

Info Note

Achievements and lessons learnt in promoting Climate-Smart Agriculture implementation in Ghana through Science-Policy dialogue platforms

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Key messages

- The Ghana Science-Policy Dialogue Platform on Climate-Smart Agriculture (CSA), with the support from CCAFS West Africa Program, has over the last 8 years collaborated successfully with numerous organizations, particularly MoFA and CSIR, in climate change policy research and related CSA activities, bringing invaluable benefits to end-users.
- These systematic engagements have demonstrated the importance of the platform in contributing to policy influence, resilience building, and food and nutrition security outcomes at various levels (global, national and local).
- The key milestones of the Ghana's platform cataloged in this info note to stimulate evidence-based research and development and continuous learning on best practices on CSA mainstreaming include: (1) Learning and knowledge sharing; (2) Policy Studies and co-production of evidence-based information; (3) High-level policy engagements and influence; (4) Building partnerships for local and international networking; (5) Capacity Building and (6) consultancy services.
- Key lessons learnt crucial for the scaling up of these bottom-up and top-down mechanisms of science-policy interfacing include:

- a) The political buy-in is a success factor for platform sustainability. Key governmental ministries (MoFA, MESTI and MoTI), parliamentarians and district assemblies have fully embraced the operations of the Ghana platform.
- b) Establishment of sub-national platforms has potential to close gap across scales and stakeholders. The sub-national platforms have essentially become development tools and hubs for effective networking and linkages with research, projects and development partners at sub-national levels.
- c) Inadequate funding has been a major constraint to platform over the years. Building and strengthening platforms capacities for resource mobilization is very critical and therefore highly recommended.

1. Introduction

Climate change and variability is affecting all aspects of the development process. Agriculture and food systems are key vulnerable sectors to climate change impacts especially in the sub-Saharan Africa where Ghana is placed. In 2010, the Food and Agriculture Organization of the United Nations (FAO) introduced the concept of Climate-Smart Agriculture (CSA) as an integrated approach to managing landscapes that address the interlinked challenges of food security and accelerating climate change. CSA aims to simultaneously achieve three outcomes: increased



productivity, enhanced resilience, and reduced emissions. Within this context, the role of institutions and policy and research cannot be overemphasized (Totin et al., 2018).

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) in West Africa has since 2012 supported the creation of national multi-stakeholder platforms on climate-smart agriculture in Burkina Faso, Ghana, Mali, Niger and Senegal (Zougmore et al., 2019). The platforms were established to use scientific evidence in order to create awareness on climate change impacts on agriculture and make recommendations on the mainstreaming of climate change and CSA into agricultural development plans. This info note aims to synthesize key milestones, achievements and lessons learnt over the last 8 years from the Ghana Science-Policy Dialogue Platform on climate-smart agriculture to inform policy influence and further research orientation on science-policy interaction.

2. Profile and Importance of the Ghana CSA Science-Policy Dialogue Platform

i. Establishment of Ghana Platform

A regional workshop was organized in 2012 in Senegal by CCAFS West Africa Program where country teams were introduced to the concept of science-policy interfacing followed by the definition of countries' road map for the creation of national multi-stakeholders science-policy dialogue platforms on climate change and food security. In Ghana, the CSA Science-Policy Dialogue Platform was established through a consultative national stakeholder workshop held on 28th and 29th November 2012 to mobilize and sensitize relevant stakeholders for the purpose. The platform was officially launched on 30th July 2013 with strong ministerial support from Ministry of Environment, Science, Technology and Innovation (MESTI); Ministry of Food and Agriculture (MoFA) and Ministry of Trade and Industry (MoTI). At the launch, Hon. Nii Lantey Vanderpuije, the then Deputy Minister (MoTI) and Hon. Dr. Bernice Heloo, the then Deputy Minister (MESTI) charged the platform to undertake nationwide sensitization and awareness creation on climate change and its impacts. The Ghana platform is legally registered with the Registrar General Department of Ghana as a not-for-profit organization. It is also a member of *Global Alliance for Climate-Smart Agriculture (GACSA)*, which seeks to improve global food and nutrition security in the face of climate change and also a member of the West Africa CSA Alliance launched in Mali in the year 2015.

ii. Platform Goal and Objectives

The Ghana CSA Science-Policy Dialogue Platform aims to promote a food-secured nation through the provision of science-based efforts that support sustainable agriculture and enhance livelihoods while adapting to climate change and conserving natural resources and environmental services. Its prime objective is to enhance science-informed policy making on climate change adaptation in Ghana's agricultural sector through exchange of information and experience sharing and learning among

various stakeholders. The platform also provides a linkage mechanism between research, policy and community settings in order to influence climate change investments and project trajectory in agriculture with effective adaptive, resilient and mitigation outcomes at the local level. Specifically, the platform seeks to:

1. Network and interact regularly with relevant stakeholders to develop Ghana's priorities and needs for adaptation to climate change.
2. Form strategic alliances for optimization of environmental resources through inter-institutional networking, knowledge sharing and learning, and research.
3. Contribute to policy decision-making processes on climate change adaptation and mitigation in agriculture through sharing of policy status and options as well as provision of research and scientific information.
4. Undertake widespread dissemination of outputs and knowledge products (e.g. policy briefs, reports, releases, papers, articles etc.) from evidence-based policy.
5. Identify related research needs and priorities and conduct supportive scientific studies to facilitate policy and decision-making processes
6. Build capacities to enhance change and adaptation to climate change effects at the local, national and sub-regional levels
7. Facilitate agribusiness related activities to enhance rural livelihoods and economic empowerment in the context of climate change.

iii. Structure and Composition of Ghana CSA Science-Policy Dialogue Platform

The Ghana CSA Science-Policy Dialogue Platform has a three-tier organizational and governance structure, comprising the **secretariat** hosted at CSIR-Animal Research Institute, the **core team** of experts from 10 key strategic organizations, and the **entire platform** of over 100 members (Sam et al, 2016a; Zougmore et al., 2019). The platform operates within the existing public and non-public institutional frameworks.

– **The Platform Secretariat** constitutes the administrative unit to ensure routine operations and comprises the Chairman, Vice Chairman, Executive Secretary, M&E Expert, Accountant and Executive Member (Policy Analyst).

– **The Expert Core Team** forms the planning and implementation body and directs the implementation of platform activities. They are representatives from strategic organizations namely: Council for Scientific and Industrial Research (CSIR), Ministry of Food and Agriculture (MoFA), University of Ghana (UG), National Development Planning Commission (NDPC), Environmental Protection

Agency (EPA), Ghana Meteorological Agency (GMet), Representative of Non-Governmental Organizations (Hatoff Foundation), Representative of Civil Society Organizations (Climate Action Network of Ghana) and Representative of Farmer-Based Organizations (Global Farmers Wives Association).

– **The Entire Platform** covers the overall membership; reaching more than 100 stakeholders and boundary partners who support platform activities at various levels. Ten District-level CSA Platforms addressing climate change and related issues at the sub-national (local and community) level have been setup so far. These multi-stakeholder platforms also follow the structure of the national platform. They serve as hubs for collaborations and local development planning at district level.

Overall, the platform is made up of actors from various partner organizations (Figure 1), which have been categorized and segmented to facilitate achievement of the platform objectives. As a hallmark, the platform enjoys multi-disciplinary teamwork and both inter-institutional - and intra-institutional collaboration capacities in its operations. The strength in the networks and linkages has been beneficial in execution of platform programs and projects.



Figure 1. Diversity of actors of the Ghana platform

3. Experiences and Major Achievements of Ghana CSA Science-Policy Dialogue Platform

The platform has engaged in a number of initiatives, programs and projects since its inception. This section presents a summary of the platform’s experiences, key milestones and achievements over the years of operation. These are organized around (1) platform launch and scaling up, (2) Learning and knowledge sharing, (3) co-creation of knowledge and policy studies, (4) High-level policy engagement and influencing, (5) Building Partnerships for Local and International Networking.

i. Platform Mobilization, Launch and Scaling Up

Ghana started with the setup of the national platform (Figure 2) and during the 8 years of operation has scaled up to ten additional sub-national platforms in order to bridge the gap between national and community/village levels. These sub-national platforms are located in the 10 respective administrative districts of Ghana, namely, Lawra Municipal, Jirapa, Nandom, Nadowli-Kaleo, Tain, Ho West, Birim South, Ada West, Abura Asebu Kwamang and Lambussie-Karni. In the process, the national platform has interacted with over 2,500 stakeholders nationwide mostly on climate change themes.

These stakeholders are generally from research and academic institutions, policy and decision-making bodies, media groups, metropolitan/municipal/district assemblies, security agencies, development partners, traditional authorities, NGOs, community groups and associations, religious bodies, farmer-based organizations and other government institutions.



Fig. 2 Ministers of state and Dignitaries at the platform launch. Deputy Minister (MESTI), Hon. Dr. Bernice Heloo (Middle) and Director- General (CSIR), Dr. A. B. Salifu (Middle Right)

ii. Learning and knowledge sharing

The platform has organized numerous workshops and conferences over the years on various thematic areas to share climate change related information and experiences to promote science-informed decision making and learning. Below are few examples of these sharing and learning events.

1. A national stakeholders’ workshop was organized on 4th July 2019 in Tamale to share experiences and achievements from the national and district levels science-policy dialogue platforms since their establishment, and to dialogue about the way forward as well as plan and develop actions in accordance with CCAFS West Africa’s policy project that began in 2019. About 25 participants with fair representation of women (e.g. some women leaders at influential positions) attended the workshop and actively contributed to discussions and deliberations (Karbo et al, 2019). Key recommendations were nationwide up scaling of district platforms to promote CSA; building platforms capacities in proposal development for resource mobilization; strengthening the

monitoring and evaluation system, and developing an innovative communication strategy of the platform. There was assurance that new West Africa policy project will be supporting the Ghana platform to tackling the above areas in the next 2 years.

2. A sub-national level policy engagement workshop was organized at Lawra on 5th January, 2017 to promote climate change adaptation strategies and CSA options at the local level. The rationale was to engage policy and decision makers at the sub-national levels for policy influence and effective mainstreaming of climate change into district agricultural and food systems development plans. The 48 workshop participants recommended that a percentage of the District Assembly Common Fund should be allocated for CSA activities. Also, the participants advocated for the establishment of CSA Special Courts to handle offenders of CSA activities.
3. A scenario-guided multi-level review of the Ghana Livestock Policy workshop was organized on the 13th-15th July 2016 to generate policy recommendations that would improve the Ghana's Livestock Policy. Over 40 participants involving stakeholders from the government institutions (MoFA and others), research and academia, civil society and NGOs and the private sector acquired knowledge on the scenarios approach of planning. The workshop outputs were expected to inform the livestock policy development processes.
4. A Climate Change and Livestock Development conference was organized by the platform in collaboration with Ghana Society of Animal Production (GSAP) on 5th-8th August 2015. The goal was to create CSA awareness among eminent livestock scientists and high-level national stakeholders to influence behavioral change towards CSA policy decisions. Over 100 renowned scientists and other stakeholders from Ghana and Nigeria were sensitized on the National Climate Change Policy (NCCP), the National CSA and Food Security Action Plan and the CCAFS programs in Ghana and West Africa at large. Communiqué was developed and presented to the Government of Ghana through the Deputy Minister of Food and Agriculture in charge of Livestock for necessary actions (Fig. 3a and 3b).

A workshop dubbed "Ghana Learning event: Information Sharing on Community-Based Adaptation and Research" was organized on December 03, 2013. The purpose was to share information on the effects of climate change and variability in specific locations of Ghana and to generate knowledge on community-based adaptation and resilience strategies. Over 40 participants (males and females) acquired knowledge on climate change effects and community-based adaptation strategies.

iii. Policy Studies and Co-Production of Evidence-Based Information

Another important area for which the platform has been active is policy studies and co-creation of evidence-based

information. The platform has conducted policy situational analysis to generate baseline information on climate change policies and institutions in Ghana to inform strategies, climate change adaptation for food security and agriculture. Over 30 key informants (females-10%) were interviewed to solicit for relevant information and opinion. A book on the baseline policy analysis and gaps has been published and shared widely (Essegbey et al, 2016).

In partnership with MoFA, the platform has developed a *National Climate-Smart Agriculture and Food Security Action Plan of Ghana (2016-2020)* to operationalize agriculture section of the National Climate Change Policy of Ghana (MoFA, 2015; Essegbey et al. 2015). The action plan is a policy document that provides implementation framework for effective development of CSA on the ground. The action plan was validated and launched by Deputy Minister of Food and Agriculture in-charge of crops and being implemented nationwide.

The platform conducted CSA profiling in the Guinea Savannah and Forest agro-ecological zones of Ghana. Various agricultural technologies and practices were identified and ranked as CSA for ease of reference and to guide policy decision makers in agricultural planning and investment decisions at local and national levels. Initial consultative and reconnaissance field works formed the basis. Separate multi-stakeholders workshops were held in each agro-ecological zone for the actual profiling exercise involving over 140 participants (22% female). For the Savannah zone, more than 50 agricultural technologies and practices were identified; focusing on **Soil fertility > Crops > Water > Livestock > Aquaculture** in that order. For the forest zone, 22 technologies and practices were identified; focusing on **Soil fertility > Crops > Water = Livestock** in that order. CSA usage in both agro-zones was gender neutral and largely by smallholder farmers. Participants generally called for scaling up of CSA use in the zones. Consequently, a book have been developed on CSA technologies and practices in Ghana (Karbo et al, 2016).

Based on the CSA profiling, the platform conducted case studies on the most prevalent technologies and practices in each of the two zones. These studies evaluated the associated costs and benefits as well as contributions to livelihood improvement and poverty reduction for national agricultural planning and investment decision-making. Fieldwork involving interviews of over 70 CSA users was carried out. Under the cost and benefit analysis, a comparison was made between the "with" and "without" CSA intervention scenarios. The results showed that the use of the CSA technologies and practices was more profitable and leads to significant improvement in livelihoods and poverty reduction in the agro-ecological zones (Sam et al, 2016b; Botchway et al, 2019).

iv. High-Level Policy Engagements and Influence

The platform has contributed to high-level policy engagements and influence. For instance, on the 13th - 15th July 2016, the platform in collaboration with CCAFS West Africa Program organized a scenario-guided multi-level review of the Ghana Livestock Policy workshop to generate policy recommendations that would improve the Ghana's Livestock Policy. Over 40 participants involving stakeholders from the government institutions (MoFA and others), research and academia, civil society and NGOs and the private sector acquired knowledge on the scenarios approach of planning. Aside the acquisition of knowledge and behavioral change, the recommendations, suggestions and other generated outputs were expected to demonstrate reflective effects and improvement in the pending Ghana livestock policy document. The target was to develop an action plan, which was being developed for the livestock policy aiming at transforming the Ghana's agriculture (livestock) sector.

Through a sensitization and awareness workshop organized on 29th Jan 2014, over 65 high-level policy and decision makers comprising Ministers of State, Parliamentarian, Chief Directors and Sector Directors have been sensitized on climate change issues and the need for integrating adaptation actions into sectoral plans and budgets (Figure 4). As a result, a political buy-in support for CSA was received from the parliamentarians in the form of communiqué endorsing CSA in the country's planning and investment.

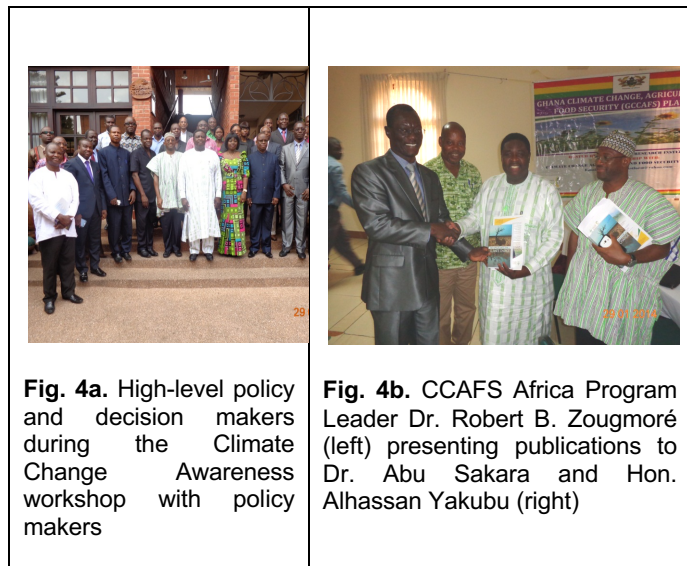


Fig. 4a. High-level policy and decision makers during the Climate Change Awareness workshop with policy makers

Fig. 4b. CCAFS Africa Program Leader Dr. Robert B. Zougmore (left) presenting publications to Dr. Abu Sakara and Hon. Alhassan Yakubu (right)

In a participatory scenario development training organized for the district platforms, various platforms developed district-specific scenarios for the future of agriculture in the midst of climate change to facilitate policy planning and investment. The national platform has further supported

these district platforms to package their scenario-visioning documents for mainstreaming into respective district development plans (Botchway et al, 2015a) where the platforms can be of influence in the policy planning and investment. Subsequently, the policy engagement workshop held at Lawra on January 05, 2017 was actively attended by the district-level policy and decision makers. The workshop was used to re-echo the effective mainstreaming of climate change into district agricultural and food systems development plans. A recommendation was made to allocate a percentage of the District Assembly Common Fund towards CSA activities. Also, there was an advocacy for establishment of CSA Special Courts to handle offenders of CSA activities. Sub-national platforms such as Lawra Municipal, Jirapa and Nandom districts and have facilitated the compilation of community by-laws to protect the environment (e.g. by-laws and presented to the Assembly for gazetting to influence policy and promote CSA).

v. Building Partnerships for Local and International Networking

The platform has engaged in strong networking and strategic partnerships building with other organizations and projects. **At the international level**, the platform has signed and successfully implemented over 10 sub-grant agreements with CGIAR CCAFS Program hosted by ICRISAT; emphasizing on exchanging climate change knowledge and sharing of information and experiences for learning, synergies and science-informed policy influencing. Also, a sub-grant agreement was signed with the International Center for Tropical Agriculture (CIAT) in November 2015 to undertake country profiling of CSA and development of CSA prioritization framework for Ghana. An ex-ante cost-benefit analysis technique was used to assess the cost effectiveness of implementing the proposed CSA practices taking into account the associated externalities. The cost effectiveness of adopting these practices serves as a key ingredient to the policy-making processes. In all, 7 of the 8 assessed CSA practices were viable, hence could support households' potential of achieving food security and sustainable livelihoods.

Our efforts at building partnerships are also reflected in the platform's participation in international conferences such as the Africa CSA Alliance Workshop, 31st March – 2nd April 2014 and 3rd Global Conference on Climate-Smart Agriculture, March 16-17, 2015 in Montpellier, Global Food Summit, March 18-22, 2019 in Munich, Germany, 3rd Africa Climate-Smart Agriculture Alliance Forum, March 21-28, 2019, Dakar, Senegal, etc.

At the local front, the platform has signed 2 sub-grant agreements with Care International Ghana office to setup sub-national level climate change platform in the Nadowli-Kaleo and Lambussie Karni districts in the Upper West region of Ghana. Also, through collaboration with MoFA

under the WAAPP Phase II, the platform was able to mainstream climate change issues into WAAPP and to scale-up the sub-national level platforms to five districts (Tain, Ho West, Birim South, Ada West and Abura Asebu Kwamang).

The national platform also supported MoFA to develop and review environment, climate change and natural resource management action plan (ECCNRMAP). It is also collaborating with other organizations and programs at various levels on climate change related projects. Some of which are FAO, World Bank, Care International, GTZ, IUCN, NANDIRDEP, ACDEP, CIKOD, SAIRLA, GH-NLA, Africa RISING, OXFAM, OCP-UM6P, BRECCIA, USIA, Ghana Climate Innovation Centre (GCIC), Adaptation at Scale in Semi-Arid Regions (ASSAR), Agricultural Model Inter-comparison and Improvement Project (AgMIP), Water and Land Ecosystems (WLE), Ghana Society of Animal Production (GSAP), Religious Bodies Network on Climate Change (RELBONET) and World Business Council on Sustainable Biodiversity. As a result, these partnerships generated financial resources to support the platforms' activities, totalizing about US\$467,000 over the last 8 years.

As a result of the platform strong partnership with Lawra Traditional Council in the Lawra Municipal since September 2014, an opportunity is always given to the platform at the annual 'Kobine' festival to sensitize the traditional authorities and local communities in the Lawra traditional area on climate change and CSA matters. As a result, climate change and CSA education has been mainstreamed into the festival celebration. Table 1 below depicts the partnerships and linkage mechanisms of Ghana Platform.

Table 1: Partnerships and Linkage Mechanisms and Outputs/Outcomes

Partner	Linkage Mechanism	Outputs/Outcomes
1. International Level		
CCAFS, West Africa Program, ICRISAT	Project planning meetings Information Sharing	Growing organizational competence and funding
	Joint project implementation	Increasing visibility of platform
	Conferences/Workshops	Engaging high level policy
	Funding projects and programs	Functional platform at all levels for policy influence
	Training and capacity building	Cogeneration of knowledge products and dissemination
UADA-NEPAD/ ACSAA	CSA strategy planning meeting	Visibility and recognition
	Consultations on Vision 25x25	Visibility and recognition

Partner	Linkage Mechanism	Outputs/Outcomes
	ACSAA Workshops	Sharing knowledge products
CIAT, CGIAR	Joint project implementation	Country CSA profiling; Enhancing capacity of members
Global Alliance for CSA	Annual CSA conferences	Sharing knowledge products; Learning and policy influence
Global Food Summit	Annual Food Security conferences	Visibility and recognition; Sharing knowledge products; Learning and policy influence
Africa CSA Alliance Forum	Annual CSA conferences	Visibility and recognition; Sharing knowledge products; Learning and policy influence
2. Local Level		
CARE International	Consultancy, Collaborative Project Implementation	Sub-national CSA platforms (2) set up in UWR
MoFA, WAAPP	Joint project implementation	Policy influence; Sub-national CSA platforms (5) set up in Southern Ghana
FAO (Ghana)	Consultancy, Collaborative Project Implementation	Development of CSA investment Framework; CA Profiling in Ghana
World Bank	Consultancy, Collaborative Project Implementation	Development of CSA Investment Plan (CSAIP)
ASSAR (University of Ghana)	Collaborative project implementation	Strengthening collaboration with sub-national platforms
Climate Smart Villages/CSIR	Field visits and data sharing	Co-generation of CSA knowledge products; Social learning and extension
Sub-National CSA Platforms	Joint project implementation	Capacity strengthening; Co-generation of CSA knowledge products;
	Workshops/Training	Bottom up approach for farmer-research-policy dialogue
	Reporting	Recognition by District Assemblies
SAIRLA/GH-NLA	National Working Alliance	Visibility and recognition; Sharing knowledge products for Policy influence
Lawra Traditional Council	Joint project implementation, Climate change and CSA sensitization and education	Visibility and recognition; Sharing knowledge products for Policy influence

Partner	Linkage Mechanism	Outputs/Outcomes
		Mainstreaming climate change and CSA into annual festival celebration
GTZ, IUCN, Africa RISING, NANDIRDEP, ACDEP, CIKOD, OXFAM, USiA, OCP-UM6P, BRECCIA, GCIC, AgMIP, WLE, GSAP, WBCSB, RELBONET	Joint project implementation, Periodic Climate change and CSA workshops conferences	Visibility and recognition; Sharing knowledge products for Policy influence

vi. Information and Knowledge Products Generated by the platform

The Ghana National CSA Science-Policy Dialogue Platform in collaboration with its partners has generated various knowledge products within the years of operation. The Table 2 below indicates the categories of the knowledge products generated so far.

Table 2: Categorization of Platform Knowledge Products

No.	Knowledge Products	Frequency	Proportion (%)
1	Books	6	9.0
2	Conference Papers	3	4.5
3	Posters	3	4.5
4	Info Notes	3	4.5
5	Blog Posts	7	10.4
6	Working papers	4	6.0
7	Brochures	2	3.0
8	Workshop and Conference Reports	27	40.3
9	Annual Reports	12	17.9
	Total	67	100.0

Table 3 presents some salient scientific outputs and results generated and the corresponding publications that have been produced from them. It is critical to note that all these information and knowledge products have been shared mainly through various meetings, seminars, workshops, conferences or the Internet largely on the CCAFS and CGIAR websites.

Table 3: Salient Scientific Outputs/Results

No.	Outputs	Publication Titles
1	Awareness on climate change created among stakeholders in Ghana	Ghana Climate Change, Agriculture and Food Security Platform Review Vol.1 Issues 1 and 2 (2014)
2	CSA technologies and practices identified and profiled by agro-ecological zones	Climate Smart Agricultural Practices in Ghana (2016)

No.	Outputs	Publication Titles
3	Climate change and institutional policy gaps at sub-national levels in Ghana identified	Assessment of Climate Change Policy and Institutional Context: The Case of Ghana (2014)
4	CSA action plan developed for Ghana	National Climate Smart Agriculture And Food Security Action Plan (2015)
5	Manual for participatory profiling of CSA technologies and practices for Ghana developed	Technologies and Practices for Climate Smart Agriculture (CSA) In Ghana: A Participatory Profiling Manual (2015)
6	Notes for review of Ghana livestock policy document developed	Proceedings on the Scenario-Guided Review of the Ghana Livestock Policy (2016)
7	Operational guide to facilitate formation of platforms developed	Systems and Operations of the Ghana Science-Policy Dialogue Platform On Climate Change, Agriculture And Food Security (2016)
8	Ten (10) sub-national platforms established and capacitated in Ghana	Scaling Up of CSA Platforms at the Sub-national (District Levels) In Ghana: A Progressive Achievement of the Ghana CCAFS Platform (2016)
9	Fact Sheets developed on composting and crop rotation	CSA Fact Sheets on composting and crop rotation

vii. Capacity Building and Strengthening

Capacity building or strengthening is another key area that the platform has greatly been involved. In general the platform members have built capacities along the project implementation trajectory through the sharing and learning events, meetings, trainings, travels and fieldwork.

It has frequently been observed that staff retirements and transfers at the sub-national level platforms have impeded the smooth running and performance of the district platforms. In addition to this is the lack of funding to implement CSA activities at the sub-national levels. In line with these, the national platform re-mobilized all the district platforms and trained them on the concept of proposal development to equip them with the skills in writing bankable project proposal to attract funding for CSA activities. The training also presented opportunity to educate and sensitize them on attitudinal and behavioral changes in order to enhance management efficiency of the platforms. Two members, preferably the chairman and secretary or M&E officer, were selected from each district platform for the capacity building event.

A participatory scenario development and training program was carried out on the 10th – 12th June 2015 to build the capacities of 34 key members from Lawra (14), Jirapa (10) and Nandom (10) district platforms. In the process, each sub-national platform developed district-specific scenarios for future of agriculture in the midst of climate change for policy planning and investment. The district-specific scenarios documents provide effective tools to support

collaborative sustainable development efforts of the district-level platforms. The national platform has also supported the district platforms to package their scenario-visioning documents for mainstreaming into respective district development plans, where the platforms can be of influence.

The platform collaborated with IUCN under the CCAFS Flagship 4 project to organize monitoring and evaluation (M&E) capacity building program for 20 members on 16th – 17th December 2014. It was to capacitate core members with policy influence M&E approaches and methods. Participants improved their knowledge on the policy influence framework and the associated monitoring and evaluation requirements. Members were adequately informed at the event that the policy influence framework comprises five domains of influence; namely: **attitudinal change, discursive commitments, procedural change, policy content and behaviour change**. In the end, the platform members were guided to develop M&E Plan for the project implementation. Figure 5 is a photograph of training participants.



Fig. 5. Platform members at CCAFS M&E training in Accra.

Training was then organized on the final M&E plan for the sub-national level platform members. The proposed M&E tools were field-tested for the platform’s policy influence into climate change, agriculture and food security. The field test took place in the Lawra, Jirapa and Nandom platforms from 26th – 28th May 2014 and there was field monitoring data collection. A total of 30 sub-national platform members (10 per platform) were interviewed for most significant change stories. The respondents were from the district assembly (16.6%), farming groups (30%), GES (3.3), MOFA (13.3%), NGO/FBO (13.3%), security agencies (10%) and traditional council (13.3%). The participants indicated various levels of change stories. For instance, changes in knowledge (31%), attitude (32%), discourse (6%) and behavior (31%).

The platform is also developing climate change entrepreneurship schemes to support youth and women development in Ghana. The purpose is to build the capacity of young professionals in CSA entrepreneurship schemes to improve their social and ecological resilience

in and promote environment friendly intensification of farming systems. A concept note has been developed and the platform has profiled the various youth entrepreneurship schemes in the country and marched them with existing policies. A comprehensive entrepreneurship training module/manual is to be developed and used to build capacities of youth entrepreneurs in CSA and possibly link them to existing CSA investment opportunities.

VIII. Consultancy Services

Ghana platform has over the years gain multi-scale of experiences; the structure and operations coupled with its credibility and quality service delivery has won the admiration of certain organizations who sometimes award consultancy works to the platform. Some of the consultancy services the platform has provided to beneficiary communities are detailed in the Table 4.

Table 4: Key Consultancy Services Provided to Beneficiary Communities

Contracting Entity	En-Year	Description of Assignment	Output
FAO	2019	Profiling and characterization of conservation agriculture practices and adoption in Guinea savannah, Sudan savannah and Transitional agro-ecological zones of Ghana	Consultancy reports
FAO	2017	Investment framework for mobilization of resources into climate smart agriculture (CSA) in Ghana	Consultancy reports
Care International, Ghana	2017	Establishment of CSA platform in Lambussie district	Consultancy reports
Care International, Ghana	2017	Establishment of CSA platform in Nadowli-Kaleo district	Consultancy reports



Fig. 6. Establishment and launch of Lambussie CSA Platform

Lessons Learnt and Key Development Outcomes and Impacts

1. Stakeholders have shown commitment to the platform through participation in platform activities. Thus confirming their assertion that before the platform, several of them undertake activities and were not able to share extensively with others. The advent of the platform has closed the gap. The

national platform for exchange of information to date is a laudable initiative.

2. The political buy-in support available to the platform since key governmental ministries (MoFA, MESTI and MoTI), parliamentarians and district assemblies have fully embraced the operations of the platform, is a success factor for platform sustainability.
3. Establishment of sub-national platforms at community levels has potential to close gap between local community – researchers – policy decision makers. The sub-national platforms have essentially become development tools and hubs for effective networking and linkages with research, projects and development partners at sub-national level. There are more calls to upscale the sub-national platforms to cover other districts that are more vulnerable to climate change impacts. MoFA and Care International have responded to these calls in various degrees.
4. Stakeholders including local communities are becoming more informed on climate change and CSA issues through the platforms' sensitization and awareness creation programs. This has presented huge capacity building and/or strengthening opportunities for all at both national and sub-national levels.
5. Adoption of both *top-down* and *bottom-up* strategies offers the platform strong ability to meaningfully contribute to the CGIAR/CCAFS agenda of policy influence within the climate change and CSA space. In this light, there is increased national call to scale up platform concept to cover all districts.
6. Through the sub-national platforms, local communities are making conscious effort to protect the environment by developing by-laws and pressing for gazetting at the district assemblies. Also, the advent of CSA and Food Security Action Plan has led to the mainstreaming of CSA investment in agriculture sector investment plan (METASIP III).
7. The platforms being multi-stakeholder in nature coupled with its multi-disciplinary human resource is a great asset, which presents platforms with a holistic approach in addressing climate change impacts and CSA issues at all levels; hence strengthening collaborative efforts in dealing with climate change.
8. The Draft CSA Financial Plan has become relevant input for the development of CSA Investment Plan (CSAIP) by the World Bank through MoFA, which will be linked to the Adaptation of African Agriculture (AAA) Initiative.
9. Inadequate funding has been a major constraint to platform over the years. Building and strengthening platforms capacities for resource mobilization is very critical and therefore highly recommended.

Conclusion

The above evidence confirms that the Ghana CSA Science-Policy Dialogue Platform has performed creditably over the last 8 years. It can therefore be concluded that the platform is fulfilling its mission and goals as initially expected by the CCAFS Regional program to influence national policy and bridging the research-policy-community gap to promote CSA and climate change investments. These have been possible through the mobilization, sensitization and awareness creation; partnerships; capacity building; co-generation and co-creation; evidence-based research; advocacy and other sharing and learning events resulting in behavioral changes across scales. The example cases described in this info note are evidence-based experiences that can be leveraged to successfully scale up these knowledge's sharing and stakeholders' interaction mechanisms. It is however crucial to take into account the lessons learnt to mitigate failure during widespread implementation.

Further reading

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This note summarizes the setup and operations of the Ghana CSA Science-Policy Dialogue Platform on Climate-Smart Agriculture. It captures the profile and importance of the platform and highlights the experiences, milestones and major achievements with key relevant development outcomes and impacts over the last 8 years for enhance research and learning.

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