benjamin Kusi	Self- Help International	Country Director	Kumasi	0200825100
239.	Daniel Kanu	Daily Graphic	Editor	Kumasi	0244981012
240.	Godson Tetey	PPRSD	Reg. Officer	Kumasi	0244459934
241.	Kingsford Nyame	MOFA	Dist. Director of Agric	Mankraso	0244433489
242.	Shaptiwn Alhassan		Framer	Atwema	0242946292
243.	George Amanyo	Dept. of Agric	Municipal Director	Atebubu	0208221063

#	Name	Organization	Position	Location	Contact
244.	Ameyaw Addo	B. Kaakgue Agro	Director	Ejura	0244511123
245.	Kojo Frimpong	Fufuo Co-operative	Farmer	Atwima	0508490844
246.	Faustina Ohene Adjei	Kamark Farms	Farmer	Asuoyebo	0244950741
247.	Francis Osei Tutu	MOFA	Director	Kumasi	0249315437
248.	Seidu Mubarak	Antika Ent.	Asst. MD	Wa	0209719953
249.	Yeboah Asuamah	MOFA	Agric Director	Ejura	0244292667
250.	Isaac Kwakye	Kodadwene Co-operative	Framer	Biemso	0247490521
251.	Joseph O. Ansah	Kodadwene Co-operative	Farmer	Biemso	0551482021
252.	Amma Asantewaa	Asuoyebo Co-operative	Farmer	Asuoyebo	0243121296
253.	Boateng Thomas	Kamark Farms	Farmer	Asuoyebo	0545913996
254.	Abukari Fuseini	Asempa Farms	Farmer	Anyinamso	0248086843
255.	Amidu Yahaya	Alafia Farms	Farmer	Amamedukrom	0504836446
256.	Kennedy Donkor	SEEDPAG	Farmer	Techiman	0243830088
257.	Bernard B. Tibo	SEEDPAG	Farmer	Wenchi	0207218202
258.	Ababio Johnson	SEEDPAG	Farmer	Wenchi	0208808078
259.	Apraku Gyau	SEEDPAG	President	Wenchi	0208221787
260.	Kwabena Ameyaw	SEEDPAG	Treasurer	Wenchi	0243707056
261.	Dr. Robert Asuboah	GLDB	Ag. Executive Director	Kumasi	0208179106
262.	Dr. Solomon Gyan Ansah	DCS/MOFA	Deputy Director	Accra	0208133029
263.	Josep Korley	SEEDPAG	Seed Grower	Kumasi	0244528304
264.	Francis K. Asempa	MOFA /SEEDPAG	Director	Agona	0244620695
265.	Fred Tetey Borkor	Oasis Agro	Input Dealer	Nkawie	0208169754
266.	Reynold Dadzie	GHONE TV	Camera man	Kumasi	0247242381
267.	Isaac Bediako	Ultimate FM	Presenter	Kumasi	0202016524
268.	Akua Nantie			Fufuo	
269.	Job Nsiah			Fufuo	0246000633
270.	Amos Anane	SEEDPAG	Chairman	Kumasi	0243764291
271.	Hon. Yussif Pangabu	Pee Farms	Member	Ejura	
272.	Abubakari Rashida	Brokua Farms	Member	Nkawie	0244121910
273.	Cecilia Kagya-Agyemang	MOFA	Director	Accra	0208198476
274.	Augusta Clottey	NASTAG	Exec. Secretary	Accra	0244294738
275.	Amos Rutherford Azinu	NASTAG	ECM	Koforidua	0245929194
276.	Ebenezer A. Nunoo	NASTAG	Finance	Accra	0244623785
277.	Juliana M. Dokurugu	NASTAG	Admin Asst.	Accra	0249817569
278.	James M. Frimpong	NASTAG	Treasurer	Accra	0277537432
279.	Abio Gilbert	MOFA	Driver	Nkoranza	0243307806
280.	Isaac Amponsah	MOFA	Driver	Sunyani	0205466967

#	Name	Organization	Position	Location	Contact
281.	Isaac Owusu	MOFA	Driver	Wenchi	0242105793
282.	Stephen Sarpong	MOFA	Driver	A/R	0248194281
283.	Emmanuel Amanyio	MOFA	Driver	B/A	0246608758

Annex 2: List of Events / High Level Meetings NASTAG Participated in

#	High Level Meeting / Event	Purpose	Outcome	Likely Impact
1.	With funding support from USAID FTF ATT, NASTAG hosted the 2 nd Northern Ghana seed platform meeting under the theme “ <i>use of certified seeds for better yields</i> ”; on February 9, 2017.	To share the progress made over the period between quality seed supply and demand of desired varieties; reveal the total area cropped with certified seeds of soybean, rice and maize in 1 year of efforts to improve the seed production & market for certified seed producers in Northern Ghana.	There were presentations on progress in increasing certified seed usage of Soy, Rice and maize by ATT, and the seed law by a govt rep.; this event was preceded and complemented by APSP’s sensitization meeting on the national seed policy and seed plan & the seed law in the northern zone, where participants agreed to share knowledge gained with other industry players and also to support NASTAG in its vision and effort to be the leading organization in promoting the use of quality certified seeds.	It will contribute to the growth and development of the private seed sector and Government in enhancing agriculture, food security and improving livelihoods.
2.	Represented at the AFSTA 2017 Congress in Senegal; February 27- March 3, 2017	To offer representatives of the Association the opportunity to widely interact with other delegates present and grasp ideas and information to augment local ideas for the growth and development NASTAG	Over 300 participants from across the world in the seed value chain; Discussions and presentations focused attention on vegetable production in West Africa, technologies for African Agriculture transformation, seed production and phytosanitary related issues; Climate change and Biotechnology in Africa, Harmonized Seed regulation at ECOWAS and other regional levels and the intellectual Property Rights in seed development.	Much more efforts of the seed associations at the ECOWAS level and respective country levels would increase use of high quality seed to the level to ensure food security at farmer and national levels; efficient trading system and strategies for post-harvest food crop management at the national level for sustainable seed production and distribution will result improved agriculture sector.
3.	Represented at USAID FtF Implementing Partners meeting at the Labadi Beach Hotel on the 21 and 22 March 2017.	Afforded NASTAG the opportunity to network with other FtF project beneficiaries and implementing partners; broadening its network for future collaborations.	Through the push and handholding support from APSP, NASTAG is taking the center stage in the seed sector with strong recognition by the donor community, other development partners and public institution.	This is laying a strong foundation for the public- private sector collaboration (Government and NASTAG) for the development of the seed sector in Ghana.
4.	Hosted the 7 th Annual Northern Ghana Pre-season Planning and Networking event; Under the theme: “ <i>Northern Ghana – open for Agribusiness</i> ”; held on March 30, 2017 at Radach Conference Centre, Tamale.	Offered good opportunity for seed industry players to interact for their business growth with a resultant effect of developing the seed sector as a whole while increasing certified seed usage in Ghana.	Over 47 seed companies and other seed value chain actors including NASTAG mounted exhibition stands to market their products at the event, which brought together of 800 seed value chain actors across the country. Presentations focused improving agricultural productivity to contribute to Ghana’s GDP through increased quality certified seed usage.	NASTAG will gain more experience in developing and implementing more networking events, especially the National Seed Forum slated for quarter 1, 2018 – the business networking opportunity will strengthen seed value chain linkages and enhance business opportunities.
5.	Participated in: AGRA validation workshop on fertilizer subsidy in Koforidua; National committee meeting on planning for 2018 PFJ implementation; in April 2017	Offered private seed sector input into these key strategic agriculture sector development programmes	It was agreed that the input subsidy distribution system has to be reviewed and improved upon in order to register substantive progress in the GOG’s agriculture development agenda.	NASTAG’s participation in these events is enhancing its visibility as an umbrella body of the private seed sector in Ghana
6.	Participation in AfricaRice / SARI rice project review meeting, in the Northern Region in May 2017	To strengthen private seed sector participation in the rice value chain by producing improved quality rice foundation seeds.	Four NASTAG members have been selected to produce foundation seeds under the supervision of SARI.	It is expected that these companies shall be given the autonomy as rice foundation seed producers with satisfactory performance.
7.	Participation in the APSP brown bag on the PFJ at Accra City Hotel in May 2017.	To share our experiences in the implementation of the government’s agenda and the way forward.	Issues discussed was captured by the USAID Technical Advisor to the MOFA and PFJ for inputting the program; NASTAG concerns about the PFJ as an active partner were also presented	It is expected that the issues discussed would be incorporated to enrich the PFJ implementation process in subsequent years.
8.	Participated in a series of meeting at the MOFA CSD and with the Hon. Ministers of, Food and Agric and all the ten regions on the PFJ implementation, in May 2017	To discuss progress and the role of the Regional Ministers in the implementation of the PFJ.	The participants understood their expected roles in the implementation of the PFJ	This will enhance cooperation among agriculture sector stakeholders for the successful achievement of the goals and objectives of the PFJ – improved food security and provide employment for the youth.
9.	NASTAG collaborated with the CORAF /WECARD West Africa Seed Programme (WASP) to organize a 2-day Learning Event	To spur the growth of the regional seed industry by consolidating successes for up-scale, guided by past challenges and lessons	NASTAG was part of the organizing committee, where it jointly held two out of the ten exhibition booths with APSP to showcase progress made in Ghana’s seed sector.	NASTAG’s full participation in this event would help draw lessons to guide our preparation towards the forthcoming annual seed business conference, as part of

#	High Level Meeting / Event	Purpose	Outcome	Likely Impact
	skated for June 13 – 14, 2017 in Accra	from the WASP implementation.		NASTAG deliverables under the APSP grants.
10.	Participated in the AGRA/IFPRI / CSIR Panel discussion on Ghana's Seed Sector at STEPRI Conference Hall, June 20, 2017.	To present and discuss the seed industry and value chain development issues; share information on efforts made in the production of early generation seeds.	The significance of the happenings at this forum was the presence of the Ministers, MOFA and MESTI respectively. This was very remarkable in getting the Government to act on key issues such as the reconstitution of the NSC and other sector related bodies that were pending.	Agriculture Minister made first pronouncement on the effort to reconstitute and inaugurate the National Seed Council; emphasized the importance of seed in the PFJ program and the Government's readiness to partner the private sector. It will enhance the development of Ghanaian seed businesses.
11.	Represented in the Annual planning sessions of APSP and ATT concurrently in August 2017.	The opportunity given NASTAG at both sessions enabled it clearly identify areas of collaboration to fast track its activities implementation for the 2018 the fiscal year with both projects.	Major issues focused on this the two fora included the expansion and full operationalization of its strategic plan with income generating avenues clearly identified	It is envisaged that substantive progress would be made by mid-June 2018 in putting NASTAG fully on a path towards self-sustainability.
12.	Six (6) Seed Company members of NASTAG and the ES participated in the APSP Policy Brown Bag meeting on Seed Market Industry Framework (SMIF) study on September 20, 2017 at the Fiesta Royal hotel in Accra.	It basically offered those Seed Companies the opportunity to make inputs on the critical issues in the seed sector that required serious attention to propel the industry development.	Study provided information on expected quantities of the various classes of quality seeds required to meet the potential demand of farmers to enhance agricultural development, which is worth sharing for future planning purposes, especially for the private sector. Break-out session helped correct /suggest issues of relevance and identify strategies for addressing some challenges outlined in the study.	The final document of the study would serve as a guide for NASTAG's future planning; this study and other information would form the basis for discussions with government and other development partners for a holistic seed industry growth and development strategy.
13.	Participated in the 2017 pre-harvest event and mounted an exhibition stand to speak with partners and potential members, on Oct. 19, 2017 at Modern city hotel, Tamale under the theme: "Keep Going No U-turn"	To provide opportunity platform for agriculture sector value chain and businesses networking	About 1,600 participants from across the country comprising agric value chain actors(VCA) and auxiliary organizations and individuals that have direct or indirect benefit in the industry attended; held business networking meetings and breakout sessions where buyers and producers discussed expected demands, expected production and price expectations prior to the harvesting on Maize, Rice and Soybeans; NASTAG representatives interacted with strategic partners and potential seed value chain actors, and sensitized some participants on the role of NASTAG and possible future collaboration.	NASTAG's membership, recognition and partnership and collaborators will grow, to enable rally stakeholders in contributing to the development of the Ghanaian seed industry.
14.	Participated in a 3-Day Working Sessions on the Development of the West Africa Agricultural Transformation programme - phase 2 (WAATP-2), Oct. 2017	NASTAG was not only invited to participate, but also elected as a key agent in the implementation of the WAATP-2.	The growing recognition and necessary exposure of NASTAG among seed sector stakeholders in Ghana; Progressive development in NASTAG's strategic goal of establishing itself as the mouthpiece and a major leader in promoting and contributing to the seed industry development.	Going forward and based on the inputs into the Programme, it is expected that NASTAG members would be supported to produce seeds to support the PFJ in view of challenges limiting seed production.
15.	Participated in the consultative meeting of the African Development Bank Project on Transformation of the African Savannah Initiative (TASI) in Nov.2017.	To solicit ideas aimed at doubling agricultural production in eight African countries, including Ghana, Guinea, Central African Republic, Uganda, Kenya, Zambia, and Mozambique.	Investors from Brazil and Argentina, agriculture experts from the AfDB, some academic institutions, civil society groups, the MOFA and the Savannah Accelerated Development Authority (SADA), including NASTAG attended; SADA will support MoFA implement the pilot phase of project to help transform the Savannah zone into an agricultural growth pole.	It is expected that NASTAG would leverage on this opportunity for its members to grow their seed businesses.
16.	Represented at the Agriculture Sector Consultative meeting by MOFA at Peduase Valley Resort, Nov. 6-7, 2017.	To discuss and contribute to the development of a Mashall Plan for Agriculture in Ghana	Development partners, relevant government institutions and the private sector, including NASTAG were at the meeting; a pointer to government's gradual recognition of the private sector and NASTAG in agricultural transformation in Ghana.	NASTAG continuous involvement and dialoguing with development and government at different levels will help public-private sector engagements in seed sector reforms.
17.	Participated in the 8 th Annual Pre-harvest	The event was to announce Agrihouse Foundation as event organizers of	This brought together about 190 participants to receive keynote address by the Minister of State for Agriculture, Hon. Dr. Gyiele Nurah, and	NASTAGs participated in the event to gather fore-knowledge on the event and identify potential

#	High Level Meeting / Event	Purpose	Outcome	Likely Impact
	event was launch, on 24 th March 2018, at Best Western Premier Hotel in Accra under the theme; <i>“Transforming Agribusiness in Northern Ghana: The Future Starts Now.</i> and hosted by the AgricHouse Foundation	subsequent Pre-harvest meetings. Organizers also used the opportunity to announce the October 3-5, 2018 as the dates, the venue as Tamale Sports Stadium, format / programme for the 2018 event and provided a brief overview of the upcoming event.	brief statements by the Chief of Party USAID – ADVANCE, the Netherlands Ambassador to Ghana, Former First Lady Nana Konadu Agyemang Rawlings, and Stakeholders such as Dizengoff, Ecobank, Yara Ghana, NASTAG, Interplast and the media.	collaboration with Agrihouse foundation for 2018 and the coming years. Based on interactions with partners, it is likely that NASTAG would in the future hold Pre-season and Pre-harvest as a joint event to holistically benefit the entire agricultural value chain actors. NASTAG would follow up with Agrihouse to further discussion on the October event and possible collaboration to the full benefit of the seed sector.
18.	Participation in AFSTA 2018 Congress in Cairo, Egypt, February 27 – March 1, 2018	The congress brought together over 450 participant seed sector players across the globe but most importantly those in Africa to share business ideas, network and create new business opportunities in the seed industry.	It focused much more on vegetables improvement across the globe, management of the MLN(meaning?) in maize seed production, climate change impact on maize, the African seed industry vis-à-vis the plant breeding innovations, the impact of biotechnology in Africa and the Plant Breeders’ rights versus farmers’ rights in Africa: Challenges and prospects.	Participants at the conference also shared views and experiences of the private seed sector on the implementation of the harmonized seed regulation at the regional community level
19.	Participate in a training programme on the production and delivery on Quality Rice seed at the Anita Hotel, Kumasi from March 1 – 2, 2018, under a Joint 3-year “Extension Capacity Development for Rice Seed Security in Africa”, by the International Rice Research Institute (IRRI), Japan International Cooperation Agency (JICA) and the Philippines Rice Research Institute (PhilRice) with MOFA-CSD	Training on improve production techniques for quality Rice Seed	In total a total of 23 Rice seed value chain actors (including researchers and seed inspectors, including 14 NASTAG members) participated in the training with a total of fourteen NASTAG persons benefitting through the Association. The members of the Association are thus benefitting satisfactorily from being members of the Association. Topics treated included land preparation, agronomic practices especially roguing harvesting and threshing drying cleaning and storage etc.	participants discussion of the constraints to the production of quality seed and actions they could take that were within the scope of their work responsibility in the rice seed production chain would result in high quality Seed production
20.	Participated in AGRA Consortium Meeting with Stanbic Bank Ltd in Accra on April 25, 2018	The purpose of the meeting was to determine what financial products of the bank can be made available to meet the needs of famers including seed producers, aggregators/ processors in the agriculture value chain consortium that AGRA is putting together	This meeting provided the information for the bank to consider the appropriate financing mechanism for the value chain actors in the consortium for improved financing for agribusiness in the country. The bank felt the value chain consortium approach was advantageous, in that it will increase access or outreach of its lending to the actors (including the seed businesses), who otherwise could not have been reached. NASTAG would work very closely with AGRA to ensure that the seed producers and the other seed value chain actors benefit extensively from this intervention	A target of 143,000 farmers and out growers from the Afram plains/Ashanti Region, Northern & Brong-Ahafo Regions would tightly be linked for improved access to inputs, i.e. seed and fertilizers through credit financing from the bank to produce for aggregators or buyers (also with bank loan).
21.	Dec 2017: NASTAG was also invited to the USAID / Africa Rice closeout workshop on the Rice seed scaling up Project in Nyankpala, Northern region. The project was implemented by the Savannah Research Institute (SARI).		The Association agreed to collaborate more with the research institutes in the coming year to promote new varieties and arrange for foundation seeds supply by SARI to NASTAG members based on negotiated terms and conditions.	
22.	Participated in an experience-sharing meeting at MOFA		Some farmers shared experiences to the challenges of the varieties seeds supplied to them that were not part of varieties that thrives	

#	High Level Meeting / Event	Purpose	Outcome	Likely Impact
	facilitated by the Peasant Farmers Association of Ghana (PFAG) on the 2017 PFJ implementation.		well in their environment or has less market, the delay in the supply of input and its effects, the challenge of matching fertilizer to the seeds supplied to each farmer, which to a large extent affected the programme negatively. Some farmers recommended that there should be a situation where they can access only seeds, only fertilizer or both depending on what they desire	
23.	Participation in “ The State of Soil Fertility in Northern Ghana, Fertilizer Recommendations, Utilization and Farm-Level Access ” at Movenpik, Accra by the USAID -ATT Project, in partnership with AFAP and AGRA. April 1011, 2018	The objective of this forum are: to present the latest scientific information on the state of the soils of northern Ghana; to note the implications of their status on sustained crop productivity; and to promote fresh dialogue amongst the interested parties – agricultural producer organizations, public policy-makers, and private sector input providers – out of which we hope will evolve an action plan to improve spoils stewardship, preserve soil fertility, and sustain long-term crop productivity.	It is expected that this forum will generate all the answers to many challenges facing Northern Ghana’s agriculture, but it is hoped that it will initiate a meaningful and constructive dialogue between the key actors, and set in motion a set of new, interconnected activities leading to continued advancement of stallholder agricultural productivity, commercialization, food security and well-being,	

Annex 3: Summary of Accomplishments of APSP Grant Project Strategic Objectives / Results

Activity	Target	Actual	Gap	Remark
STRATEGIC OBJECTIVE 1.0 Improve environment to increase private sector participation and investments in the seed industry				
1.1 Establishment of Special Working Committees; Hold EC and Sub-Committee meetings	<i>3 special working committees established and held 15 meetings / activities; 3 EC meetings</i>	<i>All target meetings and activities by the Committees and the EC held</i>	<i>Achieved</i>	<i>Meetings / activities have been very purposeful, and involved decisions and planning of key Associations and events such as; seed sector sensitization and networking forums, strategic plan development, pre-season, Northern Ghana seed platform and the PFJ campaign</i>
1.2 Policy sensitization forum on National Seed Policy, National Seed Plan & Act 803 (2010)	<i>4 zonal activities; 300 stakeholders targeted</i>	<i>Sensitized 276 stakeholders on the seed sector reform documents and programs at 5 locations across the three zones</i>	<i>8% less than the target of 300 stakeholders to be sensitized</i>	<i>Although, awareness of the seed sector reforms documents among participant stakeholders increased by 50%, there is the need for sensitization activities, to get the critical mass for support the advocacy for improved policy, regulatory and investment enabling environment for the seed sector.</i>
1.3 Advocacy activities on the plant breeders bill, Biotechnology usage & implementation of the National Seed Policy, National Seed Plan & seed law (Act 803, 2010).	<i>Awareness on BT; PPD meetings on Regulations; Meeting with MOFA/ PPRSD/CSD/NSC; meetings with PSC FACA</i>	<i>Held 1 workshop on BT; participated in BT stakeholders' meetings internationally and nationally; held regular meeting with the public sector</i>	<i>Yet to hold meeting with the PSC – FACA, especially on the Seed Regulations</i>	<i>NASTAG has gained the necessary recognition and exposure as the lead private seed sector organization, interfacing and advocating with the public-sector stakeholders and seed value chain actors</i>
STRATEGIC OBJECTIVE 2.0 Strengthen the business linkages in the seed value chain in Ghana				
2.1 Organize One (1) seed value chain actors' networking /business	<i>1 Seed business Conference; target of 100 participants</i>	<i>Implemented maiden national seed value chain business networking forum for over 100 participants</i>	<i>Need to work on high profile public sector decision makers participation; create more exhibitions and time for interactions</i>	<i>Forum Communique developed for follow up activities; Forum evaluation and reports provided rich resource for institutionalizing and improving the Forum; a major APSP indicator met</i>
2.2 Develop communication strategy and use for the dissemination of sector information to members, policy makers & stakeholders.	<i>6 policy communication materials developed in line with communication strategy</i>	<i>1 pager; 3 brochures; 2 press statement; 3 press release; 1 strategic plan document; 1 publication on Africa Seed Magazine (AFSTA) 2 radio discussions; 2 TV discussions; 8 media published reports</i>	<i>Target exceeded</i>	<i>A communication strategy specially designed for the implementation of the SP, will enhanced development and dissemination of communication materials for greater impact</i>
STRATEGIC OBJECTIVE 3.0 Strengthen institutional capacity of NASTAG to engage public stakeholders on policy reforms and program implementation to modernize the seed industry of Ghana				
3.1 Equip and staff NASTAG secretariat for effective Associations operation	<i>Secretariat furnished, equipped with 3 permanent staff & Technical Advisor / Consultant</i>	<i>Functional NASTAG Secretariat established</i>	<i>Achieved</i>	<i>NASTAG has a well-functioning Secretariat, capable of organizing, facilitating and coordinating Association activities</i>

Activity	Target	Actual	Gap	Remark
3.2 Train NASTAG staff and executives on Advocacy Plan & Strategic Plan (SP) development.	<i>Training held; 1 on SP development and 1 on Advocacy Planning</i>	<i>A NASTAG 3-year draft SP developed, now fully expanded to a 5-year SP with components such as; service delivery, advocacy, knowledge sharing and organizational development.</i>	<i>Achieved</i>	<i>The 5-year SP provide a solid blueprint for NASTAG to consolidate its leading role in the development of the seed industry in Ghana</i>
3.3 Hold AGM & Launch NASTAG	<i>AGM held; Implemented</i>	<i>First AGM held; Constitution adopted, substantive EC elected and inducted; and NASTAG officially launched</i>	<i>Achieved</i>	<i>AGM heightened the recognition and exposure of NASTAG, among public sector, development partners and other seed sector stakeholders</i>
3.4 Capacity building training on Quality Seed Management for NASTAG members.	<i>Quality Management (QM) training Held; implemented for 20 enterprises</i>	<i>20 seed enterprises training on QM; 14 have fully developed QM manuals and implementation commenced</i>	<i>Only 70% of the trained seed enterprises completed their QM manuals development</i>	<i>Those training beneficiaries who have developed and started implementing the QM manuals, have realized marked improvement in enterprise management, seed quality production and volumes.</i>