Assessment of climate change policy and institutional context: The case of Ghana

Working Paper No. 164

CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

George O. Essegbey
Edmond Totin
Naaminong Karbo
Pierre S. Traoré
Robert Zougmore
Assessment of climate change policy and institutional context: The case of Ghana

Working Paper No.164

CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

George O. Essegbey
Edmond Totin
Naaminong Karbo
Pierre S. Traoré
Robert Zougmoré
Correct citation:

Titles in this Working Paper series aim to disseminate interim climate change, agriculture and food security research and practices and stimulate feedback from the scientific community.

This document is published by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), which is a strategic partnership of the CGIAR and the Earth System Science Partnership (ESSP). CCAFS is supported by the CGIAR Fund, the Danish International Development Agency (DANIDA), the Government of Australia (ACIAR), Irish Aid, Environment Canada, Ministry of Foreign Affairs for the Netherlands, Swiss Agency for Development and Cooperation (SDC), Instituto de Investigação Científica Tropical (IICT), UK Aid, and the European Union (EU). The Program is carried out with technical support from the International Fund for Agricultural Development (IFAD).

Contact:
CCAFS Coordinating Unit - Faculty of Science, Department of Plant and Environmental Sciences, University of Copenhagen, Rolighedsvej 21, DK-1958 Frederiksberg C, Denmark. Tel: +45 35331046; Email: ccafs@cgiar.org

Creative Commons License

This Working Paper is licensed under a Creative Commons Attribution – Non Commercial–No Derivs 3.0 Un ported License.

Articles appearing in this publication may be freely quoted and reproduced provided the source is acknowledged. No use of this publication may be made for resale or other commercial purposes.

© 2016 CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). CCAFS Working Paper no. 164

DISCLAIMER:
This Working Paper has been prepared as an output for the Policies and Institutions for Climate Resilient Food Systems and the West Africa Regional Program under the CCAFS program and has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of CCAFS, donor agencies, or partners. All images remain the sole property of their source and may not be used for any purpose without written permission of the source.
Abstract

Mainstreaming climate change strategies on the basis of Science, Technology and Innovation (STI) into agricultural food security policies demands multi-dimensional approaches. In sub-Saharan Africa, the demand is made more complex by the socio-economic challenges such as poverty, unstable markets, limited opportunities for employment and livelihoods. Mainstreaming therefore has to be done on the basis of informed strategies formulated on comprehensive studies. This study was conducted to inform the strategies for science-based and climate-smart agriculture in Ghana, especially with reference to the policy and institutional framework. The methodology comprised desk research of policy documents and related publications and Key Informant Interviews (KII). The study was based on the CCAFS Platform areas in Upper West Region. The research shows that though some efforts were made in the specific case of the National Climate Change Policy (NCCP), inclusion in the process did not reach the grassroots. Thus there were weaknesses in harnessing societal grassroots’ inputs for the policy formulation process. Still the policy has been well formulated and successfully launched. However, there is lack of awareness and knowledge about the policy especially in the decentralized levels of society in the districts and policy literacy is very low. The situation poses a challenge to effective implementation of the NCCP. To address some of the key challenges identified, it is vital to strengthen the vertical and horizontal channels of policy communication. The communication from the national sources to the districts must be improved through more frequent interaction. In the regions and districts, horizontal communication to reach out to all stakeholders can be greatly facilitated by the use of the electronic media.

Keywords
Climate change; policy; Ghana
Acknowledgements

The authors acknowledge funding from the Climate Change, Agriculture and Food Security (CCAFS) and International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). They are grateful for the full cooperation of the Science-Policy Platform in the field work. The authors thank the many key informants who kindly granted us interviews within a short period of notification, especially the Deputy Minister of the Upper West Region, Hon. Dr. Mohammed Alfa in Wa and the Regional Director of Agriculture of Upper West Mr. Joseph Faalong. They are grateful to Naa Puowelle Karbo III the Paramount Chief of Lawra for the interviews in his palace, to the District Chief Executives, Hon. Paschal B. Dere of Lawra District, Hon. B.K. Nelly-Vivien Kunko of Jirapa District and Hon. Cuthbert Baba Kuupiel of Nandom District. The authors also thank the field assistant, Mr. Waanfar Karbo of Lawra who helped in coordinating the field work and the interpretation into the local language in the districts.
## Contents

Introduction ........................................................................................................................................ 7  
Background ..................................................................................................................................... 7  
Study goals and objectives .............................................................................................................. 8  
Methodology ................................................................................................................................... 8  
National development context ....................................................................................................... 11  
Climate change and agriculture in Ghana – the policy and institutional framework .................. 12  
The policy formulation process ...................................................................................................... 13  
Highlights of Key Issues ................................................................................................................ 16  

Decentralization of policy to the regional and district levels and climate change policy literacy .......................................................................................................................... 18  
Decentralization in Ghana – the concept and practice ................................................................. 18  
The regional experience ................................................................................................................ 20  
The district experience ................................................................................................................ 20  
Policy literacy and the climate change challenge ........................................................................ 24  
Highlights of the key issues .......................................................................................................... 26  

Towards improving the policy and institutional environment .................................................... 27  
Overview of the entry points ........................................................................................................ 27  
Communication linkages .............................................................................................................. 29  
Human resource development and deployment ....................................................................... 29  
Resource mobilization ................................................................................................................ 31  
Stakeholder participation in policy making .................................................................................. 32  
Need for localization and customization of policy ..................................................................... 33  
Issues from the validation ............................................................................................................. 35  

Conclusion and recommendations ................................................................................................. 36  
Appendix 1: Interview Guide for Key Informant Interview ......................................................... 38  
References ...................................................................................................................................... 40
<table>
<thead>
<tr>
<th>Acronyms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>Climate Change</td>
</tr>
<tr>
<td>CCA</td>
<td>Climate Change Adaptation</td>
</tr>
<tr>
<td>CCAFS</td>
<td>Climate Change, Agriculture and Food Security</td>
</tr>
<tr>
<td>CSIR</td>
<td>Council for Scientific and Industrial Research</td>
</tr>
<tr>
<td>DACF</td>
<td>District Assembly Common Fund</td>
</tr>
<tr>
<td>DCE</td>
<td>District Chief Executive</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African States</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
</tr>
<tr>
<td>FANRT</td>
<td>-Farmer-managed Natural Regeneration of Trees</td>
</tr>
<tr>
<td>FOAT</td>
<td>Functional and Organizational Assessment Tool</td>
</tr>
<tr>
<td>GSGDA</td>
<td>-Ghana Shared Growth and Development Agenda</td>
</tr>
<tr>
<td>ICRISAT</td>
<td>International Crops Research Institute for the Semi-Arid Tropics</td>
</tr>
<tr>
<td>KII</td>
<td>Key Informant Interview</td>
</tr>
<tr>
<td>LACERD</td>
<td>Langmaal Centre for Rural Development Initiatives</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MESTI</td>
<td>Ministry of Environment, Science, Technology and Innovation</td>
</tr>
<tr>
<td>MOFA</td>
<td>Ministry of Food and Agriculture</td>
</tr>
<tr>
<td>NCCP</td>
<td>National Climate Change Policy</td>
</tr>
<tr>
<td>NDPC</td>
<td>National Development Planning Commission</td>
</tr>
<tr>
<td>PNDCL</td>
<td>Provisional National Defence Council Law</td>
</tr>
<tr>
<td>STI</td>
<td>Science, Technology and Innovation</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environmental Programme</td>
</tr>
<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
</tbody>
</table>
Introduction

Background

Mainstreaming climate change strategies on the basis of Science, Technology and Innovation (STI) into agricultural food security policies demands multi-dimensional approaches. In sub-Saharan Africa, the demand is made more complex by the socio-economic challenges such as poverty, unstable markets, limited opportunities for employment and livelihoods. The national development agenda with its political, economic and socio-cultural or contextual priorities and needs have to be taken into account in mainstreaming climate strategies. Mainstreaming therefore has to be done on the basis of informed strategies formulated on comprehensive studies.

In this regard, Ghana is not just one example of a sub-Saharan African country, but it is also a unique West African (ECOWAS) country with specific contexts, which shape the strategies for climate smart agriculture and food security. Over the years, Ghana has grappled with addressing developmental challenges through institutions and national policies. In the agricultural sector in particular there have been cycles of policy making and planning since the 1960s to the Medium Term Agriculture Investment Plan published in 2010. The government institutions have spearheaded the planning and policy formulation. However, the extent to which climate change needs are addressed is an important question for policy research and it is the focus of this study.

Thus this study as one of the three being conducted in the West African countries of Ghana, Mali and Senegal, will assess the institutional and policy contexts for climate change strategies. It assesses the potential for capacitating science-policy exchange platforms for the purposes of mainstreaming. A harmonized framework for the study has been developed at a meeting in Bamako on September 28-29, 2014 at the ICRISAT Headquarters. The framework was meant to enable comparison across the three countries and facilitate experience sharing and exchange of best practice. These three countries to some extent share similarities in their food systems and agricultural practices and yet, their socio-cultural differences precipitate divergent practices in some details of their national agricultural systems. A harmonized framework would enable lessons for policy review and mainstreaming climate change in existing and pending agricultural policies and plans.
Study goals and objectives

Basically, the main aim is to assess what is the current policy context and institutional framework for addressing climate change adaptation for food security and agriculture. In the concept note, it is stated as:

“…..the initial assessment of the national policy contexts and instruments for the promotion of climate-smart agriculture and adaptation planning, and establishment of a capacitating environment for national science-policy platforms with the development of sub-national infrastructure and elicitation of needs at selected districts including CCAFS sites.”

The specific objectives address the key questions underlying the study namely:

- How is CCA policy currently being developed?
- What are the main strengths/weaknesses/shortcomings of such a process?
- Is Climate Change and Agricultural policy decentralized, both as a product and a process?
- What does it take to make the process/product more efficient/effective?
- What are the main leverage/entry points for improving the current situation?”

Methodology

Desk research

There has been an outpouring of literature since climate change became topical in the 1980s. Much has been published on the technicalities of the subject as well as the broader aspects of climate change including food security, water management and socio-economic impacts. A first step in this work was to conduct a comprehensive desk research to source existing literature on the subject of climate change and agriculture in Ghana.

Indeed the main aim for this study is the initial assessment of the climate change institutional arrangement and instruments for the promotion of climate-smart agriculture and adaptation planning. The study aims at exploring the gaps between the policies in place and the practices in order to make suitable recommendation and effective capacity building options that enact agricultural and equitable food system policies with integrated climate change considerations. Conducting desk research through reading and analyzing policy documents and publications in hardcopy and softcopy in libraries, offices and with experts, or mining the sources of information on the internet is a basic step in conducting this study.
Field work

The study made use of qualitative and quantitative data. The methods for data collection were designed to ensure that these data were obtained from the relevant sources.

There were three main levels at which the field work had to cut across. These were the district/community level, the regional level and the national level. At each of these levels, the field work engaged with the identifiable actors of authority, influence and decision-making as well as the actors whose socio-economic activities were affected by climate change. A study of climate change policy and institutional context needed to engage with all the relevant actors to capture the country situation. This is summarized in Table 1.

Table 1: Types of data and respondents

<table>
<thead>
<tr>
<th>Level</th>
<th>Respondents</th>
<th>Expected data</th>
</tr>
</thead>
<tbody>
<tr>
<td>District/community</td>
<td>District political head/ representative, agric extension officers, Farmer association leaders, opinion leaders; Local chief/ headman, farmers, women</td>
<td>District plans, CC Programmes in the district, experiences in agricultural extension, agricultural production, farmer adoption of CC innovations; Climate change experiences at the community level, farm outputs data, challenges, innovations to CC</td>
</tr>
<tr>
<td>Regional (in-country)</td>
<td>Regional administrators, agricultural officers, farmers association leaders</td>
<td>Regional plans, CC programmes, experiences in agricultural extension, farming and innovation</td>
</tr>
<tr>
<td>National</td>
<td>Agricultural ministry leaders, policy makers, farmer association leaders, climate change policy makers, agricultural researchers (scientists and experts) including from NGOs and international organizations</td>
<td>National agricultural policies and programmes, national agricultural statistics e.g. production trends, public expenditure and investment, CC policies and programmes.</td>
</tr>
</tbody>
</table>

Source: Authors’ construction

Key informant interviews (KII)

At the regional and national levels, KII was the appropriate instrument for gathering information from persons in authority, influence and engaged in interventions aimed at addressing climate change adaptation. This was because the KII allows for direct interaction with these actors and flexibility in the dialogue to source relevant information on the subject of study. The KII was also extended to the regional and
district levels. At the regional level, there were key informant interviews with the political authorities and the regional administrators of agriculture. At the district level, agricultural extension officers were engaged in interviews to identify the bottlenecks in effective dissemination of agricultural scientific knowledge and technologies. Through the interviews with them, information was gathered on what had been done, what was likely to be done and what the prognosis was for the future.

In the end, a total of 31 key informants were interviewed across the three main levels including from three CCAFS districts in the Upper West Region namely Lawra, Jirapa and Nandom. The idea of selecting these districts was to enable climate change experiences to be gathered in the CCAFS districts and use the study outputs to support the platform activities.

**Validation**

As part of the methodology, the draft report was presented for validation on various platforms in November 2014. It was presented to a meeting of the national executive meeting of CCAFS in Accra at the Head Office of the Council for Scientific and Industrial Research (CSIR). It was next presented at a Stakeholders Workshop at the Conference Hall of the Lawra District Assembly in Lawra. It was similarly presented in Jirapa and Nandom. During the validation, the discussions affirmed the key findings of the report and suggestions were made for fine-tuning the recommendations.

**Climate change policy and institutional framework**

The report is organized in five chapters. The chapter 1 gives the introduction with the goals and objectives spelt out. It also gives an elaboration of the methodology and the rationale for the adopted approach to data collection and analysis. Chapter 2 gives an overview of the climate change policy and institutional framework in Ghana with particular emphasis on adaptation, the policy cycle and the corollary issues. Chapter 3 discusses decentralization in Ghana and current experiences within the decentralized structures of governance. Chapter 4 discusses options for improving policies and the institutional framework for climate change adaptation. It draws extensively on the field work and the analysis of the data gathered. Chapter 5 is the conclusion and the summary of recommendations.
National development context

The Ghana Shared Growth and Development Agenda (GSGDA II – 2014 – 2017) is the comprehensive development framework of the country. On one hand it underscores national efforts to ensure an all-embracing policy framework for socio-economic development. On the other hand it exemplifies the recognition of science, technology and innovation as enablers in national development. Ghana with a population of some 25 million people has attained the status of a lower-middle-income country with an income per capita of $1,630 currently (National Development Planning Commission, 2014). The fundamental challenge however facing Ghana is translating its middle-income status in real terms, into the lives of the citizenry. There are sector-specific policies such as in agriculture, industry, health and education that in some aspects elaborate on promoting Science, Technology and Innovation (STI) in the socio-economic activities. There are institutions for policy making and implementation in the respective sectors.

The Ministry of Environment, Science, Technology and Innovation (MESTI) in 2010 was a move to actualize the government commitment to the use of STI in national development. Its key agencies of Research and Development (R&D) such as the research institutes of the Council for Scientific and Industrial Research (CSIR) and the Environmental Protection Agency (EPA) are at the heart of the national efforts to ensure impact of STI on national development. In the particular area of climate change MESTI is a lead actor and the EPA hosts the National Climate Change Committee.

In a broader sense, MESTI spearheaded the formulation of a National Environment Policy (2014) launched by the President of Ghana H.E. John Dramani Mahama. In his foreword to the policy, the President emphasized the constitutional obligations of government to safeguard the environment. The Directives Principles of State Policy (Article 36 (9) of the Constitution of Ghana states that:

The State shall take appropriate measures needed to protect and safeguard the national environment for prosperity and shall seek co-operation with other states and bodies for the purposes of protecting the wider international environment for mankind.” Enshrining the environmental sustainability principles in the Constitution of Ghana, the supreme law of the nation, underscores the premium the nation places on the environment. The National Environment Policy elaborates on the framework for addressing the constitutional obligation of the state towards environmental sustainability. Among other things, the policy outlines the approach for translating
sustainable development into national planning and budgetary processes. It elaborates on the mainstreaming of environmental sustainability in the programmes of the Ministries, Departments and Agencies including Metropolitan, Municipal and District Assemblies. This is an important recognition of the centrality of sustainable management of the environment for socio-economic development.

The Ministry of Food and Agriculture (MOFA) is also the lead actor in the agriculture sector. It exercises oversight of the policy making and implementation activities in the sector. It is under the auspices of MOFA that the critical support functions for agricultural activities take place including agricultural extension services. It is one of the most decentralized government agencies with all its constituent departments decentralized to the district level.

**Climate change and agriculture in Ghana - the policy and institutional framework**

The National Climate Change Policy (NCCP) encapsulates the essence of Ghana’s elaboration of national policy and institutional arrangements for achieving the policy goals and objectives. It is the integrated response to climate change defining the vision as “to ensure a climate-resilient and climate-compatible economy while achieving sustainable development through equitable low-carbon economic growth for Ghana.” (MESTI, 2013, p. 15) The attainment of this is fundamental to sustainable growth in Ghana.

Climate change is “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (UNFCCC, Article 1)”. There are two broad approaches to addressing climate change namely mitigation and adaptation. The former involves ways of reducing the causes of climate change, specifically greenhouse gases such as carbon dioxide, methane, nitrous gases, oxone, chlorofluorocarbons and some other carbon gases. Adaptation is where efforts are made to adapt to the effects of climate change.

In effect, adaptation is the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (NCCP, 2013, p.3). In adaptation, the NCCP highlights four thematic areas that need addressing including natural resource management; and agriculture and food security. The highlight on agriculture is based on the fact that the
country’s economy is agriculture-based. The specific objectives stated are to among others:

- Develop climate-resilient agriculture and food security systems;
- Build climate-resilient infrastructure;
- Increase resilience of vulnerable communities to climate-related risks;
- Increase carbon sinks;
- Minimize impacts of climate change on access to water and sanitation;
- Address gender issues in climate change.

The NCCP establishes the fundamental principles and actions for addressing climate change, which are then to be elaborated into specific strategies and actions in another phase of the policy development.

There are other policies which are relevant to the subject matter of this report. The National Climate Change Adaptation Strategy (EPA, 2011) was prepared with the support of UNDP and UNEP to create the conditions for Ghana’s climate change adaptation.

**The policy formulation process**

The policy cycle in Ghana is fairly generic. A particular policy evolves within a given ministry through four main steps, each of which has its own composite processes.
As illustrated in Figure 1, there are four main identifiable steps in the policy process. Step 1 is where the idea is first conceived and the decision is made to formulate the policy. There may not be any such policy in existence or that there may be an existing one which has become outdated. Once the decision is made, either a committee is set up to work on the policy or some experts are engaged to constitute a team and put an initial draft together. The drafting of the policy can also be the work of a consultant. Once a draft policy is produced, it goes into Step 2.

Step 2 is where the stakeholders of the policy are identified and brought onto a platform to discuss the policy. The norm is to send the policy well in advance to the representatives of the stakeholders, in some cases targeting specific persons with knowledge of the policy content. They read and make inputs for the revision of the policy which is done in Step 3.

Step 3 may not be a simple case of revision. In Figure 1, Step 3 precedes Step 4 because the revision may get to the point where it is necessary to package it for adoption by the highest decision organ of the Executive arm of government i.e. the President and his or her cabinet ministers. Usually, there is a back and forth between Step 3 and Step 4 until the policy gets adopted as a national policy.
As illustrated, there is also two-way communication between the steps and it emphasizes the often iterative nature of the process. The policy is drafted and discussed at the stakeholders’ platforms which may be repeated in various parts of the country in order to enlarge the scope of consultation and the broadening of the stakeholder base.

It is also important to take note of the environment in which policies are made. There are two broad environments – the global environment and the national. In the global environment are all those stimuli coming into the country of political and economic nature, especially the global market conditions. There are multi-lateral and bilateral arrangements which may facilitate or hinder the formulation of the policy. There are developments in science and technology which may also promote or constrain the formulation of the policy.

The national context is very crucial. There are socio-cultural situations which may promote the policy formulation and there are also political and economic conditions which may be promoters or inhibitors. There are important success factors in the national context that may spur the policy formulation. For example, the level of knowledge of the policy issues and the priority level of the policy will determine how well and within what timeframe the policy is formulated.

Generally, the formulation of policy is a challenge. Participatory processes have their complexities. How to engage stakeholders effectively, efficiently and within the constraints of available resources is always a challenge. There is also the limitation of knowledge of the stakeholders to ensure the totality of participation. Sometimes, it is also the case of individual biases where those determining who participates, deliberately avoid including certain people because they are perceived to be anti-establishment or for whatever reason. So the management of the process of stakeholder participation can be a challenge.

In the case of the Ghana National Climate Change Policy, there was an elaborate effort to ensure that the policy formulation was as effective as it should be. The NCCP was formulated from the National Climate Change Policy Framework (Ghana Goes for Green Growth – G4) discussion document. The G4 document had already been accepted by the Cabinet and has been subjected to extensive stakeholder consultation in both the northern and southern regions of Ghana over a two-year period. Stakeholder consultation workshops were organized to enable inputs from civil society organizations, traditional authorities, Municipal and District Assemblies, parliamentarians and high-level experts (NCCP, 2013). It appears that there was some
success in the participatory process. However, despite the efforts, more stakeholders would have liked to have participated and many more would have benefited from the sensitization that usually came with the participatory process. The step which for the NCCP proved to be the most challenging was therefore the Step 2 which required consultation with the stakeholders. What emerged in the study was a perceived marginalization of key stakeholders including agricultural extension officers, farmers and traditional rulers. Step 2 by its nature is always difficult to execute effectively because the resource outlay for broadening the base of participation is very huge. Quite often, resources are limited and therefore only some few representatives of the stakeholders get engaged. This happened in the case of the NCCP formulation.

There is also the policy cycle itself as the policy moves through the various stages of its lifespan as illustrated in Figure 2.

**Figure 2. The policy cycle**

![Policy Cycle Diagram](image)

Figure 2 illustrates the usual cycle of policy formulation, implementation, Monitoring and Evaluation (M&E), review or revision and policy formulation. The main challenge in going through the cycle is the available capacities and resources at each stage of the cycle.

**Highlights of Key Issues**

Both the policy process and the policy cycle lend themselves to analytical scrutiny with respect to the lead question the study aims at addressing. The field work in particular brought out some key issues.
At the national level, it was apparent that because the national actors were responsible for policy formulation, there was relatively high awareness and knowledge about the national policies. Asking about the NCCP specifically and related policies such as the Food and Agriculture Sector Development Policy (FASDEP) and the National Science, Technology and Innovation (STI) Policy, respondents were aware of the policies and seem to be fairly conversant with some of the contents.

At the regional level, awareness of the policies and their contents become problematic. In the specific case of the NCCP, policy literacy became rather reduced. There was awareness that the policy was being formulated, some heard on the news about the launching of the policy. However, they did not know the contents. The situation is much worse at the district level. Most of the interviewees did not even know that a NCCP has been formulated let alone know the contents. One District Coordinating Director stated that:

\"We heard on radio and saw the news on television that His Excellency the President has launched a policy on climate change. We are yet to see the policy document. I believe that in the course of time, copies will be sent to the districts. However, we are the ones to implement the policy and we must know the contents.\"

The point needs to be emphasized that the issue is not about possessing copies of the policy document but about knowing the contents. However, one has to have a copy of the NCCP to read before one can have knowledge of the contents. Apparently, there were some weaknesses in the participatory process in policy formulation. The interviews showed that indeed efforts were made at including stakeholders in the discussion of the NCCP at the formulation stage. As indicated in the policy document, two major stakeholder workshops were organized in two different parts of the country. However, as one interviewer stated, the workshop was seen more as “an exercise for sensitization than for garnering inputs for policy formulation”. The explanation given was that, to garner policy inputs, there can be prior sensitization and then, this has to be followed by an event which allows the participants to come with prepared inputs coming from the collective discussion of the stakeholders. If for example farmers were sensitized to the issues the climate change policy intended to address, farmers would get into their appropriate associations, clusters, groups and networks, discuss and make concrete inputs for the policy. This should apply across all the stakeholder categories. However, this was not done for a number of reasons including inadequate resources.
An important issue which came up clearly in the field work is the limited dissemination of policies to decentralized levels, and more specifically to the district level. Dissemination of the policy product was absent and none of the interviewees had seen a copy of the NCCP even though some of them indicated that they “heard” that such a policy had been formulated. The traditional authority, the Paramount Chief Naa Puowelle Karbo III, had not seen it neither had the District Chief Executive nor the District Coordinating Director. One may argue that the time was rather short for the dissemination, however for such political authorities in the districts, copies of the policies could have been sent to them within days of the launching by the President. It is a practice that should go for all national policies. Again, the point needs to be emphasized that the issue here is not about the possession of copies of the NCCP by the stakeholders. It is about knowledge of the policy contents on the part of the stakeholders which could only be possible should there be copies of the documents for them to read.

The experiences in exclusion of the stakeholders such as the traditional authorities, agricultural extension officers and farmers from the policy formulation process has led to relatively poor buy-in of policy at the grassroots or district levels and therefore little impact of policy at the grassroots.

It also came out that the implementation of policy was being hampered by the limited or in some cases the complete lack of resources. A case in point is the implementation of the agricultural policies. Dissemination of information to farmers to enable good farming practices e.g. planting on time and taking advantage of the early rains, education on application of fertilizers, harvesting and marketing of the farm produce could not be done in the agricultural extension services mechanisms of the District Agriculture Directorates for lack of resources.

**Decentralization of policy to the regional and district levels and climate change policy literacy**

**Decentralization in Ghana - the concept and practice**

It is important to understand the concept and practice of Ghana’s decentralization policy to better appreciate the connection with climate change policy literacy. The 1992 Fourth Republican Constitution of Ghana has enshrined decentralization in the national policy practice. In simple terms, decentralization is the devolution of
political, administrative and financial authority from the centre of government in Accra, to the assemblies.

Article 34 Section 5 (d) of the Constitution demands of the state to “make democracy a reality by decentralizing the administrative and financial machinery of government to the regions and districts and by affording all possible opportunities to the people to participate in decision-making at every level in national life and in government”. Chapter 20 states the essentials for achieving this objective as:

- Transfer of functions, powers, responsibilities and resources from the centre to local government;
- Measures to build the capacity of local authorities to plan, initiate, coordinate, manage and execute policies;
- Establish a sound financial base with adequate and reliable sources of revenue;
- Vest control of persons in the service of local governments in local authorities, as far as possible; and
- Create opportunities for people to participate effectively in governance to ensure the accountability of local authorities.

Thus in terms of governance, public management and administrative system, authority descends from the top hierarchy of government ministries to the districts. It is a concept that was enshrined in a policy and further in a law. A number of laws have been passed that require that ministerial and other government functions have to be devolved to the regions and subsequently to the districts. These include the Local Government Act, 1993, Act 462, the National Development Planning (System) Act, 1994, Act 480, the Civil Service Law, 1993, PNDCL 327, the District Assemblies’ Common Fund Act, 1993, Act 455 and the Local Government Service Act, 2003, Act 656. Also, these are subsidiary legislations including individual Establishment Instruments of the respective District Assemblies, and the Local Government (Urban, Town, Zonal Councils and Unit Committees) (Establishment) Instrument, 1994 (L.I 1589). The important point to note is the extent to which the institutional framework has been well defined for the implementation of the decentralization policy. It has implications for the effectiveness of policy formulation and implementation across the key levels of governance structure i.e. national, regional and district. But ultimately what matters is to ensure the kind of governance system which brings development to the numerous discrete communities of Ghana. In essence, decentralization is about community development (Kunbuor, 2000).
Currently efforts have been made in the implementation of the decentralization policy with important ministries such as MOFA, the Ministry of Education and the Ministry of Local Government experiencing the decentralization. Government agencies such as the Ghana Statistical Service and the Environmental Protection Agency are also decentralizing and opening offices in the regions and some districts. At present, MOFA is the ministry, which has been most decentralized. However, there are challenges in the MOFA’s experience, which came to light in the course of the field work in the conduct of the KII with various respondents.

The regional experience

The Upper West Regional Directorate of MOFA based in the regional capital town of Wa has its identifiable divisions reflecting those at the national level e.g. Agricultural Extension Services, Plant Protection and Regulatory Services, Crops Services, Animal Health, etc. The Regional Directorate has developed a Regional Agricultural Plan for Upper West which is yet to be adopted. But it is commendable as it appears to be the only initiative of its kind in the country. The plan is an opportunity to mainstream climate change intervention actions into the regional directorate’s programmes.

Although Upper West generally has officers in charge of the divisions at the regional level, some offices are vacant. There is the problem of finding suitable and qualified officers willing to serve in those positions to be appointed. In the districts, the human resource situation is even worse. Several positions are not filled due to the lack of suitable officers.

The district experience

The District Agriculture Directorate is considered to be part of the District Assembly in the decentralized system. It is supposed to receive its resources mainly from the mobilized resources in the districts. The Director of Agriculture is part of the District management and he or she participates in all decision-making in the district. It implies that for climate change policy implementation in the district, the Director of Agriculture and the staff of the directorate are very important actors.

The District Chief Executive (DCE) heads the district and is responsible for the administration and management of the district. In other words, he is responsible for planning, coordination, budgeting, implementation of national policies and programmes in the district. He or she superintends over the decision-making process that ensures that resources are allocated (or not allocated) to climate change programmes.
Three districts were covered in the Upper West Region in the field work namely Jirapa, Lawra and Nandom Districts with the district capital towns being Jirapa, Lawra and Nandom respectively. The field studies gave interesting observations about agriculture in the three districts that related to the theme of climate-smartness in food security and agriculture.

The Lawra District is one of the eleven Districts that make up the Upper West Region. It is bounded to the East and South by the Nandom District and to the North and West by the Republic of Burkina Faso. The district has a population of 100,929 (Ghana Statistical Service, 2010). The climate of the district is the tropical continental type with the mean annual temperature ranging between 27°C to 36°C. The period between February and April is the hottest. Between April and October, the Tropical Maritime air mass blows over the area which gives the only wet season in the year. The experiences of climate change manifests in changes in the weather pattern (Lawra District Assembly, 2012).

The district lies within the Guinea Savannah Zone which is characterized by short grasses and few woody plants. The greatest influence on the vegetation is the prolonged dry season. During this period, the grass becomes dry and the subsequent bush burning leaves the area patchy and mostly bare of vegetation. Consequently, the torrential early rains cause soil erosion. Bush burning reduces the vegetative cover and transpiration and this affects average annual rainfall totals.

Farming is the main preoccupation of the people of the Lawra district. Some of the main crops cultivated in the district include; millet, maize, cowpea and groundnut. Out of the crops, groundnut and cowpea record very high level of production. Some of the people are thus engaged in the processing and marketing of these crops. Other business activities undertaken in the district include; pito brewing, shea butter processing, rice processing, basket and cloth weaving, pottery, and stone quarrying. There is fishing too along the river banks (REP, 2013).

The vegetation of the district supports livestock production. Some of the livestock that are reared include sheep, goats, guinea fowls and other forms of poultry and pigs. Livestock production is undertaken by almost every household in the district however not on a commercial basis. The Lawra District has a huge comparative advantage in livestock agriculture especially goat and sheep rearing. With the ‘livestock market’ at Babile, buyers and sellers converge there to trade among themselves. The market
serves as a platform for which sheep and goats from Burkina Faso are sold (REP, 2013).

Jirapa District is a district created in 1988 from the Lawra District and known as Jirapa-Lambussie District. In 1999, Lambussie was separated from Jirapa giving birth to the Jirapa District, which is currently estimated to have a population of over 58,000 (MOFA website). The total area of the district is 1,667 square kilometres and shares borders to the south with Nadowli District, to the east with Sissala District, to the West with Lawra District and north with the Lambussie-Karni District.

It is a farming district with the sandy loam soil being suitable for cultivation of groundnuts and cowpea. The soil being generally fertile, other crops are widely grown including maize, sorghum, millet and rice. Livestock rearing is also important in the district and livestock farmers rear cattle, pigs, sheep and goats.

Nandom District lies in the north western corner of the Upper West Region in Ghana between. It is bounded to the East and South by the Lambussie and Jirapa Districts respectively and to the north and west by the Republic of Burkina Faso. The total area of the District is estimated to be about 567.6 square kilometres constituting about 3.1% of the Upper West Region’s total land area. There are about 84 communities with 95% of the inhabitants in the rural areas primarily engaged in crop and livestock farming. The population of the Nandom district is over 50,000 and it is the most densely populated district in the region with the administrative capital being Nandom.

Agriculture accounts for about 80% of Nandom District’s economy with the Guinea Savanna grassland vegetation being very suitable for livestock rearing. Poultry farming is a major agricultural venture in the district. The main crops grown are corn, millet, cowpea and groundnut. However food production in the district is low to the extent that food commodities are imported from Burkina Faso, the Techiman and other districts in Ghana. Erratic rainfall patterns and poor soil fertility in many areas are negatively affecting agricultural production. There is also the bad practice of bush-burning for farming and hunting which contributes to the degradation of the land and worsens climate change impacts.

1 See the website on districts in Ghana. http://www.ghanadistricts.com/districts/?news&r=9&_=224 the information on the districts are largely sourced from this website.
Indeed in the three districts of Lawra, Jirapa and Nandom, traditional farming practices and environmental behaviours are impacting negatively on the environment causing degradation and deforestation. There is bush burning and the cutting down of trees and charcoal production. The combination of all these practices culminates in the kind of environmental degradation which is already affecting people’s livelihoods negatively. It calls for climate-smart interventions.

In Lawra District, the CCAFS Platform is an intervention to address climate change impacts by fostering stakeholder actions on adaptation and behavioural change. In Jirapa District there is also a CCAFS Platform as there is also in Nandom. In conducting the interviews in the districts, there seems to be no significant difference in the level of awareness of the policy products and processes in these districts. Policy literacy is a problem. Assuming that the highest authority in each of the districts is the DCE, their not even seeing a copy of the NCCP is a significant failing in the process of moving policy from the formulation stage to the implementation stage. All the DCEs stated that they knew about the formulation of the policy. However, none has seen a copy (as at the time of interview). The issue is not so much that of having a copy of the NCCP in one’s possession. The issue is about knowing the contents by reading the policy document and then incorporating the relevant aspects into one’s work. As one of them put it:

“We will get copies from Accra and we will use the policy to guide our work in the district. However, we are already taking action to address climate change impacts. For example, we have programmes to educate farmers about the disastrous effects of bush-burning. But having the policy, knowing the details of the contents and working closely on the implementation of the policy will be highly beneficial."

The Agriculture Directorates in the three districts also made complaints of lack of resources for implementation of their programmes. They had not seen the NCCP but they had planned their work for the year 2014 and resources were needed to get to the farmers and extend services to them in line with their annual plan. The resource constraints did not make it possible to do their work. The CCAFS project therefore promises to be very beneficial to the three districts in making some resources available.
Policy literacy and the climate change challenge

Policy literacy generally refers to the extent to which there is knowledge of a given public policy in terms of the objectives, the envisaged actions and expected outcomes. The effective implementation of public or national policies depends a great deal on the extent to which the critical actors in the policy cycle are knowledgeable in the contents of the policy. Public officers such as in the Agriculture Directorates in the regions and districts, farmers, traditional authorities and District Assembly members need adequate knowledge of the national policies to facilitate implementation. For climate change, policy literacy is essential in creating the enabling environment for addressing climate change impacts.

The field work in the regions and the three districts revealed the inadequacies in policy literacy at the regional and district levels as far as the national climate change policy is concerned. The officers at the regional level knew there was the NCCP and that it had been launched by the Head of State. However, they had not seen a copy and therefore were yet to apprise themselves of the contents. Therefore on the question of the dissemination of the policy product, it has not been done.

Photo: The researcher with the District Agriculture Director in Jirapa
It may also be argued that not seeing a copy of the NCCP did not mean there was no implementation. In reality all the District Agriculture Directorates had existing programmes drawn in line with the directives of the Regional Directorate and for that matter the Ministry of Food and Agriculture. Besides, being part of the District Assemblies, the District Agriculture Directorates formulated plans for the district along with other officers of the district administration. Nevertheless, on some of the specific issues elaborated in the NCCP, there is need for sufficient knowledge to strategise towards implementation in the district. Even the key principles espoused under the Agriculture and Food Security strategic focus areas may need to be well-explained to the actors in the districts for effective operationalization of the principles:

- “Understanding the sustainability of natural resources including land, forest, water and genetic biodiversity is significantly influenced by agricultural practices.
- Need for sustainable agricultural systems as the fundamental basis for achieving national food security and poverty reduction.” (MESTI, 2014; pp 76-77)

The enhanced knowledge of the NCCP will then guide the design and implementation of the policy actions outlined in the policy document such as:

- “Prepare and enforce spatial plans to address conflicts between peri-urban agriculture and human settlements;
- Improve productivity through improved farming technologies and practices such as the integration of trees into farming systems, integrated nutrient management under various crops, green/ organic farming, etc.;
- Promote and support agricultural diversification (livestock-crop integration as well as management practices) as a coping strategy and for income generation;
- Provide sustained support in the use of simple agronomic soil and water conservation measures (e.g. agro-forestry, crop rotation, tied ridging, mulching, contour earth mounds, vegetative barriers and improved fallow)” (MESTI, 2014; pp. 78-79).

Whereas some of these policy actions may be in existence already in the annual programmes of the District Assemblies, there is the need for effective and well-thought-through strategies to implement the relevant policy actions in the districts especially in the context of available resources. It means that knowledge of the policy
content is important and therefore, the dissemination of the policy document is critical.

At Nandom, one interviewee underscored the point that getting hold of the policy document would enhance their actions. The policy document would provide important inputs for any policy discussions at the local level. The Ministry of Local Government and Rural Development (MLGRD) conducts annual monitoring and evaluation of Assemblies known as Functional and Organisational Assessment Tool (FOAT) with indicators including climate change actions, gender considerations, Internally Generated Funds (IGF), contract management, audit, procurement, water and sanitation and so on. In monitoring and evaluating climate change, visits are even made to the field to check on the evidence. Given that the evaluation is made whether resources are transmitted to the district or not, one interviewee quipped:

“We receive the lashes whether or not we deserve them.”

NGOs were also not as engaged as they should have been in the policy formulation. However, there was awareness that the NCCP had been launched. As one NGO officer put it:

“The content of the NCCP could improve the functioning of the District Food Security Network of which our NGO is a member. We are operating at the community level promoting sustainable agricultural practices. We need the details of the NCCP to enhance our activities.”

Another NGO officer also expressed similar views. The NGO, Langmaal Centre for Rural Development (LACED) also promoted sustainable agricultural practices including Farmer-managed Natural Regeneration of Trees (FANRT). He was excited to learn that district level platforms on Science-Policy exchange were being established for climate change information sharing and policy influence. (A copy of the NCCP was presented to the NGO.)

Highlights of the key issues

During the data collection, a number of issues came up. The analysis of the qualitative and quantitative data is aimed at describing the situations prevailing at the various levels of data gathering and reflective of the scenarios for climate change impact interventions. In this regard, the analysis is based on:
• Identifying gaps in policy and policy actions; what are the gaps in existing policies with respect to stimulating action for food security and water sustainability? What are the gaps in implementation of policies and programmes and in public investment and expenditures?

• Strengths and weaknesses in stakeholder linkages; Who are the critical stakeholders at the identifiable levels? How strongly are stakeholders linked from bottom-up in the efforts to undertake action to address climate change adaptation? How can linkages be strengthened and sustained?

• Differences between CCAFS selected districts: is there observable differences in the selected areas with respect to the data e.g. farm outputs, experiences to technology or innovation adoption? What factors account for the differences?

Towards improving the policy and institutional environment

Overview of the entry points

In investigating the key bottlenecks to policy formulation and implementation, there are two broad categories. There are the bottlenecks that pertain to the internal environment of the region or district and there are those bottlenecks pertaining to the external environment. In the internal environment, the socio-economic and cultural attributes are vital. The extent of the poverty, the adult illiteracy level, inadequate mobilization of funds, the political (dis)agreement prevailing among the leadership and more specifically between the government authority and the traditional authority, are some of the bottlenecks constraining policy implementation.

The District Assemblies are functioning as expected going by the responses from the district authorities (e.g. District Chief Executives, District Coordinating Directors and the District Assembly members representing electoral areas). The constitution of various committees has been done and some programmes have been initiated in line with the district plans. But implementation of these programmes is constrained by the inadequacy of resources.

There is however need to utilize the traditional structures more effectively. In the northern parts of Ghana, traditional authorities, and specifically the chiefs, are very much recognized by the local communities. They serve as pivots for harnessing the people’s resolve and commitment to programmes and initiatives. As Naa Puowelle
Karbo III, the paramount chief of Lawra explained, traditional authorities cut across sectors of the economy. He explained that:

The mandate of the chief embraces all aspects of the people’s life. Now most chiefs in northern Ghana are highly educated and enlightened and this manifests in some of the positive initiatives the chiefs launch in their paramountcies. In Lawra for example, the Kobine festival was used as a point for awareness creation and public education on issues of direct impact on the lives of the people. During the durbar, the people were educated on improved agricultural practices and issues pertaining to climate change adaptation. The traditional structures already exist and are respected and therefore the state has to take advantage of it.

**Photo: Naa Puowelle Karbo III the Paramount Chief of Lawra in his palace**

The need for engaging traditional structures also stems from the importance of identifying the specific community needs and addressing them. Different communities have different priorities and interests and therefore development policy has to take cognizance of the heterogeneity of needs in the different parts of the country and ensure they are well catered for (Kunbuor, 2000). To do this, traditional systems are the best structures to engage. The external bottlenecks come from some of the practices from outside of the districts which invariably constrain policy implementation. For example the failure to ensure policy implementation can create problems for not only the public officers of the districts but also entrepreneurs and the private sector actors in the policy cycle. A Chief Farmer was interviewed in Wa. He had been farming for about 40 years and had won a number of prizes for including the National Best Farmer. He had machinery and large acreages of crops and had livestock. However the poor implementation of the policy on subsidized fertilizer and
the distribution of seeds had affected his operations. Again, the macro-economic conditions under which he farmed e.g. the high interest rates on bank loans, the relatively high cost of energy and high cost of farm inputs had made him begin thinking of giving up farming: “Farming does not pay any more. I wish I could sell my tractors and lands.”

Such despondency especially in the localities of food production does not augur well for the future of agriculture in Ghana. It is a barrier to addressing fundamental challenges like climate change because such stakeholders giving up hope in agriculture are less likely able to contribute to addressing the challenges.

Policy documents are not translated into the local languages. So there is no easy and accessible means of getting the people to educate themselves on the policies. But the translation of the policy into the local languages is still not the main solution. One has to be able to read before one can access published policies in local languages. Yet in the districts the adult illiteracy is rather high as Ghana has an estimated adult literacy of 64% of the population. Respondents were of the view that translation into the local languages will demand a lot of resources with its attendant needed programme of mass education. The resources could be better channeled into the existing school system to improve the quality of education and improve access.

Communication linkages

Communication linkages are the building blocks of effective policy communication. In the implementation of the policy, communication is needed for educating the stakeholders on the essentials and details of the policy. What emerged from the KII at the regional and district levels is a case of some communication inadequacies. There appears to be some clogging in the communication channels which very much has to do with the administrative communication lines not being effectively used. For example, a project on grasscutter rearing was designed for Jirapa and the agricultural officers did not know about it until the project officers moved into the districts. Even at the conceptualization stage of the project, the officers could have been brought in given their knowledge of the terrain.

Human resource development and deployment

Human resource needs became evident in the field work in the Upper West Region and specifically in the districts. Table 2 illustrates the needs.
Table 2: Summary of Field Staff Requirements in Jirapa, Lawra and Nandom (Source: MOFA, 2014 (Document of the Upper West Regional Office of MOFA))

<table>
<thead>
<tr>
<th>Districts</th>
<th>Graduates</th>
<th>Extension Field Agents</th>
<th>Veterinary Field Agents</th>
<th>SRID/ MIS Agents</th>
<th>Total for Each CCAFS District</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>A N</td>
<td>A N</td>
<td>A N</td>
<td>A N</td>
<td>A N</td>
</tr>
<tr>
<td>Jirapa</td>
<td>4 2</td>
<td>7 6</td>
<td>4 8</td>
<td>4 2</td>
<td>19 18</td>
</tr>
<tr>
<td>Lawra</td>
<td>3 3</td>
<td>7 3</td>
<td>7 3</td>
<td>3 4</td>
<td>20 13</td>
</tr>
<tr>
<td>Nandom</td>
<td>0 6</td>
<td>3 6</td>
<td>4 6</td>
<td>0 5</td>
<td>7 23</td>
</tr>
<tr>
<td>Total</td>
<td>7 11</td>
<td>17 15</td>
<td>15 17</td>
<td>7 11</td>
<td>46 54</td>
</tr>
</tbody>
</table>

*A= Available  N= Needed

There are currently 13 vacancies in the Lawra District Agriculture Directorate and 18 vacancies in the Jirapa directorate as shown in Table 2. The Nandom Agriculture Directorate has 23 vacancies. In all of the three CCAFS districts in the Upper West Region, some 54% of the approved officer positions are vacant. In fact, it has been established that in 13 districts of the Upper West Region, there are up to 209 vacancies of the categories listed in Table 2. That is a significant gap in human resource which negatively affects the operations of the agriculture directorates in the region.

The inadequacy of human resources for the implementation of agricultural policies and programmes came up for particular emphasis in the KII with the Regional Director of Agriculture (RDA). At the regional level, there is almost the full complement of officers heading the identifiable units. However, the position of Farm Manager is vacant as well as the Regional Veterinary Officer. The vacancies in the districts are of great concern. As the RDA explained: “It is in the regions and the districts that the translation of the policies into reality has to be done. For this we need qualified, efficient and well-motivated staff. Yet we are lacking in some units...”
It has implications for policy implementation and the quality of outputs in the execution of the programmes. For climate change in particular, the educated and well-trained human resource is crucial to unravel the intricacies of policy and drive the implementation of the agricultural programmes.

**Resource mobilization**

Funds flow into the District Assemblies from the District Assembly Common Fund (DACF). However, the districts are supposed to mobilize resources through levies they impose on commercial activities in the districts, property rates and in a few cases, projects that are implemented by government institutions and NGOs. CCAFS for example is using donor support to implement programmes that will enhance response to climate change in the Lawra District. There are wide differences in the extent to which districts can have resources as it depends a great deal the natural resources in the districts, and the innovativeness of the district leadership in resource mobilization. Therefore the situation in which no operational funding has been extended to the districts has created serious challenges.

An issue that also surfaced in the KII in the districts relate to mobilization of resources from donor agencies by stakeholders at the district level. Generally the bulk of donor resources are mobilized at the national level. However, the ‘trickle-down’ effect is not to the expectation of the district officers. As the District Coordinating Director of Lawra put it:

"Accessing donor resources from the district is extremely difficult. It is not so much the geographical distance, but the difficulty in identifying willing donors and convincing them that even though they have provided resources at the national level,
they still need to come into the districts to support peculiar development actions such as for climate change.”

A District Agriculture Officer also illustrated the case of efforts to obtain resources for agricultural extension services in Jirapa. Farmers timing of the rains is crucial for good harvest. With the lack of government subvention to enable the officers to get to the farmers in the villages and provide extension services, efforts were made to find non-governmental resources:

“An NGO launched its own innovative initiative assisting us to provide the agricultural information to the farmers. The NGO works in collaboration with the district agricultural extension officer to record needed information e.g. the time for preparing the land for farming and planting, measures to contain pest and disease infestation and measures against deforestation and climate change adaptation behaviors. The recording is taken to the villages and played to the farmers when they assemble late in the evening after their day’s work. However, the critical funding from donor or non-governmental sources to carry out their normal activities is not provided.”

The issue of not being able to get donor resources is multi-faceted. However, operating at the national level and specifically in Accra has its advantages. There is no lack of information for those ready to look for information. One can easily get interaction with the authorities of the funding agencies or one can link up with others with the information on getting funding resources. For example, the Vice Chairman of the CCAFS National Committee and a member of the National Climate Change Committee, Mr. Delali Nutsukpo was able to attract some donor funding for a project. Such an initiative might not have succeeded if he was working in the district.

**Stakeholder participation in policy making**

Stakeholder participation in policy making is a complex issue. The fact is, determining the extent of representation of the stakeholders needed in the policy discussion is extremely difficult. Quite often, the stakeholders are not that effectively organized. It came to light in the KII with the farmers in Lawra that their associations virtually existed in name. The farmers interviewed were fairly prominent farmers. But they had not been involved in any policy discussions either through their association or in their individual capacity.
In the specific case of the NCCP, the field work found out that it was not only (ordinary) farmers who were not included in the policy discussions but some of the prominent opinion leaders. The organisers might not have intended exclusion on purpose. But what it means is that, in the implementation of the policy, the necessary understanding of the policy is lacking and the needed buy-in is missing.

The policy cycle extends beyond implementation to policy review which in a sense is like policy formulation. Greater efforts and investment have to be made to widen the scope of stakeholder engagement. Even at the implementation stage, participatory processes in the design of projects and their execution will enhance outputs.

**Need for localization and customization of policy**

At district level, the decentralization laws require that districts make their own plans. For climate change, such customization is vital to ensure the locally specific climate change challenges to be addressed. However, it became clear that climate change policy customization cannot now until the policy product is well disseminated to the regions and districts and has been assimilated into the District Assembly mix of policy documents.

Indeed, national level policy makers need to know that their work is not done until the policies get to the districts and grassroots and implementation is going on. One may expect the district actors to take up the policies. But what are the mechanisms for their up-take? Is it that when the publishers put the policies in print then one expects the district actors (e.g. assembly members and officers, farmers and traditional rulers) to go into the shops looking for copies? This is not likely. There has to be premium on disseminating policy documents to the decentralized levels in the same way that premium is put on the finalization and launching of the policy documents.

The issue of accessibility also related to the question of translating policies in the languages. Whilst it may be desirable to have these translations, it may not be practical – though one can make exceptions to the main languages spoken in Ghana e.g. Twi, Ewe, Ga and Dagbani.

There appears to be an inverse relationship between decentralization and policy literacy. Ghana has succeeded in implementing its decentralization policy. But it has also brought challenges in transmitting policies to the decentralized levels – the district assemblies and electoral areas and unit committees. We may hypothesize that the higher one goes in decentralization, the lower one gets in policy literacy. In other
words, as decentralization becomes more implemented and effective, the policy literacy tends to reduce at the decentralized units. It is not to say that decentralization leads to policy illiteracy. What was observed in the field work merely seems to support this hypothesis. It is a subject worth researching into.

Nevertheless, the minimal policy literacy at the districts is a challenge to the capacity of the district actors to launch initiatives for development. For example, policy literacy has investment implications for e.g. climate-smart investment – at the national level, the actors take advantage of it and attract funds/ projects. The district assemblies usually are not able to attract funds or projects. It is an illustration and consequence of the policy literacy.

The issue also borders on how the policy content is framed. We expect the same information content at the decentralized levels as we have at the national level theoretically. However, it is not the case. This is not so because of various constraints such as the challenge of knowledge at the national level of all the needs at the individual community levels across the country. The content of policy is therefore framed in broad terms to capture the needs across thousands of communities in the country.

Still at national level, the policy actors need to know how to transmit policy information in a manner and through media which are effective and will yield results. Today the channels of communication have mushroomed and the mushrooming has presented opportunities for information dissemination. However, it calls for certain skills not only to know how to use specific channels but also how to prepare the information for dissemination. In the past, the information vans were used to disseminate information. MOFA has a dissemination van and an outfit called AGRIMAG equipped for dissemination. Ministry of Information seem to put much emphasis on the “Meet the Press” in Accra for the ministries to show case the efforts the ministries are putting into addressing mandates. However, some efforts could also be invested in information outreaches outside of Accra and into marginalized areas such as Upper West.

Some of the district officers are making efforts to get things done. An example is the way agriculture extension officers are working in the districts. Strategies for dissemination include use of FM stations and using playback taped messages to rural communities in the evening (as in Jirapa). Initially we had the URA Radio covering the Upper East and Upper West. Now we have in most districts. These are
opportunities for policy dissemination. Who packages, who does the dissemination with what skills and what resources. Particularly for climate change or climate smart education, these media offer innovative opportunities. The commercialization of the FM stations means there is need for sponsorship and resource mobilization for information dissemination. There is the challenge of skills to package the information especially the cultural packaging. It requires the application of indigenous knowledge. Story telling is a key mechanism for communication and mass education. Telling stories and making real life analogies in disseminating the information.

The platforms are institutional innovations for addressing the gaps whether as relating to product or process. They can only be complementary and not meant to replace the structures such as the District Assemblies or traditional authorities. The platforms can facilitate the work of these structures to enhance; policy dissemination and implementation. However, the platforms need the support of these existing institutions or structures. The platform is a multi-stakeholder representation.

**Issues from the validation**

The validation of the draft report was done at the various levels of data collection including the three CCAFS districts. The discussion underscored the key issues highlighted in the report. For example, concerning awareness of the NCCP, four out of the 74 participants at the validation workshop in Nandom ever heard about the launching of the NCCP. That an overwhelming 95% did not even hear about the launching nor the existence of the policy, illustrates the huge disconnect in policy formulation and policy dissemination, which ultimately hampers policy implementation.

Generally at the validation, the comments reiterated the urgent need to strengthen implementation strategies for the NCCP to make impact in the society and on the environment. A point was made that a number of district plans were made which were never implemented. Participants agreed fundamentally that all the needed resources – be they financial or human – should be made available for implementation at the districts. This is the only means of ensuring sustainable development.

The validation sessions particularly emphasized the need to ensure adequacy of human resources in the districts for the implementation of climate-smart agricultural programmes. There are concerns on the part of government that the expenditure on salaries and wages of public sector workers is huge and this constrains investment in important development projects. Government has therefore placed a ban on public
sector employment. However, there can be rationalization of public sector employment such that redundancies are moved to places and positions where they are needed. Many public offices in the urban areas are over-staffed while some rural public offices are under-staffed. Moving human resources into vacancies is mainly about creating effective incentive packages. The implementation of the climate change policy to enhance agriculture is of such priority that effective strategies need to be adopted to address the gaps in human resource in the districts.

Conclusion and recommendations

The national policy for climate-smart agriculture is well-developed in terms of the product which was given a huge endorsement with launching of the NCCP by President John Mahama, the Head of State. However, considering the key steps in the policy formulation process, there were some drawbacks in the policy formulation process. Besides, the dissemination of the policy document was not as expected. Thus far, the dissemination did not reflect the high importance attached to the product as it still hanged at the national level. In this dispensation of decentralized government, the policies should have been disseminated to the district assemblies. This is critical for effective implementation at the district and community levels.

Admittedly, the policy process was designed to engage stakeholders in formulation. It appeared that though some efforts were made in the specific case of the National Climate Change Policy, inclusion in the process did not reach the grassroots. Thus there was weakness in the process. It led to a situation where there was limited awareness and knowledge about the policy especially in the decentralized levels of society. Policy literacy was at its lowest ebb.

To address some of the key challenges identified, it is vital to strengthen the vertical and horizontal channels of policy communication. The communication from the national sources to the districts must be improved through more frequent interaction and through the administrative letters. In the regions and districts, horizontal communication to reach out to all stakeholders can be greatly facilitated by the use of the electronic media. FM radio stations are in almost every district. Communicating to implement policies can make good use of these. But the communicators need to be innovative in their communication. It calls for capacity building for the respective officers in the districts to enhance their communication skills.
Policy implementation cannot happen without financial resources. In the particular case of the government, the law enjoins government to transfer resources from DACF to the district assemblies for development projects. More importantly, government need to prioritise policy implementation activities in the districts and therefore give the needed subvention to fund their operations. The lack of government subvention for operations is affecting the work of the decentralized government organs such as the directorates of agriculture in the districts. It in turn affects the farmers and others in the value chain of the agricultural practices in the regions and districts.

There are other challenges that have to be addressed for effective climate-smart agriculture. Of priority consideration is addressing the gap in human resources in the districts. For agricultural programmes to be effectively implemented in the districts most vulnerable to climate change impacts, the requisite human resources must be engaged. This calls for incentive packages for public sector agricultural officers in the districts. Where necessary, there must be capacity building to enhance skills and knowledge in climate-smart agricultural practices. The point cannot be over-emphasised that it is crucial that human resources must be available in their numbers and quality in the districts.
Appendix

Appendix 1: Interview Guide for Key Informant Interview

(NOTE: These questions are only meant as guides to the interaction with the key informants. The main areas are highlighted and questions need to be asked in these areas. However, not all questions are compulsory. Follow-up questions are useful in seeking clarification and understanding.)

1. How is CCA policy currently being developed?
   - The country currently has certain relevant climate change policy documents? (e.g. national climate change policy, climate change adaptation policy or strategy or plan, agriculture policy or plan. Specifying the relevant one(s) the questions are:
     - How were they formulated or developed?
     - What was the process of development? Was there stakeholder participation and to what extent? Which stakeholder was involved? At which step of the process? For what tasks/ What was their contribution?
     - What are the main institutions of implementation of the policies? (What is the institutional and legislative framework?)
     - What is the state of implementation of the policy?
     - What is the people’s perception about the current climate change policy?

2. The main strengths/ weaknesses/ shortcomings of the process?
   - How do you assess the process for policy formulation and is there any way it could have been improved?
   - What are the strength and weaknesses of the process?

3. Is Climate Change and Agricultural policy decentralized, both as a product and a process?
   - Have the policies been translated to the district levels?
   - Is the implementation of the policies going on at all levels of the governance and society?
   - Can we find the policy documents at the relevant offices of the districts and are they being implemented?

4. What does it take to make the process/product more efficient/effective?
• With the implementation of the policy, what is needed to implement the policies effectively and efficiently?
• What are the innovative lessons coming from the implementation?

5. What are the main leverage / entry points for improving the current situation?
• What are the key bottlenecks?
• Do we have a regular review process? (e.g. Every 5 years?)
• Are any of the policy documents translated into any of the local languages? Is it necessary to translate the policy documents into national languages?
• What are the channels of communication of the content of the policy documents? (e.g. radio and television?)
• What are the opportunities for public information and public education on policies on climate change adaptation?
• What kinds and levels of public investment have been made in the implementation of the policies? What about donor support for the implementation? Private sector support?

6. Policy literacy
• What is the level of knowledge (of the key informant) of the climate change adaptation policy? How familiar is he/she with the content of the policy?
• What is the respondent’s own assessment of the policy literacy of the climate change policies among the technocrats in the relevant ministries, in parliament and among the key stakeholders in the regions and districts?
References


IFAD (2011), Strategic Framework 2011-2015; Enabling Poor Rural People to improve their food security and nutrition, raise their income and strengthen their resilience, IFAD, Rome.


Lawra District Assembly (2012) District Profile, Lawra District Assembly, Wa.
MEST (2010) Ghana Goes for Green: National Engagement on (Climate Change),
MEST, Accra.

MEST (2011) National Science, Technology and Innovation (STI) Development
Programme of Ghana (STIDEP I), Ministry of Environment, Science and Technology,
Accra.

MESTI (2013) Ghana National Climate Change Policy, Ministry of Environment,
Science, Technology and Innovation (MESTI, Accra)

MOFA (2012) Food and Agriculture Sector Development Policy (FASDEP), Ministry
of Food and Agriculture (MOFA), Accra.

MOFA (2012) METASIP, Ministry of Food and Agriculture (MOFA), Accra
National Development Planning Commission (2014) Ghana Shared Growth and
(NDPC), Accra

Enterprises Programme, Kumasi.

UNDP/EPA Policy briefs on Climate Change Adaptation, EPA, Accra
The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is a strategic initiative of CGIAR and Future Earth, led by the International Center for Tropical Agriculture (CIAT). CCAFS is the world’s most comprehensive global research program to examine and address the critical interactions between climate change, agriculture and food security.

For more information, visit www.ccafs.cgiar.org

Titles in this Working Paper series aim to disseminate interim climate change, agriculture and food security research and practices and stimulate feedback from the scientific community.

Research supported by: