



**LUND UNIVERSITY**  
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## **Unravelling the GMO Policy-Making Impasse**

A Qualitative Content Analysis of the Perceptions of Ghana's Anti-GMO  
groups on Public Participation and Trust

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## **Abstract**

In many countries, GMO policy-making has been characterised with a lot of controversy, participation and trust being the most pressing issues. The ongoing Ghanaian GMO policy-making is not spared of the controversy. The GMO Bill which was introduced in the Ghanaian Parliament in 2013 remained unpassed amid accusations and counter-accusations between government-led groups and civil society-led anti-GMO groups. The entrenched positions taken by the pro-GMO groups and anti-GMO groups have stalled the policy-making process. This study was set out to examine through the lens of the anti-GMO groups how lack of public participation and trust contributed to the policy standoff.

A directed qualitative content analysis and critical discourse analysis were conducted on twenty (20) news articles and publications on the activities of Ghana's anti-GMO groups. Using the internet, text materials were gathered from media and anti-GMO sources. The analysis was enabled by a priori categories and coding scheme which were developed based on the study's purpose, research questions and previous literature on public participation and trust. The analysis was based on the following categories: Ghanaians Being Misled or Misinformed to Accept GMOs; GMO Bill Making Non-inclusive or More Consultations Needed; Being Disregarded or Denied Access to Information; Decision-makers/GMO Policy-Making Violating or Disregarding Rules; GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations; and Being Open to Dialogue.

Findings from the analysis of anti-GMO groups' perceptions on the policy-making included: lack of public and stakeholder education and engagement on GMOs; government officials and scientists were perceived to belittle contributions of anti-GMO groups; GMO Bill viewed as an illegality; anti-GMO groups showed confidence in Ghana's law courts; and anti-GMO groups made contradictory demands of the government. The findings were consistent with previous research which showed that public education on Ghana's GMO policy-making was lacking. Although the findings validated previous literature, generalised conclusions cannot be made about the policy standoff since the study examined only the perceptions of anti-GMO groups. The study contributed to studies on GMO policy-making and governance in Ghana.

Keywords: GMO Bill, GMO Policy-Making, Democracy, Governance, Government Officials, Public Participation, Trust, Development and Ghana

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# Table of Contents

|   |           |
|---|-----------|
| <b>1. INTRODUCTION.....</b>   | <b>1</b>  |
| 1.1 Background.....   | 1         |
| 1.2 Context and Need for the Study.....   | 2         |
| 1.3 Democracy and Policy-Making in Ghana.....                                     | 4         |
| 1.4 The Politics of GMO Policy-Making in Ghana.....                               | 6         |
| 1.5 Purpose of the Study.....   | 7         |
| 1.6 Research Questions.....   | 8         |
| <br>  |           |
| <b>2. PREVIOUS LITERATURE AND THEORY .....</b>                                    | <b>10</b> |
| 2.1 Introduction .....  | 10        |
| 2.2 Defining Trust.....   | 10        |
| 2.3 Defining Participation.....   | 12        |
| 2.4 Representation and Participation in a Democracy .....                         | 13        |
| 2.5 Trust and Democratic Governance .....   | 15        |
| 2.6 Theory of Trust.....  | 17        |
| 2.7 Public Participation as Theory of Trust .....                                 | 18        |
| 2.8 Participatory Development .....   | 20        |
| <br>  |           |
| <b>3. METHODOLOGY .....</b>   | <b>22</b> |
| 3.1 Introduction .....  | 22        |
| 3.2 Purposive Sampling.....   | 22        |
| 3.3 Data Collection .....   | 23        |
| 3.4 Data Analysis and Content Analysis .....                                      | 24        |
| 3.4.1 Directed Qualitative Content Analysis (QCA) as a Method.....                | 24        |
| 3.4.2 Critical Discourse Analysis (CDA).....                                      | 25        |
| 3.5 Initial Categories.....   | 25        |
| 3.6 Pilot Study .....   | 26        |
| 3.7 Final categories:.....  | 28        |
| 3.8 Revised Coding Schedule .....   | 28        |
| 3.9 Transferability, Credibility and Dependability .....                          | 29        |
| <br>  |           |
| <b>4. ANALYSIS .....</b>  | <b>30</b> |
| 4.1 Ghanaians Being Misled or Misinformed to Accept GMOs.....                     | 30        |
| 4.2 GMO Bill Making Non-inclusive or More Consultations Needed .....              | 32        |
| 4.3 Being Disregarded or Denied Access to Information .....                       | 35        |
| 4.4 Decision-makers/GMO Policy-Making Violating or Disregarding Rules .....       | 37        |
| 4.5 GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations..... | 40        |
| 4.6 Being Open to Dialogue .....  | 42        |
| <br>  |           |
| <b>5. DISCUSSION.....</b>   | <b>45</b> |

|   |           |
|---|-----------|
| 5.1 Lack of Public Education on GMOs.....                                 | 45        |
| 5.2 Lack of Engagement of Agricultural Sector Actors.....                 | 46        |
| 5.3 Government Officials Belittled Contributions of Anti-GMO Groups ..... | 47        |
| 5.4 Loss of Confidence in Government and the Political Class.....         | 48        |
| 5.5 GMO Bill perceives as an Illegality .....                             | 48        |
| 5.6 Confidence in the Legal System .....                                  | 49        |
| 5.7 Anti-GMO Groups make Inconsistent Demands .....                       | 49        |
| 5.8 Limitations of the study .....  | 50        |
| <br>  |           |
| <b>6. CONCLUSION .....</b>  | <b>52</b> |
| <b>7. REFERENCES.....</b>   | <b>55</b> |
| <b>8. APPENDIXES .....</b>  | <b>60</b> |
| <br>  |           |
| Appendix A .....  | 60        |
| Appendix B.....   | 62        |
| Appendix C.....   | 63        |
| Appendix D .....  | 64        |
| Appendix E.....   | 66        |
| Appendix F .....  | 67        |

## List of Abbreviations

|       |   |   |
|-------|---|---|
| CDA   | - | Critical Discourse Analysis                                       |
| CIKOD | - | Centre for Indigenous Knowledge and Organisational Development    |
| CPP   | - | Convention People's Party   |
| CSO   | - | Civil Society Organisation  |
| EDV   | - | Essentially Derived Variety                                       |
| ESRC  | - | Economic and Social Research Council                              |
| FBO   | - | Farmer-Based Organisation   |
| FSG   | - | Food Sovereignty Ghana  |
| GCBC  | - | Ghana Catholic Bishops Conference                                 |
| GMO   | - | Genetically Modified Organism                                     |
| IGO   | - | Inter-governmental Organisation                                   |
| IO    | - | International Organisation  |
| IMF   | - | International Monetary Fund                                       |
| MOFA  | - | Ministry of Food and Agriculture                                  |
| MP    | - | Member of Parliament  |
| NDC   | - | National Democratic Congress                                      |
| OECD  | - | Organisation for Economic Co-operation and Development            |
| PFAG  | - | Peasant Farmers Association of Ghana                              |
| PNDC  | - | Provisional National Defence Council                              |
| QCA   | - | Qualitative Content Analysis                                      |
| SDGs  | - | Sustainable Development Goals                                     |
| UN    | - | United Nations  |
| UPOV  | - | International Union for the Protection of New Varieties of Plants |
| WB    | - | World Bank  |

# 1. Introduction

## 1.1 Background

A fast-growing world population and changing food consumption patterns and choices have caused an increase in global food demand (Alexandratos & Bruinsma, 2012). In the coming years, global food consumption is expected to rise. In 2010, it was estimated that the world would need double of its food production to feed its projected 9.2 billion inhabitants in 2050 (ibid). This means global food production needs to increase substantially to meet the estimated rise in demand. This has become a major cause of concern for national governments, international development organisations and policy-makers in both global north and global south countries. Amid the concerns about future food security are climate change, weed resistance and pests and diseases infestations which adversely affect agricultural activities especially in the global south (Nsafoah, Dicks & Osei, 2011, p. 3). As part of the global efforts to prevent food insecurity and ensure food security for all, development organisations and national governments have been advocating, developing and adopting innovative agricultural technologies such as biotechnologies (Nsafoah, Dicks & Osei, 2011). According to supporters, biotechnologies can help in creating resilient food systems, increasing food production, enhancing the livelihoods of farmers, eradicating poverty and ending global hunger (ibid). In 2016, there was a renewed global commitment through the United Nations Sustainable Development Goals (SDGs) to end hunger around the world (see Goal 2) and to promote sustainable production and consumption (see Goal 12) (United Nation, 2016). The SDGs were initiated after the Millennium Development Goals (MDGs) came to an end in 2015.

Being a part of the global community and having a high agricultural potential, Ghana is taking steps to harness its agricultural potential to feed itself and to generate foreign exchange from agricultural exports (Nsafoah, Dicks & Osei, 2011). In this regard, the government of Ghana is introducing agricultural biotechnologies that is, Genetically Modified Organisms (GMOs) in the country's agricultural sector. Genetically Modified Organisms (GMOs) are created by modifying the gene composition of a plant. According to Saxena & Stotzky (2001), GMOs "involves the transfer of genes from one plant to another for human and animal consumption by transferring genes from one plant to another and in extreme cases, the transfer of animal genes into plants" (cited in Buah, 2011, p. 541). GMO plants are said to be high yielding and pests and diseases resistant (see arguments of pro-GMO groups in the next section). As it will

be shown later in this chapter, the government of Ghana through the Plant Breeder's Bill (henceforth referred to as GMO Bill) which is the focus and subject matter of the study aims to establish a legal framework that will protect the rights of plant breeders and encourage plant breeding in the country (Vecchione & Verma, 2015; Zakaria, Adam & Abujaja, 2014; Kangmennaang et al., 2016; Rodriguez & Lee, 2016). In the next section, I will present Ghana's GMO policy-making in detail.

## 1.2 Context and Need for the Study

In the wake of the global and national efforts to achieve food security and end hunger, the government of Ghana as indicated above initiated the GMO Bill in the Ghanaian parliament in 2013. The proposed bill seeks to create a legal framework that will protect the rights of plant breeders and to attract investment to the Ghanaian agricultural sector (Vecchione & Verma, 2015; Zakaria, Adam & Abujaja, 2014; Kangmennaang et al., 2016; Rodriguez & Lee, 2016). The bill also aims to complement Ghana's Biosafety Act (ACT 831) which was passed in 2011, to regulate the production, certification, and marketing of biotechnology products including GMOs in the country (Kangmennaang et al., 2016; Rodriguez & Lee, 2016; Vecchione & Verma, 2015). Since the introduction of the bill in the Ghanaian parliament, there has been a long-running debate between supporters of the bill (who comprises government officials and members of the Ghanaian science community) and opponents of the bill (who consists of civil society organisations (CSOs), farmer-based groups, religious bodies, and some minority political parties) (Rodriguez & Lee, 2016). The debate has been characterised by accusations and counter-accusations between the two groups, that is, advocates of the bill (Known as pro-GMO activists or groups) and critics of the bill (also known as anti-GMO activists or groups). In other words, government officials argued that the GMO bill will protect plant breeders, encourage breeding of new plant varieties and promote agricultural and economic development of Ghana. According to the Ghanaian science community, new GMO varieties are pests and diseases resistant and high yielding which they observed will increase Ghana's food production, enhance food security, improve livelihoods of Ghanaians and promote national development. On the other hand, opponents of the GMO Bill claimed that the bill will pave way for unsafe GMO products to be introduced into Ghana's food system and make smallholder farmers poorer. They also claimed that Ghana's food sovereignty would be threatened considering the high corporate interests (of multinational seed manufacturing companies) in the policy (Vecchione & Verma, 2015; Kangmennaang et al., 2016). The



divergent views of supporters and opponents on the bill have led them to take entrenched positions which contributed largely to the standoff that is being witnessed today.

Research (see Subulade, Adekunle & Olajunke, 2007; Jennifer & Richard, 2010; Nsafoah, Dicks & Osei, 2011) show that GMO policy-making in other countries such as Nigeria, Kenya, Canada etc have also been controversial. In some of these countries growing GMO crops have been restricted and in others, it has been banned. In these countries, GMO policy-making disputes have been over environmental, public health and safety issues. This shows that the Ghanaian GMO policy-making impasse is not unusual. With regard to Ghana's GMO policy-making, several studies (see Buah, 2011; Vecchione & Verma, 2015; Kangmennaang et al., 2016; Rodriguez & Lee, 2016) have been conducted on various topics such as public perception on GMOs, farmers' knowledge and perception on biotechnology, public attitudes toward biotechnology etc. Even though several studies have been conducted on the GMO policy-making, it appears much attention has not been paid to examining the standoff from the perspective of anti-GMO groups. For this reason, the study aims to contribute to the existing literature by examining the perceptions of anti-GMO groups based on their encounters with government officials, members of parliament (MPs) and members of the science community in Ghana. Specifically, the study will examine how concerns over public participation affected stakeholders' trust which in turn contributed to the standoff. Studies (such as OECD, 2001; Carreira, Machado, & Vasconcelos, 2016) show that trust helps in reducing and resolving conflicts in public policy-making. This shows the relevance of building trust among stakeholders in policy-making and governance decision-making. As such, the position of this study is that lack of public participation in the Ghanaian GMO policy-making affected stakeholder trust which in turn contributed to the policy standoff. Because as the analysis will show, the anti-GMO groups appeared to have been frustrated in their attempts to contribute to the policy-making. Therefore, public participation and trust are key concepts that will guide the study.

Before I proceed to give an account of democracy and policy-making in Ghana, it is imperative that I highlight the definitions of trust and participation that will guide this study. The following is a working definition of trust in this study - *trust refers to a situation in which government officials, experts, and policy-makers are given greater roles and responsibilities to lead and guide the public in making decisions and policies that will be in the interests of the public.* This definition drew on the work of Anne (1986), Warren (1999) and Tilly (2007) (see further

illustrations in chapter two). The study also adopts the World Bank's definition of participation which focuses on citizen inclusion in decision-making. The Bank defines participation as “*a process through which stakeholders influence and share control over development initiatives, decisions and resources which affect them*” (World Bank, 1996, p. 3; cited Nelson & Wright, 1995 p. 5; cited in Mohammed, 2013, p. 123). This definition emphasises the need for stakeholders to be able to influence the making of decisions that affect their lives. In the Ghanaian GMO policy-making, there are high public and stakeholder interests to participate in the process (Schiffino & Jacob, 2017; Kangmennaang et al., 2016). As such, the study draws on the World Bank's definition to examine how some of the major stakeholders (anti-GMO groups) were excluded from the policy-making and how their exclusion affected their trust in the policy and government (see chapter 2 for further illustrations). What makes this study interesting is that for some years now Ghana has been receiving special mention in the international community for being a good democracy in Africa (Godefroidt, Langer & Meuleman, 2016). This recognition presupposes that Ghanaians might have had a high level of trust and confidence in Ghana's public officials and government institutions. However, as the analysis will show the Ghanaian GMO case does not seem to support this proposition. Even though Ghana's democracy has been recognised as one of the best in Sub-Saharan Africa, elements of elite decision-making can still be observed in the GMO policy-making.

### 1.3 Democracy and Policy-Making in Ghana

In the early twentieth century, the state wielded so much power in decision and policy-making (Mohammed, 2013). Then decision-making was the prerogative of the ruling class and few experts (Mohammed, 2013; Schiffino & Jacob, 2017). This was described as an elite decision-making approach. According to Cerovac (2017), the elite approach organises “existing capacities within a political community to achieve the desired outcome, thus giving greater (or even all) political power to a small group of people (i.e., experts) who are considered to be better at producing correct political decisions” (p. 2). This approach was criticised for excluding ordinary people and marginalised groups in governance decision-making. For instance, Dahl (1961) criticised the approach and called for the adoption of participatory approaches to decision-making (cited in Schiffino & Jacob, 2017). He argues that wider decision and policy-making leads to the making of better public policies. In the same way, an inclusive decision and policy-making decentralise state power, reduces the power of the political class and makes policies more representative, transparent and acceptable to the public.

After gaining independence from Britain in 1957, Ghana was ruled by the Convention People's Party (CPP) government, led by Kwame Nkrumah until his government's overthrow in 1966 (Gyimah-Boadi, 2010 cited in Mohammed, 2013). A key criticism against the Nkrumah's government was that it was intolerant of political opposition (Frimpong, 2007 cited in Mohammed, 2013). Before adopting multi-party democracy in 1992, Ghana had been ruled by several military governments after the overthrow of the CPP government (Ayee, 1993; Gyimah-Boadi, 2010; Institute for Democratic Governance, 2007 cited in Mohammed, 2013). These undemocratic regimes excluded the masses from decision and policy-making. The last military regime, the Provisional National Defence Council (PNDC) government supervised Ghana's democratic transition in 1992 (Mohammed, 2013). Before the transition, the PNDC government was accused on several occasions of brutalising and arresting political opponents arbitrarily and burning of shops belonging to 'supposed' corrupt business people across the country. During the transition, the PNDC transformed itself into a new political party (known as National Democratic Congress - NDC) and contested and won the 1992 general elections with the same leadership and ideology. I indicated earlier that before Ghana's adoption of democratic decision-making was reserved for a privileged few (the ruling class and experts). This approach continued even after the country's adoption of democracy. According to Mohammed (2013), decision and policy-making under the new NDC-led government was still reserved for the ruling class and technocrats. Even though the elite decision-making approach persisted after 1992, four necessary conditions that support public participation in democratic governance have been present in the country (ibid).

First, the 1992 Constitution of Ghana is clear in Article 6 Clause 35(6)(d) that the State (of Ghana) shall "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*" (1992 Constitution of Ghana, p. 36, emphasis mine). By this provision, every Ghanaian government is expected to work toward engaging the public in policy-making and governance. After 1992, the Ghanaian parliament also became the main organ of government that represents Ghanaians and performs legislative functions, unlike earlier times when legislative and executive powers were vested in the president (Mohammed, 2013). In the GMO policy-making, parliament is expected to engage stakeholders such as MOFA, Attorney General's Office, FSG, ActionAid, CIKOD, PFAG, agribusiness actors and farmers (Friedrich-

Ebert-Stiftung Ghana, 2011). Furthermore, CSOs became instrumental in Ghana. Since 1992, various CSOs have been contributing to policy-making and governance through public awareness creation, mobilising communities, and empowering minorities and excluded groups (Mohammed, p. 122). For example, FSG and CIKOD have been playing key roles in the GMO policy-making. In addition, the media played instrumental role in promoting democracy and national development. The 1992 Constitution paved the way “for greater media freedom” and “proliferation of the media” in Ghana (Owusu, 2012, p. 5). Since 1992, the media has served as a platform for public discourse on the GMO policy and GMO information dissemination (ibid). It will be seen later in the study that even though the necessary conditions for citizens participation were and are still prevailing in Ghana, participation in policy-making appears limited to a certain category of people (signs of elite decision-making).

After more than two decades of democratic governance as indicated above, Ghana has made appreciable progress in its democratic practice to the extent that at present it is touted as a model of good democracy for Sub-Saharan African countries (Godefroidt, Langer & Meuleman, 2016). This is an impressive political achievement for a country whose colonial history is still fresh in the minds of its citizens. To a large extent, for a country to achieve such a political feat, it might be having effective political systems and institutions which are trusted by majority of its citizens. According to Warren (1999), democratic governance is effective when citizens trust their governments and public institutions. In other words, lack of trust might impede democratic governance. In this regard, considering Ghana democratic development, it is reasonable to assume that Ghanaians might be having high levels of trust in their government and public institutions. However, it seems this proposition does not hold for Ghana because Ghanaians are said to have the lowest trust levels in their government in Sub Saharan Africa (Godefroidt, Langer & Meuleman, 2016). This finding goes beyond the scope of this study; however, it is an interesting area which requires further research.

#### 1.4 The Politics of GMO Policy-Making in Ghana

There is general agreement between the GMO bill’s supporters and opponents that, Ghana’s agriculture needs improvement. However, the bone of contention between the two groups has to do with how the agricultural sector should be supported to grow. The need to produce food sustainably, increase food production and enhance food security necessitated Ghana’s moves to adopt GMOs in 2013. As indicated earlier, supporters of the GMO policy argue that the bill

will improve Ghana's food production and food security and as well enhance the livelihoods of farmers and national development (Buah, 2011 and Kangmennaang et al., 2016). According to them, the bill will lead to the introduction of high yielding, diseases and pests resistant crop varieties into the country's agricultural sector. However, the bill's opponents point out that it does not hold the prospects the government and members of the science community are claiming it has for Ghana. Citing examples from Burkina Faso, they claim that the introduction of GMOs in Ghana will endanger the livelihoods of smallholder farmers, pose health risks to the public and the environment and as well threaten Ghana's food sovereignty. The divergent views of the groups on the prospects of GMOs have led to accusations and counter-accusations (see section above). They also accuse the government of failing to conduct an adequate risk assessment for new GMO seed varieties before their commercial release (ibid). For this reason, on several occasions, the anti-GMO groups have taken to the streets to show their displeasure about the government's handling of the GMO policy-making, and in some instances sue the government for violating biotechnology policy-making agreements (see next section for details). Viewing the wrangling from the perspective of democratic governance, it is not far-fetched to postulate that the policy process might have lacked credibility, transparency, and legitimacy (Schiffino & Jacob, 2017; Kangmennaang et al., 2016). To some extent, it can be said that the protests and court injunctions against the policy-making contributed to the policy standoff. In addition, the challenges associated with the GMO policy-making expose limitations and democratic deficits in the highly touted democratisation of Ghana.

## 1.5 Purpose of the Study

The study aims to examine the extent to which lack of public participation contributed to the Ghanaian GMO policy-making standoff, and how a more participatory approach could resolve the impasse. This, the study intends to achieve through the examination of the perceptions of anti-GMO groups in the country. Using qualitative content analysis (QCA) and critical discourse analysis (CDA) as a complementary methodology, the study will examine press releases, petitions, and media reports on campaigns of opponents of the GMO bill to improve our understanding of the GMO policy standoff. From the perspective of participation and trust (see chapter two for details), the study will particularly investigate the perceptions of anti-GMO activists as it relates to the GMO policy standoff through the following categories: MPs and scientists are paid to pass the GMO bill; Ghanaians are being misled or misinformed to accept GMOs; the GMO bill making non-inclusive or more consultations needed; being disregarded

or denied access to information; the GMO bill being imposed on Ghanaians despite calls for more consultations; decision-makers disregarding rules; lack of public education; and being open to dialogue. Since the phenomenon under study is current and ongoing, by examining the perceptions of the bill's opponents, this thesis aims to contribute to the literature on GMO policy-making from the Ghanaian perspective.

## 1.6 Research Questions

As indicated earlier, public participation and trust are fundamental concepts that underpin this study. They are necessary conditions for the success of democratic governance (OECD, 2001; World Bank, 1996; Kikuchi, 2015; and Godefroidt, Langer & Meuleman, 2017). As will be seen later, one way of building trust in a democracy is through public participation (see chapter two). It is observed that the credibility and legitimacy of government decisions and policies have a strong connection to citizens participation and trust. It has been argued that public participation in governance enhances citizens trust in public institutions and public officials (Warren, 1999; OECD, 2001; World Bank, 1996). As indicated earlier, although Ghana is touted as one of the best democracies in Sub-Saharan Africa, ironically, a research conducted by Godefroidt, Langer, and Meuleman (2017) shows that public trust in the country is lowest in the sub-region. This is an interesting finding about a country whose democratic credentials have been highly commended in the international community (ibid). In the Ghanaian GMO policy-making, it has been observed earlier how anti-GMO groups petition and demonstrate against attempts to pass the bill. It appears the anti-GMO groups are disappointed and doubtful of the government's commitment to engaging Ghanaians and all stakeholders in the policy-making process. The demonstrations, court injunctions and petitions against the government's handling of the policy-making raised significant questions about stakeholder trust in the process. As a result, the study seeks to understand the Ghanaian GMO policy standoff by examining the perceptions of the anti-GMO groups from the perspective of participation and trust. Therefore, the study will be guided by the following research questions:

*1. From the perspective of opponents of the Ghanaian GMO policy, how has lack of participation and trust in government officials and members of the science community contributed to the policy impasse?*

*2. Can more participation and openness in the policy-making process resolve the GMO policy standstill?*

The study is organised as follows: presentation of the existing literature and theory; data collection and choice of methods; analysis of the data; discussion of findings and conclusion.

## 2. Previous Literature and theory

### 2.1 Introduction

This chapter outlines the relevant concepts and theoretical underpinnings that guide this study. The chapter begins by defining trust and participation and placing them in the context of the study. Also discussed is the relationship between representation and participation in modern democratic settings. Following this is presentation of the relationship between trust and democratic governance. Afterward, public participation as a theory of trust is presented with a special focus on three frameworks of participatory public policy-making proposed by the OECD (2001). The development of the study's categories will be based on the OECD's framework: *information, consultation and active participation* as well as Offe's propositions on trust in democratic governance. Since the study is rooted in development, the last section is dedicated to discussing participatory development and how building trust in development informs discourse on participatory development since the 1950s.

### 2.2 Defining Trust

The concept of trust defies a one-size-fits-all definition (see Blind 2006 for a comprehensive literature review) because of its open contested nature. The definition of trust is subject to varied scholarly debates (Warren, 1999; Hardin, 1999, p. 24; Blind, 2006). While examining the role of knowledge in institutional trust, PytlikZillig et al. (2017) define trust in institutions as “an attitude toward a specific institution (or organisation, business, etc) characterised by positive expectations that the institution will appropriately fulfil its functions” (p. 2). Their concept of trust is based on individuals' knowledge of the functions of a public institution and how that knowledge affects their expectations of the institution in question. In other words, citizens' knowledge of an institution shapes and influences their perceptions and actions toward the institution. Hardin (1999, p. 23) on his part concurs with their reasoning when he argues that knowledge is important before trust can be established. However, he disagrees with the assertion that citizens can trust public institutions, public officials, and governments the same way they trust their fellow citizens. He observes further that “To say “I trust you” means that I know or think I know relevant things about you, especially about your motivations toward me. It is such knowledge that many of us cannot sensibly claim to have with respect to most government officials or with respect to government generally (Hardin, 1998)” (cited in Hardin, 1999, p.24).



Charles Tilly on his part defines trust from the perspective of social networks. According to him trust “consists of placing valued outcomes at risk to others’ malfeasance, mistakes, or failures (Tilly, 2005b)” (cited in Tilly, 2007, p. 8). From his perspective, trust relations can be observed from these situations: when a neighbour leaves her children or precious objects in another neighbour’s care; when someone lends another money; when someone willingly tells her secrets to another etc (Tilly, 2007, p. 8). In these examples, the trusting parties expose themselves to some form of risks by investing their trust in people who could betray them. In the same way, in his book *Democracy and Trust*, Warren (1999) defines trust as “a judgment, however implicit, to accept vulnerability to the potential ill will of others by granting them discretionary power over some good” (Warren, 1999 p. 1). From this perspective, trust is said to involve exposing oneself to risk in exchange for the good of one’s community. Similarly, Annette Baier (1986) defines trust as someone depending on someone’s goodwill and giving the person a chance to harm oneself (cited in Warren, 1999). The definitions as given by Tilly, Warren and Annette Baier are based on the assumption of the existence of solidarity between the trusting party and the trusted party, and that trust between the parties will not be betrayed. In this regard, Warren (1999) argues that trust that is based on solidarity is achievable in the social contexts because there are cooperation and mutual support among community members, but to a large extent unachievable in political situations because politics revolve around conflict of interests of actors (p. 1). This situation makes decision-making in the political arena highly competitive as actors compete to influence policy-making in their favour.

The tentative definition of trust of this study draws on the works of Anne (1986), Warren (1999) and Tilly (2007). Their definitions have one common element, that is, giving power to someone to act on one’s behalf with the expectation that the person in question will not act in bad faith. In other words, the authors view trust to involve granting power to an individual to make decisions about something of importance to oneself; thereby placing oneself in a situation of risk. As indicated in the introduction, this study defines trust as *a situation in which government officials, experts, and policy-makers are given greater role and responsibility to lead and guide the public in making decisions and policies that will be in the interests of the general public*. This definition takes cognisance of the fact that in GMO policy-making concerns over public safety, environmental effects, loss of ownership of seeds, and loss of farmer livelihoods etc go a great length to influence the stands supporters and opponents of GMOs take. The Ghanaian GMO policy-making has been characterised with so much controversy because the anti-GMO

activists feel the government and members of the science community are renegeing on their responsibility of protecting the interest of Ghanaians. Ghana being a shining example of a democracy in Africa, the study will draw on the democratic principles of representation and participation in examining the perceptions of anti-GMO groups (see section 2.4).

## 2.3 Defining Participation

In the study, participation is conceptualised from the perspective of policy-making. The concept of participation can be traced to practices in ancient Greek city-states where deliberations among male adult citizens were used as a form of collective decision-making (Mansuri & Rao, 2013). Democracy revolves around people; therefore Abraham Lincoln, a former U.S. President defined democracy as “government of the people, by the people and for the people”. His definition captures the pivotal role citizens play in democratic governance. In fact, modern democracies place decision-making in the hands of citizens through voting, referenda, town hall meetings etc (OECD, 2001). Thus, public participation in decision-making and governance is fundamental to the success of democracies. The concept of participation has been termed differently by different scholars and organisations such as citizen participation, citizen engagement, public participation and public engagement. Based on the different perspectives, participation has been defined in different ways.

First, the Canadian International Development Authority (1997) defines participation in development as “the active engagement of the partners and customers in sharing ideas, committing time and resources, making decisions, and taking action to bring about a desired development objective” (cited in Mohammed, 2013, p. 122). This definition emphasises the active involvement of stakeholders in development. In addition, Michels (2011) defines participation as “a process that approaches citizens more as a group to share in decision making in which there is explicit connection between citizens’ input and policy decisions” (cited in Mohammed, 2013, p. 123) This definition emphasises the effective engagement of citizens in development decision-making and incorporating the perspectives of citizens and stakeholders in development decisions. The WB also defines participation from the perspective of inclusion and control as “*a process through which stakeholders influence and share control over development initiatives, decisions and resources which affect them*” (World Bank, 1996, p. 3; cited in Nelson & Wright, 1995, p. 5 and Mohammed 2013, p. 123). From the perspective of the WB, the involvement of citizens and stakeholders in development decision-making in itself is not enough, rather stakeholders’ involvement should lead to the making of collective and

inclusive decisions. As indicated in chapter one amongst the definitions of participation given here, this study adopts that of the WB for the following reasons. First, the Bank's definition emphasises the need for an inclusive decision-making. It also underscores the significance of sharing information and resources between and among stakeholders in decision and policy-making. Lastly, it stresses the need for stakeholders to be able to influence development decisions and outcomes. These elements make citizens and stakeholders feel important, being part of the decision-making and even make them see themselves as owners of the development decisions and projects. In this regard, participation plays an enabling role in which stakeholders' inputs are included in development decisions. Nelsen and Wright (1995, p. 1) observe that participation can either be a means or an end in development. On the one hand, participation is a means when inputs of citizens are included in development decisions such that the realities of the people are reflected in the final decisions. On the other hand, it becomes an end when citizens are engaged by decision-makers to simply satisfy a requirement of participation.

## 2.4 Representation and Participation in a Democracy

Democracy has its roots from the city-states of ancient Greece. Advocates for democracy mention social progress, political stability, economic efficiency and national development as some of the prospects of democracy (Huntington, 1991; Tilly, 2007). During and after the Cold War, countries especially those in the then 'third world' were encouraged to adopt democracy (Huntington, 1991; Carter & Stokes, 2002). This period was described as the 'third-wave of democratisation'. Before then, the first-wave and second-wave of democratic transitions had occurred in the early 19<sup>th</sup> century and the post-World War II era respectively (Huntington, 1991). During the third wave democracy swept across Africa and several other countries in the world (Huntington, 1991). As a result, many countries including Ghana transitioned from military and authoritarian regimes to democracy. Since then, the number of democratic countries has increased substantially. Since its inception democracy has proven to be the most successful system of government. As such today almost every country wishes to be seen to be doing well in its democratic enterprise. In countries where democratic governance appears to be lacking efforts are even made by promoters of democracy such as the United States to get them to adopt it (Huntington, 1991, p. 15). A case in point was the popular uprising in the Arab world that led to the overthrow of some authoritarian governments between 2010 and 2011 (Ahmed & Capoccia, 2014). How democratic systems, institutions, and governments function

is explained by democratic theories. These theories explain the relationships between governments and their citizens and how political institutions and systems interact with one another. Since the purpose of the study is to examine how lack of participation and trust contributed to the GMO policy standoff based on the anti-GMO groups' interactions with supporters of the bill, I will throw some light on the concepts of representation and participation in a democratic setting.

According to the Organisation for Economic Co-operation and Development - OECD (2001), representative democracy "is based on ongoing interactions among government and citizens in between elections" (p. 15). Warren (1999) observes that representative democracy is necessary because of the complex nature of modern societies. The complexities of modern democratic societies have made direct public participation in governance almost impossible. This informs the introduction of representative governance system which enables citizens to choose their political leaders to represent and act on their behalf. It has been observed that relations between citizens and decision-makers are highly conflictual in political situations (Warren, 1999). He opines that this is so because political actors in most instances work toward achieving their partisan interests instead of collective interests (ibid). He observes that "... representation by territorial district does not correspond to natural communities of interest or identity and so lacks the "thick" social context defined by background assumptions about shared interests, identities, and mutual understandings" (Warren, 1999, p. 314). In other words, in political settings actors compete among themselves with the objective to satisfying their parochial interests to the neglect of the general good of their communities. This is why decision-making in the political arena is fraught with conflicts. This is evident in the GMO policy-making in Ghana as supporters of the GMO bill (who are mainly representatives of the people) and opponents of the GMO bill (CSOs and ordinary citizens) compete to influence the policy in their favour.

From the perspective of Warren (1999), representative governance breeds suspicion between decision-makers (representatives) and the public and that "... the trust that the representative seeks will come to depend, to a greater or lesser degree, upon "political entrepreneurship" that is, evoking communities of interest sufficient for a majority coalition" (Warren, 1999, p. 315). Communities of interests in this regard are coalitions which are mobilised based on shared interests. Depending on the political context a coalition could be formed based on communal interests or sectional interests. Whereas coalitions that are based on societal interests promote collective decision-making, those that are motivated by sectional interests impede collective

decision-making (ibid). The latter it is argued breeds suspicion between decision-makers and the public. As indicated in chapter 1, in the Ghanaian GMO policy-making both the opponents and supporters of the GMO bill see themselves as acting in the interests of all Ghanaians. However, they continue to accuse each other of acting in bad faith; thus, the standoff. This has contributed to a culture of suspicion between the two sides.

Offe (2000) states that democratic institutions could play a major role in avoiding suspicions between decision-makers and citizens as well as resolving suspicions in governance (p. 11). He observes that when government institutions perform their functions effectively it will increase their legitimacy especially in new democracies such as Ghana. That is, governments that perform their responsibilities and fulfil their promises as agreed with the public will improve their legitimacy in the eyes of the public. In recent years, Ghanaians seem to be disenchanted with politics and are becoming more suspicious of the political class. For example, there have been several instances of broken and unfulfilled promises between governments and the people of Ghana (see GhanaWeb, 2016a; GhanaWeb, 2017). It has also been observed that when governments violate their constitutions, democratic principles and institutional procedures it could affect public trust and leads to low trust in public institutions and governments (Offe, 2000). The discussions show that in policy-making violations of rules and regulations could affect stakeholders trust in a government which in the long run could affect the legitimacy, transparency, and inclusiveness of a policy-making. In a nutshell, when a government violates rules regulating policy-making, not performing their functions well and are perceived by the public to be biased such a government is likely to lose its legitimacy and public trust. The absence of trust according to Offe (2000) affects policy-making and democratic governance in general. In the next section, I will discuss the relationship between trust and democracy.

## 2.5 Trust and Democratic Governance

This section will draw on existing literature in examining the relationship between trust and democracy. The renowned American political scientist, Robert Putnam identifies a positive relationship between democracy and trust. He observes that trust is an important component of social capital which he defines as “features of social life - networks, norms, and trust - that enable participants to act together more effectively to pursue shared objectives” (Putnam, 1995, p. 664). In an earlier study, Putnam (1993) illustrates his concept of social capital to include:

*“... social capital is productive, making possible the achievement of certain ends that would not be attainable in its absence... For example, a group whose members manifest trustworthiness and place extensive trust in one another will be able to accomplish much more than a comparable group lacking that trustworthiness and trust... In a farming community... where one farmer got his hay baled by another and where farm tools are extensively borrowed and lent, the social capital allows each farmer to get his work done with less physical capital in the form of tools and equipment”.*

(Putnam, 1993, p. 167)

Putnam’s conceptualisation of social capital (which encapsulates trust) places emphasis on social connections at the community and state levels. That is, when citizens participate in communal and civic activities it makes them more trusting of their fellow citizens and strangers and thus enable them to cooperate among themselves for their collective good. Specifically, citizens who engage in civic associations are likely to support collective decision-making and democratic governance since they are more supportive and trusting of each other and are therefore willing to cooperate with their governments (Putnam 1993).

Whereas Putnam (1993; 1995) finds a positive relationship between trust and democracy, Warren (1999) observes that there is a paradoxical relationship between them. In a democracy, Warren stresses the need for decision-makers (those who are given political power) to be monitored in a democratically to ensure that they do not abuse the public trust. He argues that;

*“...democratic progress is most often sparked by distrust of authorities. Innovations in democratic institutions usually involve new ways of monitoring and controlling those in power, on the assumption that, as a rule, those with power cannot or ought not to be trusted. ..., democracy is about controlling, limiting, and distributing power. And democracy... seems most necessary precisely when those [who] claim they are trustworthy are found to have abused their trust. Clearly, distrust is essential not only to democratic progress but also, we might think, to the healthy suspicion of power upon which the vitality of democracy depends”*  
(Warren, 1999, p. 310).

To illustrate further, Warren (1999) contends that trust-democracy relations are paradoxical because, on the one hand, governments require the public trust to be able to perform their functions. In other words, public officials and public institutions should be able to function without undue interference from the public based on issues of mistrust. Frequent and unwarranted interference has the tendency to impede governance and decision-making. On the other hand, Warren (1999) observes that citizens should not completely assume that their governments and policy-makers will always act in their (citizens) interests. As such, there is a

need for checks and balances to be put in place to ensure that public officials do not act based on their whims and caprices. As part of measures to keep public officials (people's representatives) in check, citizens are admonished to participate in democratic governance and decision-making to ensure that governments do not act in ways that are contradictory to promises they make to the public (ibid). From Warren's perspective trust can be said to be a necessary evil since it is needed for governments to function effectively and at the same time, its absence can stall democratic governance.

Warren (1999) further observes that trust in government and public institutions depends largely on the political context and the type of trust involved. That is, in some political settings, trust (e.g. generalised trust) can make democracy to flourish and in other political contexts, trust (e.g. particularised trust) can impede collective decision-making and hence democratic governance. It is clear from the illustrations above that public trust in governments, public officials and institutions depend to a large extent on the political context. Since Ghana has attained appreciable democratic development, I find it suitable to examine the Ghanaian GMO policy standoff from the perspective of lack of participation. Based on the purpose of the study and study context in the next section I will explain how participation could enhance trust and democracy.

## 2.6 Theory of Trust

There are several theories (see Stoyan et al, 2016; Christensen & Laegried, 2005; Kestila-Kekkonen & Soderlund, 2015 for details) that explain trust in government, public officials, and institutions in democracies. In the literature, there are two dominant theories – performance and participation that explain trust in institutions and governments. Government performance and civic engagement have been used by several scholars in assessing trust in government and public institutions in the social sciences (see Stoyan et al. 2016; Christensen & Laegried, 2005). In 2016, Stoyan et al. examine how government performance and public participation in Haiti and the Dominican Republic shape public trust in government institutions. They find that civic engagement can have a positive or negative relationship on institutional trust (see the next section for details). Based on the purpose of the study I will utilise the participatory theory of trust to explore how lack of public participation in the Ghanaian GMO policy-making might explain the policy standoff.

Other relevant determinants of trust in government and public institutions I will draw minimally on in this study include corruption, party ideology and political party support (Bouckaert et al. 2002, Christensen & Laegried, 2005; Kestila-Kekkonen & Soderlund, 2015; Godefroidt, Langer & Meuleman, 2017; Stoyan et al., 2016). Party affiliation and political ideology of individuals influence their trust in government and public institutions (Bouckaert et al., 2002; Christensen & Laegried, 2005; Stoyan et al., 2016). It is common for supporters of opposition parties in developing democracies to express lack of trust in government institutions (Stoyan et al., 2016). In Ghana, opposition parties usually show low levels of trust in government and public institutions. In 2013, an opposition MP expressed his party's lack of confidence in Ghana's security agencies to protect his party members (GhanaWeb, 2016b). Moreover, a study conducted on the relationship between corruption, trust and good governance in Thailand by Punyaratabandhu (2015) finds that "persons who found corruption unacceptable were less likely to express trust in government or its agencies" p. 196. The Ghana Center for Democratic Development (CDD-Ghana) conducts an Afrobarometer survey on *Trust and corruption in public institutions* in Ghana in 2015 and finds that about 85 percent of Ghanaians perceived public officials including MPs as corrupt. The Afrobarometer also reveals that majority (more than 50 percent) of Ghanaians expressed 'little' or 'no' trust in almost all government institutions. Corruption, political party support and ideological leanings of opponents of the GMO policy will enable the answering of my research questions. Since the study aims to examine how lack of public participation in the Ghanaian GMO policy-making might have contributed to the policy impasse, I will outline the participatory theory of trust and how it will enable the study.

## 2.7 Public Participation as Theory of Trust

Little information is available on the origins of the participatory theory of trust. However, its application in social sciences is not new because it has been used in evaluating the effects of public participation on trust in government and political institutions in many countries (Bouckaert et al., 2002; Christensen & Laegried, 2005; Stoyan et al., 2016). Advocates of the participatory theory of trust (it is not termed as such in the literature) argue that when citizens are engaged in decision and policy-making their trust levels in public officials, public institutions and government will increase 'positively' (Putnam, 1993; World Bank, 1996; OECD, 2001; Kim & Kim, 2010; Stoyan et al., 2016). One proponent of public participation, Putnam, strongly espouses the view that civic engagement builds citizens' confidence in



governments and public institutions. He also argues that public participation generates social capital which in turn promotes cooperation and trust in communities (Putnam, 1993). In addition, OECD (2001), Kim and Kim (2010) and Mohammed (2013) have cited public participation as a good way of engaging citizens in public policy-making. They state that public participation plays a critical role in improving government-citizen relations and building trust in public policy-making. Considering the importance of public participation in fostering trust in policy-making, the OECD in a report *Citizens as Partners* in 2001 proposes three mechanisms - information, consultation and active participation for effective participatory public policy-making. The OECD (2001) states that public participation helps in countering “declining public support”, promoting greater trust in government, and can lead to the making of transparent, legitimate, accountable and better public policies (p. 20). By adopting the proposed mechanisms, the OECD expects its member countries and non-member countries’ governments to build trust and improve their relations with their citizens in public policy-making.

The information mechanism involves a government’s dissemination of policy information to its citizens in order not kept in the dark. This is a one-way flow of information in which decision-makers use instruments such as official gazettes, websites, public records, public announcements etc in disseminating policy information to all stakeholders (OECD, 2001). In addition, consultation was the second mechanism identified by the OECD. It is a two-way approach in which a government provides information to citizens and receives their feedback on policy issues. Consultation can be used to seek the views of citizens in public policy-making. Draft legislation, public hearings, and surveys are forms of public consultations governments can use in engaging their citizens (OECD, 2001). The OECD (2001) also identifies active participation as an approach to participatory public policy-making. This mechanism involves giving citizens greater roles and responsibilities to contribute to shaping public policies. Governments are recommended to create an enabling environment for active participation to be successful. Even though public participation is widely agreed and asserted as essential to building trust in public policy-making and democratic governance (see OECD, 2001; Kim & Kim, 2010; Putnam, 1993; Mohammed, 2013), there are some contradictory views espoused by some scholars.

Contrary to propositions that public participation has a positive effect on trust in public policy-making and democratic governance, Warren (1999) and Newton & Norris (2000) (cited in Stoyan et al., 2016) hold a similar but slightly different view. They contend that context

determines the effect public participation has on trust. According to them, public participation can have a positive or negative effect on trust. The findings of Stoyan et al. (2016) supports the argument that public participation can have a positive or a negative effect on institutional trust. They find that the important role grassroots organisations play in civic engagement in Haiti enhances trust whereas partisanship and clientelism in the political system of the Dominican Republic inhibit civic engagement and trust. On the part of Brehm & Rahn (1997) and Finkel et al., (2000) (cited in Stoyan et al., 2016) public participation has a negative effect on trust in government institutions. They point out that public participation exposes gaps between democratic values and governance realities which makes citizens unnecessarily critical of their governments, public officials, and public institutions. Even though, there are divergent views on the effect of public participation on trust in governance decision-making, the argument that public participation plays a critical role in building citizens and stakeholders' trust and confidence cannot be underemphasised. To a large extent, the important role public participation could play in improving government and citizens relations informed the introduction of participatory development in Africa at a time development projects in the continent were not yielding the expected results.

## 2.8 Participatory Development

In the 1950s and 1960s, the 'first wave of participatory development' as White (1999) and Arizpe (2004) describe it, occurred when the World Bank (WB), International Monetary Fund (IMF), United Nations (UN), and the United States Agency for International Development (USAID) initiated community and human-centred development initiatives in several countries in Africa, Asia and Latin America (cited in Mansuri & Rao, 2013). These initiatives were necessitated by the need to insulate newly independent countries from "dual threats of external military aggression and internal subversion" during the Cold War (ibid, p. 25). To put differently, the intention was to protect the new countries from the influences of communism. In the 1980s, the communitarian development approaches which the intergovernmental organisations (IGOs) and international organisations (IOs) initiated were criticised as being expert-based and top-down which did not take local realities into consideration before development projects and programmes were implemented (Escobar, 1995). The critics observe the expert-based approach of the initiatives was responsible for the failure of development programmes in many developing countries (Escobar, 1995; Mansuri & Rao, 2013).

The criticisms against the communitarian approaches coupled with the failure of development projects meant that there was a need for the IGOs and IOs to figure out the problem and to come out with new ways of undertaking and executing development projects in the developing countries. The organisations commissioned an investigation which reveals that differences between local realities and development project objectives were accountable for the poor development results (Hickey & Mohan, 2004). A recommendation to involve locales in development planning was made. Since then, the late 1980s, the WB and IMF development policy has changed from the expert-based approach to stakeholder and community engagement in all aspects of development. The finding also changed the way national governments in developing countries execute national projects. In the late 1980s, national governments began to give citizens an opportunity to participate in exercises such as budgeting and constitution-making (Mansuri & Rao, 2013). During this period, the WB promoted the idea of decentralisation which involved the transfer of decision-making power to local communities, especially in Africa. According to the WB, decentralisation gives citizens and policy-makers the opportunity to work together in improving the efficiency and effectiveness of development programmes (ibid). This period was termed as ‘the second-wave’ of participatory development. During the second-wave emphasis was placed on “empowerment as a key priority of development policy” (Mansuri & Rao, 2013, p. 30). They observe that under second-wave the objective was to build stakeholders and target beneficiaries’ capacities to enable them to contribute meaningfully toward the development of their communities. This corroborates Hickey and Mohan (2004)’s assertion that participatory development aims to empower and transform the underprivileged individuals and communities (p. 3).

## 3. Methodology

### 3.1 Introduction

The study is based on a qualitative research approach. The literature review on participation and trust outlined above motivated my choice of the qualitative research methodology. According to Auerbach and Silverstein (2003) “qualitative research is research that involves analysing and interpreting texts and interviews in order to discover meaningful patterns descriptive of a particular phenomenon” (p. 3). This research approach allowed me to flexibly gather, analyse and interpret participants narratives on the phenomenon (Creswell, 2014). Specifically, the approach enabled me to describe the GMO policy impasse in terms of anti-GMO groups’ participation in the policy-making. It also allowed me to draw on qualitative data to examine the extent to which lack of public participation affected stakeholder trust which contributed to the ongoing standoff (Kumar, 2011). Yin (2003a) and Gillham (2000) observe that the strength of a case study depends largely on the richness of its data sources (cited in Kohlbacher 2006). As such, I will utilise data from anti-GMO CSOs and some media sources. Drawing on texts from these sources the study aims to thoroughly investigate the following research question:

- 1. From the perspective of opponents of the Ghanaian GMO policy, how has lack of participation and trust in government officials and members of the science community contributed to the policy impasse?*
- 2. Can more participation and openness in the policy-making process resolve the GMO policy standstill?*

### 3.2 Purposive Sampling

In order to gather rich data for the analysis, I used a purposive sampling strategy. This strategy is known as relevance sampling. It is common in qualitative research and applied mostly in cases that involve the construction of “historical reality, describe a phenomenon or develop something about which only a little is known” (Kumar, 2011, no page). The choice of purposive sampling strategy by a researcher is motivated by the research design. Thus, my choice of the purposive sampling technique was motivated by the design and purpose of this study. By using purposive sampling, I am confident I will gather data from sources that contain the best

information (Kumar, 2011 & Krippendorff, 2013). Since the Ghanaian GMO policy-making is an ongoing national issue, I employ purposive sampling strategy to collect relevant data from anti-GMO CSOs and media sources between 1<sup>st</sup> January 2013 and 30<sup>th</sup> June 2018. This period captures the Ghanaian GMO policy-making in its entirety - from its beginning to its current standing. Therefore, my choice of purposive sampling strategy was aimed at collecting relevant data for the analysis.

### 3.3 Data Collection

Google was used as the main search tool in gathering data for the analysis. It was chosen because all the relevant data I needed for analysis were easily accessible on the internet. I used keywords such as: ‘Ghana GMO’, ‘Ghana GM’, Ghana GMO policy, GMO+crops+Ghana, ‘Ghana+GM+crops+petition, Ghana+GMO+public+participation in conducting the search. A total of twenty-one (21) publications and articles were compiled from the FSG website for analysis. The collected materials included petitions, press releases, news reports and public notices. Through these materials, perceptions of anti-GMO groups about their participation in the GMO policy-making can be assessed.

As indicated in Chapter One, Ghana developed a vibrant media space after its adoption of democracy in 1992 (Owusu, 2012). The anti-GMO activists have been engaging the media (mostly radio stations) in disseminating information on the GMO bill to Ghanaians. In my search for relevant data from media sources I paid particular attention to publications of major media houses based in Ghana’s capital, Accra which included but not limited to Citi FM 97.3 [www.citinewsroom.com](http://www.citinewsroom.com); Joy FM 99.7 [www.myjoyonline.com](http://www.myjoyonline.com) etc. My choice of these media sources was informed by their wider coverage, listenership, and credibility in news reporting. After the removal of several duplicate articles from various media sources, a total of fifteen (15) relevant articles were compiled for the analysis. Out of the fifteen (15) articles, six (6) were obtained from the website of Citi FM 97.3, three (3) articles were gathered from the website of Joy FM 99.7 and the remaining six (6) articles collected from random news websites. From both FSG and media sources, a total of thirty-six (36) relevant publications and articles were gathered for the qualitative content analysis.

### 3.4 Data Analysis and Content Analysis

Data analysis is as important as data collection because it forms a significant part of a research work. In qualitative research, there are several methods of data analysis that a researcher can utilise. As such in this chapter, I will analyse and interpret the collected data using content analysis. I will complement the content analysis with critical discourse analysis.

#### 3.4.1 Directed Qualitative Content Analysis (QCA) as a Method

The study is based on the presupposition that public participation enhances the legitimacy and transparency of public policy-making in democracies. I find directed QCA as an appropriate method for undertaking the study because it will enable me to identify explicit and implicit actions and meanings inherent in the Ghanaian GMO debate and how those meanings explain how lack of public participation and trust in the government and science community could explain the policy impasse. According to Assarroudi et al. (2018) “qualitative content analysis (QCA) is a research approach for the description and interpretation of textual data using systematic process of coding” (p. 43). For Mayring, QCA is an appropriate method for analysing and interpreting data material in a case study research because it “offers a range of rule-based procedures for a systematic analysis of a material” (cited in Kohlbacher 2006, p. 17). In QCA “... it is not only the manifest content of the material that is important but also the latent content” (ibid, p. 9). Several QCA approaches have been used in studying the contents of communication and observational materials since the mid-twentieth century (Schreier, 2014 cited in Assarroudi et al., 2018, p. 43).

There are three main approaches of qualitative content analysis (QCA) - conventional, summative and directed (Nang et al 2015, p. 411 & Assarroudi et al., 2018, p. 43). Conventional QCA uses grounded theory in developing codes from text material. Summative QCA involves counting words and using their meanings to identify key themes in the text. Directed QCA entails developing analytical categories from existing theory and or previous literature in describing and explaining a phenomenon (Nang et al., 2015, p. 411). I used directed QCA approach to deductively derive categories for analysis from existing literature or previous research. Directed QCA has several advantages. Hsieh and Shannon (2005) point out that the approach enables researchers through their studies to either support and extend a previous theory or invalidate an existing theory. It also enables researchers to make predictions about variables and their relationship. The approach also has some limitations. Hsieh and Shannon

(2005) observe that the approach's emphasis on theory might lead to researcher bias. The emphasis on theory might lead to researchers' searching for "evidence that is supportive rather than non-supportive of a theory" (ibid, 2005, p. 1283).

### 3.4.2 Critical Discourse Analysis (CDA)

I will also draw on critical discourse analysis as a *complementary* method in *identifying* how supporters and opponents of the bill used language and how the latter expressed their powerlessness. According to Wodak and Meyer (2008) critical discourse analysis (henceforth CDA) involves "analysing opaque as well as transparent structural relationships of dominance, discrimination, power and control as manifested in language" (p. 10). It has also been described as the critical investigation of "social inequality as it is expressed, constituted, legitimised and so on, by language use (or in discourse)" (ibid, p. 10). CDA is considered a suitable approach to examining power relations and how ideology shapes power relations and domination. It has been observed that "power is central for understanding the dynamics and specifics of control (of action) in modern societies" (Wodak & Meyer, 2008, p. 10). In the Ghanaian GMO policy-making, the role of power is critical to understanding the impasse. For this reason, I utilised CDA in identifying how Ghanaian government officials exercised power and how it affected anti-GMO groups' participation and trust. I also drew on CDA in identifying how supporters and opponents of the bill used language in their attempt to contribute toward the GMO policy. Mogashoa (2014) point out that CDA reveals "unspoken and unacknowledged aspects of human behaviour, making salient either hidden or dominant discourses that maintain marginalised positions in society" (p. 111). CDA is also context-specific which makes it suitable for studying phenomena in any given location and time (ibid). One demerit of the method is that it depends largely on a researcher's interpretation which presupposes that meaning is always based on who is doing the interpretation (Mogashoa, 2014).

## 3.5 Initial Categories

As indicated above, I employed directed QCA in identifying and deriving initial categories from the existing literature and collected data. In a qualitative content analysis, it is recommended for a researcher to generate a priori categories to enable a pilot study to be conducted on a sample (Zhang & Wildemuth, 2009, p. 4; Assaroudi et al. 2018, p. 51). This study utilised categories derived from existing literature and collected data in examining how lack of public participation and trust might have contributed to the GMO policy standoff in

Ghana. The development of the categories was informed by the purpose of the study as well as the research questions the study sought to answer. Specifically, my goal was to develop categories that will enable my analysis and to enable relevant inferences to be made about the likely causes of the policy standoff and how more participation could resolve the impasse. As hinted earlier in chapter 2, the category development was informed by the OECD's framework: *information, consultation and active participation* and Offe's contributions to trust building in democratic governance. The OECD (2001) states that providing information, consulting and actively engaging the public in policy-making enhances their trust. Therefore, it can be argued on the other hand that, when a government denies policy stakeholders information, fail to consult and or actively involve stakeholders in policy-making it will negatively affects their trust in the government, political institutions and public officials involved in the policy-making. Offe (2000) also states that when public institutions violate rules that govern social interaction, it goes a long way to erode stakeholders' trust, however, when rules and regulations are respected by a government it improves stakeholders trust. By closely reading the collected texts and reflecting on the existing literature, portions of the texts that suggest lack of information, consultation and active participation were identified and marked as such and formed the basis of the category development (see Appendix A and E for details). The following are the initial categories:

1. MPs and Scientists are Paid to Pass GMO Bill (MSPPB)
2. Ghanaians Being Misled or Misinformed to Accept GMOs (GBMAG)
3. GMO Bill Making Non-inclusive or More Consultations Needed (BMNMCN)
4. Being Disregarded or Denied Access to Information (BDDAI)
5. GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations (GBBIGDCMC)
6. Decision-makers Disregarding Rules (DDR)
7. Lack of public education (LPE)
8. Being Open to Dialogue (BOD)

### 3.6 Pilot Study

A pilot study was conducted to check the consistency and appropriateness of the initial categories and coding schedule for the study. According to Assarroudi et al. (2018), a pilot study provides researchers the opportunity to encode text and discuss challenges associated



with using identified categories. The pilot study enabled me to test the initial categories and assessed consistencies and inconsistencies in the coding schedule (see appendix A) (Prasad, 2008, p.14). In the study, the pilot study was conducted on seven (7) sample units (news articles, petition and press releases). My analyses of the sampled texts were facilitated by my familiarity with the study context. During the pilot study (see Appendix B for details), I reviewed the sampled texts a couple of times to familiarise myself with the contents of the texts. Based on the analysis I found that some of the initial categories overlapped and needed to be merged to enhance their accuracy and appropriateness. Since some of the categories overlapped, it was necessary to revise and re-categorise them to enable reliable and objective analysis to be conducted. My revision of the overlapped categories was informed by the constant comparative method which content analysts are encouraged to use in their category development (Glaser & Strauss, 1967 cited in Zhang & Wildemuth, 2009, p. 4). I used the constant comparative method to compare and reassess each of the eight (8) initial categories in relation to all other categories. From the reassessment similarities and differences between and among initial categories were identified and resolved.

First, following the reassessment, I discovered that *LPE (Lack of Public Education)* and *BMNMCN (GMO Bill Making Non-inclusive or More Consultations Needed)* categories overlapped. Because anti-GMO groups which requested for more consultations also decried the lack of public education and demanded further public education to be held. The new category that emerged from the revision was *GMO Bill Making Non-Inclusive, More Public Education and Consultations Needed (BMNMPECN)* (see revised coding schedule for details). Other categories I revised were *GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations (GBBIGDCMC)* and *MPs and Scientists are Paid to Pass GMO Bill (MSPPB)*. The pilot study showed that these categories were interrelated because both sought to show that government officials and scientists were somehow biased and not committed to a transparent and inclusive GMO policy-making. As such, the categories were revised to avoid duplication and to enhance the study reliability and accuracy. The revision led to a new category *Ghanaian Decision-Makers are Bias, Trying to Impose GMOs on Ghanaians Despite Calls for More Consultations (GDBTIGGDCMC)* (see revised coding schedule for details). Moreover, the category, *Decision-Makers Disregarding Rules (DDR)* was revised and redefined as *Decision-Makers/GMO Policy-Making Violating and or Disregarding Rules (DVDR)* to adequately and objectively represent all meaning units which make reference to violation and disregard of local

and international biosafety protocols. Therefore, the revisions and recategorizations are reflected in the final categories and revised coding schedule below.

### 3.7 Final categories:

1. Ghanaians Being Misled or Misinformed to Accept GMOs (GBMAG)
2. GMO Bill Making Non-inclusive, More Public Education and Consultations Needed (BMNMPECN)
3. Being Disregarded or Denied Access to Information (BDDAI)
4. Ghanaian Decision-Makers are Bias, Trying to Impose GMOs on Ghanaians Despite Calls for More Consultation (GDBTIGGDCMC)
5. Decision-makers/GMO Policy-Making Violating or Disregarding Rules (DVDR)
6. Being Open to Dialogue (BOD)

### 3.8 Revised Coding Schedule

| No. | Category    | Category description   | When to use   |
|-----|-------------|--|---|
| 1   | GBMAG       | Public officials and scientists are misinforming Ghanaians about the GMO bill and GMOs, in general.  | Apply this code to units of the texts (meaning units) in which statements of public misinformation are made by the individuals and CSOs in the anti-GMO group   |
| 2   | BMNMPECN    | Refers to claims that the government side-lined several stakeholders in the GMO policy-making process. Before consensus can be reached broad consultations should be held. | Apply this category to units of the texts (meaning units) which suggest a lack of public education and consultations. It also includes statements of calls for more public education and stakeholder engagement                             |
| 3   | BDDAI       | Refers to attempts by individuals and CSOs to access information on the Bill are stifled, ignored or disregarded   | Apply this category to units of the texts (meaning units) that suggest the denial or withholding of information about the Bill and GMOs by government, parliament, MPs, and scientists  |
| 4   | GDBTIGGDCMC | Relates to claims that pro-GMO groups are trying to pass the Bill without adequate public consultations  | This code is applicable to units of text (meaning units) that allude to government and scientists resolve to pass the GMO bill without adequate consultations with stakeholders. It includes assertions of unfairness and policy imposition |

|   |      |   |   |
|---|------|---|---|
| 5 | DVDR | Relates to anti-GMO groups assertions that decision makers violate and disregard rules regulating biotechnology policy-making | Apply this code to units of the text (meaning units) in which Ghanaians decision-makers are said to be violating and disregarding the Ghana Biosafety Act (ACT 831) and the international protocols on biosafety.                       |
| 6 | BOD  | Relates to stakeholders' expression of willingness cooperate with the government in the making of the GMO policy              | Apply this code to units of the texts (meaning unit) in which anti-GMO activists express their willingness to participate in the policy-making. It also applies to instances where anti-GMO activists made proposals to change the Bill |

### 3.9 Transferability, Credibility and Dependability

In qualitative research, the trustworthiness of a study is of importance to its credibility, transferability, and dependability the same way validity, reliability and generalisability are indispensable qualities of good quantitative studies (Assarroudi et al., 2018). To reduce researcher bias and to ensure the study was trustworthy and consistent I conducted a 2-level inter-coder test in which I invited a second person (coder) to review a sample of seven (7) texts (news articles and publications) and literature review (Mayring, 2014). Mayring (2014) recommends a 3-level inter-coder agreement test for enhancing the rigor of content analysis and to reducing researcher bias. Considering the purpose of the study and availability of the second coder, I conducted a 2-level inter-coder test which involved the following:

- (1). The second coder was given the sample texts and research questions for analysis.
- (2). The second coder was also given the final categories and the coding scheme to assess the consistency of the categories.

Adapted from Mayring (2014)

Following the second coder's review and analysis of the seven (7) sample news articles and publications, he remarked that "based on the excerpts [sample] you sent, I think the work is very good. The coding looks perfectly fine. It covers the areas related to the [research] questions very well". The second coder also identified quotes in the texts which he noted could help in answering the research questions (see Appendix D).

## 4. Analysis

This chapter presents analyses of the texts based on the revised categories as indicated in the previous chapter. Even though, 36 news articles and publications were gathered for the analysis only 20 were used in the study. The analysis of the six (6) a priori categories were divided into two sections. The first section consisted of the first five categories that answered research question one (1) and the second part tried to answer research question two (2) using the sixth category.

### Research Question One (1)

*From the perspective of opponents of the Ghanaian GMO policy, how has lack of participation and trust in government officials and members of the science community contributed to the ongoing policy impasse?*

### 4.1 Ghanaians Being Misled or Misinformed to Accept GMOs

Ghanaians Being Misled or Misinformed to Accept GMOs was the third most observed category in the collected texts. A close reading of the publications and news articles revealed how individuals and CSOs that are opposed to the GMO bill expressed their concerns and disapproval of the way Ghanaian government officials and members of the science community tried to ‘deceive’ Ghanaians into accepting GMOs. Both supporters and opponents of the Bill concur that the provision of right information to stakeholders and the Ghanaian public will enable them to make informed decisions on the Bill. However, based on their encounters with supporters of the Bill, opponents of the Bill expressed their dissatisfaction with what they called attempts by the government to mislead Ghanaians into accepting the Bill without proper stakeholder education. For instance, in September 2014, FSG criticised the Minister for Justice and Attorney General, Mrs. Marietta Brew Appiah-Oppong for ‘deliberately misleading’ parliament when she stated in a memorandum that under the Bill Ghanaian farmers would have the right to reuse GMO seeds without infringing on breeder’s rights. This is captured in the following statement by FSG:

*“The Memorandum to the Bill falsely argues that farmers have the right to use protected varieties as a source for further research and breeding activities. In actual fact under the Bill, if a protected variety is used for further breeding and where the variety developed from the protected variety is an essentially derived variety (EDVs), breeders’ rights extend to the EDVs. This concept of EDVs is highly contentious and uncertain. Many advanced developed countries*

*are still grappling with this concept and its implementation. What is or is not an EDV is a question already under extensive litigation and court and arbitration disputes. These types of provision favor multinationals, which have immense financial resources at the expense of farmers and even local breeders. In the US Monsanto has attempted to crush farmers and local breeders in the courts”.*

FSG (16 September 2014)

In another respect, the failure to provide adequate information to Ghanaians by the Ministry of Justice and Attorney General was captured by FSG as a calculated attempt to humbug the legislature and the general public. Below is the claim by FSG:

*“mislead Parliament into voting for the Bill, [and] to throw dust into the eyes of the Ghanaian public about the real intent and import of the Bill visà-vis the enabling of the plant breeder to introduce GMOs into our food chain without any public awareness and participation in that decision.”*

FSG (24 January 2014)

FSG further explained the consequences of the Bill to farmers and food supply in Ghana at large when they argued that:

*“Far from simply dealing with the rights of the plant breeder, the Bill is designed to pre-empt the laws of Ghana and prevent farmers from freely saving, using, and sharing seed from season to season as they have always done. The ultimate result of the bill will be to put Ghana’s food supply into the hands of foreign corporations”.*

FSG (12 March 2014)

From the quotes above, the anti-GMO groups were clearly unhappy about the Attorney General’s attempt to misinform Ghanaians regarding seed ownership under the Bill.

During the early stages of the GMO policy-making, government officials and scientists denied claims by opponents of the bill that it had a connection with GMOs. This was expected to change when an advocate for the bill and Director of Biotechnology and Stewardship for Sustainable Agriculture in West Africa (BSSA), Prof. Walter Sandow admitted that the bill had connections with GMOs. Based on his admission, FSG found it untenable and misleading that some government officials, MPs, and scientists continued to deny any links between the bill and GMOs. In a statement, FSG queried:

*“Food Sovereignty Ghana is horrified by the mind-boggling attempts by people in responsible positions of public trust who are supposed to know better, to mislead the Ghanaian public and our lawmakers that the Plant Breeders’ Bill has nothing to do with GMOs! The Bill has GMOs in the crossed hairs.... What is even alarming is the fact that these people continued to peddle*

*their lies even after being publicly corrected by Prof. Walter Sando Alhassan.... There seems to be a discernible determination on their part to use plain lies and deceit to push the Plant Breeders' Bill into law".*

FSG (24 January 2014)

From the illustration above FSG believed that public officials and scientists have something to hide that is why they were trying very hard to delink the Bill from GMOs.

On a whole, the provision of right information to citizens is at the heart of public participation and trust building in GMO policy-making (OECD, 2001). Because access to right information increases citizens understanding and knowledge of policy issues. In the same way, public education enhances citizens support and acceptance of biotechnology policies (ESRC, 1999). On the other hand, misinformation in policy-making has undesirable consequences on stakeholder trust. From the illustrations above, the anti-GMO groups indicated their unhappiness about attempts by supporters of the Bill to mislead Ghanaians into accepting GMOs in the country. The lack of adequate information from government officials is perceived as attempts by the government to mislead Ghanaians into accepting GMOs into the country. This is a widely held perception among opponents of the Bill. The consequence of this on stakeholder trust is apparent as anti-GMO groups have decided to boycott information sessions and injunct the policy process. Therefore, the widely held perception among anti-GMO groups that the Ghanaian government is misinforming or misleading the public into accepting the Bill does not augur well for the policy process as well as Ghana's democratic development. Such perceptions should be properly addressed to avoid suspicions about the government's interests and commitment to collective and consensual decision and policy-making.

#### **4.2 GMO Bill Making Non-inclusive or More Consultations Needed**

A close reading of the press statements and news articles revealed 18 incidences of this category which makes it the most observed of all the categories. In line with local and international protocols on biosafety, the government of Ghana put in place public participation guidelines which aimed to "promote and facilitate public awareness, education and participation in decision making on activities involving GMOs". Even though, the Ghanaian government indicated clearly its intention to engage citizens and stakeholders in the policy-making as stipulated in the guidelines, a close reading of the texts revealed several instances where anti-GMO groups and non-partisan organisations and associations expressed dissatisfaction in the way the public consultations were conducted. They described the

consultations as woefully inadequate which did little to include Ghanaians and all stakeholders. For instance, the Ghana News Agency reported that during a two-day capacity and skills development workshop organised in Accra by FSG on February 2, 2014, there was general agreement among the participants that “the [B]ill has been developed without consultations with the wider civil society and smallholder farmer community” (GNA, 2014).

Faith-based and religious organisations occupy an important place in the Ghanaian society and politics. They have large membership than any form of organisation in the country. For this reason, their views on national issues, for example, the GMO policy-making are said to represent the views of a majority of Ghanaians and therefore should be taken seriously by decision-makers. It was based on this that in June 2014, a group of faith-based and non-partisan organisations observed that many Ghanaians were left out of the GMO policy-making and therefore were uninformed about it:

*“Many Ghanaians are not aware of or understand what is contained in the Plant Breeders’ Bill. There has not been adequate public education and consensus on the Bill. We are alarmed by attempts by Parliament to pass the Bill without adequate consultation with key stakeholders including the Faith-Based Organizations”.*

Faith-based organisations, ActionAid Ghana, CIKOD, PFAG, STAR-Ghana, Accra (19 June 2014)

In a similar move, the Ghana Catholic Bishops Conference (GCBC), a popular religious organisation in the country issued a press release in relation to the GMO policy impasse in which the bishops observed that the consultations were inadequate and requested the government to actively involve Ghanaians in the policy-making process. They observed:

*“We believe that there is the urgent need to organise a proper education for all Ghanaians to appreciate the merits and demerits of GMOs in order to help all citizens to make a proper and informed decision on the subject”.*

(GCBC website)

As a way to create a conducive atmosphere for a national dialogue on the GMO policy-making, GCBC in press release further admonished all relevant stakeholders of the GMO policy to “cease fire and allow proper dialogue and consultation to take place”.

Apart from religious organisations, there have also been calls from non-partisan organisations urging the government and parliament to widen the consultations to allow Ghanaians and all relevant stakeholders to participate in the deliberations. For example, in February 2014, over

50 CSOs issued a press release in which they requested for wider public consultations to be held. They pointed out that adequate consultations will lead to the protection of Ghanaian interests under the Bill. They opined that:

*“Extensive consultations involving all stakeholders including the farming communities and civil society should be initiated urgently with the aim to develop a balanced and equitable legislation, with appropriate safeguards to protect the interests of smallholder farmers and public interests”.*

Group of CSOs (20 February 2014)

To reiterate the need for public consultations, FSG which has been critical of the government’s handling of the GMO policy-making process also added its voice to calls for wider public consultations. On September 8, 2017, FSG observed that extensive public consultations will lead to a transparent GMO policy-making. In a press release, FSG asserts that:

*“A national debate involving all stakeholders on the suitability of GMO’s in the Ghana food industry will help reach a consensus on a sustainable national position as well as to help expose the lack of engagement that has so far been the hallmark of the entire GMO agenda in Ghana. A more transparent process is needed to settle the controversial issue which conveniently did not find a voice on any political party campaign platform leading up to the recent election in 2016”.*

FSG (8 September 2017)

To a large extent, public consultation is considered an important component of participatory public policy-making (OECD, 2001). It was also observed that open and transparent public consultation wins public support and trust for biotechnology policies (ESRC, 1999). On the other hand, when citizens are not consulted in public policy-making it affects their trust in the policy and decision-makers.

In the Ghanaian GMO policy-making, the quotes above have shown that even though both supporters and opponents of the Bill acknowledged that public consultation is a necessary condition for better public policy-making, the government of Ghana has been adamant about conducting extensive public consultations. It has also been observed that since the Bill was introduced in Ghana’s parliament, opponents of GMOs and some independent organisations have been demanding for wider consultations to be held but to no avail. As a result, the anti-GMO groups questioned the transparency, legitimacy, and inclusiveness of the policy-making process. Clearly, the anti-GMO groups are not willing to allow the policy-making process to continue unless extensive consultations are held.



### 4.3 Being Disregarded or Denied Access to Information

Being Disregarded or Denied Access to Information was the third most observed category in the texts. Through this category opponents of the GMO bill recounted their experiences of being refused access to policy information and in some instances, their requests for information were ignored completely. As indicated in chapter two, access to information in public policy-making is critical to improving government-citizen relations (OECD, 2001). Both supporters and opponents of GMOs seemed to have acknowledged this proposition. Opponents of the Bill depend largely on the supporters for official information on the policy. However, government institutions such as MOFA, Attorney General's Office, and parliament which have the GMO policy-making mandate from the state and have full access to the policy documents appeared to be overprotective of the policy information. In the texts, five occurrences of this category were observed as opponents of the Bill expressed how their requests for information were denied and or disregarded by parliament. In some instances, the opponents implicitly and explicitly expressed how difficult it was to get parliament to publish reports on consultations it said to have conducted. For instance, in March 2014, FSG expressed worry and frustration over parliament's unwillingness to publish reports on their (FSG) meeting with the legislators and queried why "the minutes of our meeting with Parliament must be denied to us the public".

In addition, in 2016, FSG requested the then Ghana's Speaker of Parliament, Edward Korbly Doe Adjaho to publish reports of consultations on the Bill. The request was necessitated by claims of the then Vice-Chairman of the Parliamentary Select-Committee on Constitutional, Legal and Parliamentary Affairs, Mr. George Loh that wider public consultations had been conducted. On March 16, 2016, the North Dayi MP claimed in an interview on Radio XYZ 93.1 FM that:

*"We have done extensive consultations. We even did two consultations carried live on television with all stakeholders. So, nobody can pretend that we haven't spoken to people.... If after consultations, you do stand where you are, fine! We have consulted.... We have looked at the petitions. We've invited all the relevant people. We sat with Food Sovereignty Ghana, the Attorney-General, we've had all the consultations and all the meetings".*

FSG (29 March 2016)

The comments of the MP did not go well with the anti-GMO groups because they found the consultations as non-inclusive as indicated in the section above. In response to the MP's comments in March 2016, FSG claimed that several stakeholders were excluded, and no justification was provided for their exclusion. For this reason, FSG reiterated their call for a

parliamentary report on which stakeholders were consulted and why some stakeholders were excluded. The statement below captures the queries of FSG:

*“The consultations that we have been expecting from Parliament since November 11, 2014, have already taken place without our knowledge.... We are not claiming that we are the only group that petitioned Parliament that needed to be consulted. However, we see that almost all the groups that petitioned Parliament are still waiting to be consulted. We wonder, which groups actually were consulted? Why were most or all of the petitioners excluded?... What was the basis of the petitions of any groups that may have been consulted, and on what grounds were they rejected by the Committee?... It therefore behooves the Committee to produce an official report detailing the consultations they claim to have done for all to know why Parliament still refuses to heed the demands of Ghanaian civil society groups and faith-based organisations, who have formally petitioned them”.*

Citi Newsroom (30 March 2016)

Moreover, in February 2018, a group of CSO<sup>1</sup> led by FSG in a petition to Parliament’s Select Committee on Food, Agriculture and Cocoa Affairs called on the Ghanaian Parliament to publish reports on public consultations held. According to the CSOs, publishing the consultations reports will enhance the GMO policy-making transparency and legitimacy. They observed:

*“The only reason given for the withdrawal of the Plant Breeders’ Bill, which was at the Consideration Stage was, in the words of the former Speaker of the House, “because it is important to inform the people of Ghana”. It therefore behoves Parliament, in the interest of transparency, especially given the controversy surrounding the Plant Breeders’ Bill, to publish a cogent report on the consultations over the Plant Breeders’ Bill, detailing the petitions, the basis of opposition to the Bill, and generally provide a public account before any decision to proceed with the Bill in its current form”.*

Group of CSOs (27 February 2018)

In the same petition, the CSOs demanded a review of several clauses in the Bill including clause 3, 9, 10, 16, 20, 21 and 23. These clauses were said to be inimical to Ghana’s sovereignty, food production, and agricultural development. They were also noted to contravene local and international protocols on biotechnology policy-making. For these reasons, the FSG-led group demanded an explanation of why Ghana opted for the International Union for the Protection of New Varieties of Plants (UPOV) 91 model instead of a ‘sui generis’

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<sup>1</sup> The CSOs included Food Sovereignty Ghana (FSG), Peasant Farmers Association of Ghana (PFAG), General Agricultural Workers Union – GAWU of TUC Ghana, Centre for Indigenous Knowledge and Organisational Development (CIKOD), and SNV Netherlands Development Organisation

plant variety protection which is suitable for developing countries like Ghana and which has been adopted and proven successful in other developing countries. The CSOs queried the government in the statement below:

*“Ghana can protect plant breeder rights without necessarily opting for UPOV 91. The Bill is modelled on the International Convention for the Protection of New Varieties of Plants of 1991 (UPOV 1991) which is a rigid and an inflexible regime for plant variety protection (PVP). It is worth noting that today out of the 71 UPOV members, only a fraction – about 22 developing countries are members of UPOV. Most of these developing countries (e.g. Brazil, China, Argentina, South Africa) and even some developed countries (e.g. Norway) are not members of UPOV 1991 but rather UPOV 1978, which is a far more flexible regime”.*

FSG (27 February 2018)

As indicated in chapter two, access to policy information by citizens and stakeholders is important to successful public policy-making. It was also established that access to information helps in building citizens’ confidence and trust in public institutions, public officials, and governments (OECD, 2001). On the other hand, denial of access to policy information can have dire consequences on policy legitimacy, acceptability, and transparency. From the illustrations above, it has been shown how anti-GMO groups tried on several occasions to access information and to parliament to publish reports on the policy-making but to no avail. It has become a big challenge to opponents of the GMO Bill contribute effectively to the policy-making process since their efforts to obtain information from relevant government officials and parliament are either ignored or stifled. Particularly, the refusal of the leadership of the Ghanaian Parliament to publish reports on consultations held does not show Ghana’s democracy in good light. As indicated in the introduction, the Parliament is the people’s house which functions on the principle of participation. Therefore, withholding public records even after several requests by stakeholders does not show Ghana’s democracy in good light especially when the country’s democratic development has been touted as one of the best in Sub-Saharan Africa.

#### 4.4 Decision-makers/GMO Policy-Making Violating or Disregarding Rules

The Decision-makers/GMO Policy-Making Violating or Disregarding Rules category was one of the least observed categories in the texts. Four occurrences of this category were observed in the texts. To a large extent, alleged violation of biosafety protocols appeared to have strong connections with claims by anti-GMO groups that the Bill lacked legitimacy and hence the

protests, demonstrations, court cases, and petitions. The anti-GMO groups pointed out that the policy-making process and the Ghana Biosafety Act 2011 (ACT 831) were inconsistent with major international protocols<sup>2</sup> on biosafety and biodiversity, of which Ghana is a signatory. As a signatory to these protocols, Ghana agreed to take steps to preserve and protect plant resources as well as protect the public from the dangers of biotechnology. Aside from the international agreements, the anti-GMO activists also claimed that the government violated its own Biosafety Act 2011 (ACT 831) in the GMO policy-making process. For example, in March 2014, FSG organised a stakeholder sensitisation workshop in Accra in which it was generally agreed among the participants and captured in their report that:

*“The Ghana’s Biosafety Act ... contravenes several provisions of the Cartagena Protocol on Biosafety, an international environmental agreement to which Ghana is Party”. The participants also observed that “the Bill is inconsistent with Ghana’s obligations under the Convention on Biological Diversity and the International Treaty on Plant Genetic Resources for Food and Agriculture”.*

Ghana News Agency /FSG (2 March 2014)

In February 2015, FSG sought an injunction at the Human Rights Court in Accra to halt any plan to release new GMOs seeds into the country’s agricultural sector until the government complies with all relevant local and international protocols on biosafety. In biotechnology and GMO policy-making, concerns over public safety and risks have always been high on the agenda. In Ghana, anti-GMO groups have shown great concern for public safety and have criticised the government for not putting in place adequate measures to protect the public from dangers associated with the development of new GMO varieties. In particular, FSG claimed that the government failed to comply with GMO safety requirements which it observed could have dire consequences for Ghanaians. In this regard, FSG in a statement held the view that “in approving the release and commercialization of GMOs, [the] government had not met the requirement of the law on major issues of risk assessment and risk management”. However, the court dismissed FSG’s injunction by arguing that granting the injunction would cause “irreparable damage and hardship” to the government. In response to the dismissal of the injunction, FSG organised a press conference on 29th October 2015, in which the CSO and its partners defended and reiterated their position on the matter. They outlined how the government violated provisions relating to public awareness and participation in approving

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<sup>2</sup> International Treaty on Plant Genetic Resources for Food and Agriculture, Convention on Biological Diversity and the Cartagena Protocol on Biosafety

new GMO cowpea confined field trials. During the press conference, FSG made the following argument:

*“Our case for the Interlocutory Injunction is simple. We have noticed certain irregularities and illegalities in the approval for the “confined field trials” and therefore plead that they must not, and cannot, be used as a basis for the granting of approval for the commercial release of same. The “confined field trials” for the Bt cowpeas and the genetically modified rice did little to respect the provisions of Advance Informed Agreement under the Protocols; that advance informed consent includes public awareness and participation in the decision-making processes leading to the intentional release of living modified organisms into the environment”.*

FSG and others (11 November 2015)

Furthermore, opponents of the Bill criticised the government and parliament for failing to effectively engage Ghanaians in the GMO policy-making. Under international protocols (see footnote 2) on biotechnology policy-making public education and participation are obligations national governments are admonished to fulfil. Actively engaging citizens and stakeholders in GMO policy-making enhances policy transparency, legitimacy and as well as public trust. As such, FSG argued in a press release that:

*“There is a clear need for mass education and public engagement which is an obligation Ghana is bound by under the provisions of the Cartagena Protocol on Biosafety.”*

FSG (24 May 2016)

On November 23, 2017, FSG alongside the CPP, Vegetarian Association of Ghana and Goaso Kayan Akuofo Kuo, a farmers’ association sued MOFA, National Biosafety Association, Attorney General’s Office, National Biosafety Committee (NBC) and Ghana National Farmers and Fishermen Association to stop them from releasing new GMO rice and cowpea seeds into the country’s seed system. According to them, the necessary provisions of biosafety were not followed. Speaking on behalf of the group, Mr. Edwin Kweku Andoh Baffuor Director of Communication of FSG observed that:

*“We want to highlight that these are the red flags that we should be paying attention to now. Some of these risk assessments have not been through. And as a nation we stand to lose out if we go ahead with the release of this cowpea and rice”*

Joy FM 99.7 (27 November 2017)

The illustrations above captured the perceptions and experiences of opponents of the GMO policy in relation to the Ghana government’s compliance with biosafety protocols. The opponents of the Bill have attached great importance to the government’s compliance with biosafety protocols. However, the illustrations above have shown that there have been several

instances of violations of biosafety protocols in terms of public participation and risks assessment before new GMO seed varieties were tested in the field. As observed by Offe (2000) when democratic governments violate rules and regulations that govern the conduct of political institutions and actors, it has the tendency to negatively affect public trust. For this reason, the perception among anti-GMO groups that the government is violating relevant protocols of GMO policy-making appeared to have affected their trust in government agencies and public officials. As such, it seems the anti-GMO groups are resolved not to allow the Bill to be passed unless the government complies with international and local protocols.

#### 4.5 GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations

GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations was the second most observed category. In closely reading the texts five occurrences of this category was observed. This category appeared to have contributed significantly to the policy standstill. In many instances and based on their encounters with government officials, opponents of the GMO bill expressed worry and suspicion that the government was trying to impose the GMO policy on Ghanaians. They had this feeling because of the government's seeming determination to pass the Bill without addressing the concerns of citizens and stakeholders. For example, in a press release on February 12, 2014, FSG expressed concerns over parliament's resolve to pass the Bill despite several calls from several stakeholders for further consultations to be conducted. FSG mentioned an infringement on national sovereignty and corporate capture of Ghana's food production as some of the ills of the Bill. With all these evidence against the Bill, FSG wondered why:

*“The Speaker of Parliament and the Parliamentary Sub-committee on Constitutional, Parliamentary and Legal Affairs appear determined to ignore the voices of the Ghanaian people and to give away Ghana's sovereignty and control of our food supply and place it at the mercy of foreign multinational corporations. Food Sovereignty Ghana (FSG) was not invited to participate at any meeting with the Parliamentary Subcommittee on Constitutional, Parliamentary and Legal Affairs and other stakeholders agreeing to support the Plant Breeders Bill”.*

FSG (12 February 2014)

In another press release, FSG observed how MPs were adamant about organising wider consultations. FSG expressed concern that even though many Ghanaians and CSOs are

opposed the Bill Parliament was still determined to pass it. The sentiments of FSG is captured in the statement below:

*“The problem is that judging from the various pronouncements of several MPs on this Committee, the mood is clearly one of going ahead to pass the Bill in spite of the overwhelming public opposition to it. In order to do so, it is expected that the report would attempt to rubbish the concerns raised in these petitions as baseless and unfounded, as they have been doing in interviews and Press Conferences”.*

FSG (16 September 2014)

In September 2014, FSG observed how some Ghanaian MPs were trying to demonise anti-GMO groups in their attempt to pass the Bill without further consultations. FSG expressed worry that the main concerns of opponents of the Bill were being disregarded by MPs who described them as engaging in sensationalism. Commenting on the implications of the legislators’ actions, FSG accused Ghanaian political elites of betraying Ghanaians and went further to liken Parliament’s non-cooperative nature to practices in countries where one political party governs. The sentiments of FSG is captured in this statement:

*“Various radio interviews, and statements by several members of the committee [on Constitutional, Legal and Parliamentary Affairs] have systematically sought to bastardize the petitions and to defend the Bill as it stands, without paying any due attention to the fundamental concerns in the petitions... Parliament still appears determined to defy democracy, defy the will of the Ghanaian people, and pass the Plant Breeders Bill... When it comes to the Plant Breeders Bill you might think Ghana is a one party state. The elites of our political parties all seem intent on passing the Plant Breeders Bill despite public outcry. The Ghanaian people do not want this bill! Is Ghana independent? Is Ghana a democracy?”*

FSG (30 September 2014)

In addition, during a protest march on March 23, 2015, Mr. Charles Nyaaba, a programme officer of PFAG recounted how a government appointee tried to stop an anti-GMO demonstration in a district in the Greater Accra Region. He made the comments after the District Chief Executive of Dangme West District in Accra attempted to stop them from demonstrating in his district. Charles Nyaaba berated the conduct of government officials whom he observed are not doing enough to protect the interest of the public. The assertion of Charles Nyaaba is captured in this statement:

*“We are not surprised with his attitude [District Chief Executive who tried to stop their demonstration] because MONSANTO can do anything to protect the interest. We stood under the heat of the sun and elected every one of the two-hundred and seventy five parliamentarians*

*in the hope that they would protect our collective interest but our expectations have become bitter experiences” (caps in original).*

Modern Ghana (24 May 2015)

Overall, the GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultation category has shed light on the perceptions of anti-GMO groups on the government’s role in the policy-making. Based on their encounters and experiences, the anti-GMO groups perceived government officials and MPs as a biased group of individuals who are determined to pass the bill without addressing the concerns of stakeholders. For this reason, some of the bill’s opponents are determined to resist the passage of the bill at all costs. To the extent that even if all legitimate means fail, some of them will not hesitate to seek a spiritual solution to the matter. For example, a well-known musician, radio personality and an anti-GMO activist, Blakk Rasta in an interview with Sahara Reporters on why Ghana should not introduce GMOs into the country hinted that “... if this one [campaign to stop government] fails which I wonder, we will chant them down spiritually”. This shows the group is determined to impede the GMO policy-making process as long as the government does not heed to their calls.

In the five categories illustrated above anti-GMO groups pointed out the various challenges they encounter in their attempt to participate in the GMO policy-making. These challenges impede their attitude to contribute effectively to the policy-making. Most importantly, the challenges served as barriers to their participation in the policy-making which to some extent affected their trust in the political class, public institutions, and government officials. As such, the illustrations have shown the magnitude of challenges opponents of GMOs encounter in Ghana as they try to contribute the policy-making.

This section focuses on answering research question two (2) and explores how open anti-GMO groups were to participate in the GMO policy-making process.

Research question two (2)

*Can more participation and openness in the policy making-process resolve the GMO policy standstill?*

## 4.6 Being Open to Dialogue

Being Open to Dialogue category was observed 7 times in the texts. Opponents of the GMO bill attached great importance to their involvement in the GMO policy-making. This was



evident in their frequent requests for government to involve Ghanaians and all relevant stakeholders in the policy-making. The anti-GMO groups appeared very enthusiastic about participating in the making of the GMO policy. An instance can be cited of the African Centre for Biosafety (ACB) and FSG petition to the Speaker of Parliament, Chairman of Committee on Consultation, Legal and Parliamentary Affairs and MPs to review the Bill in November 2013. In their petition, the CSOs expressed their preparedness to contribute to shaping the policy. They also indicated that their objective was to contribute to making a policy that would protect Ghanaian farmers' rights, protect human health and the environment and at the same time save Ghanaians from paying judgement debts that might occur because of possible violations of plant breeder's rights. According to them, they were:

*“EAGER TO help block a reckless loop-hole that is bound to saddle us with huge judgement debts, as a nation, we particularly oppose Clause 23. This clause will, at best, present us with a dilemma of regulating the activities of the plant breeder for the sake of public health or the environment and face judgement debts, or accepting the right of the breeder and be damned. As it currently stands in Clause 23, a plant breeder's right is “independent of any measure taken by the Republic to regulate within Ghana the production, certification and marketing of material of a variety or the importation or exportation of the material”, irrespective of the consequences” (caps in original).*

FSG (24 November 2013)

Moreover, in March 2016, FSG wrote a letter titled ‘Publish Report On “Consultations” Over Plant Breeder's Bill!’ to the Speaker of Parliament and copied to relevant committees in Parliament. In the letter, FSG observed that several organisations were prepared to contribute to the policy discussions only to be disappointed by Mr. George Loh's announcement (see section on Being Disregarded or Denied Access to Information for details) that Parliament had conducted consultations the CSOs had been waiting for a long time. FSG posed several questions regarding the modalities Parliament used in selecting stakeholders who participated in the supposed consultations. The following capture FSG sentiments:

*“We are not claiming that we are the only group that petitioned Parliament that needed to be consulted. However, we see that almost all the groups that petitioned Parliament are still waiting to be ‘consulted. We wonder which groups actually were consulted? Why were most or all of the petitioners excluded? What was the basis of the petitions of any groups that may have been consulted, and on what grounds were they rejected by the Committee?”*

FSG (29 March 2016)

Aside from expressing their preparedness to participate in the GMO policy-making, the anti-GMO groups also demonstrated enough capacity to contribute toward shaping the policy. Since

2013, several anti-GMO organisations have been submitting proposals and petitions to Parliament and the Presidency with the objective of changing ‘inimical’ clauses in the Bill. FSG, in a petition to parliament in 2013, observed that some of the clauses could pose serious risks to Ghanaians in future. Some of the clauses FSG proposed to amend included clause 3, 6, 20, 21, and 23. In the petition, FSG was concerned that the bill:

*“contains clauses that have serious implications on our sovereignty as a people, including unacceptable limitations on the policy space it leaves for the state to regulate the activities of plant breeders vis-à-vis measures to protect public health and the natural environment”.*

FSG (November 2013)

The discussions above have shown that opponents of the GMO Bill have been desirous of participating in the policy discussions. Therefore, it is imperative for the government, parliament, and Ghanaian scientists to rethink their engagement strategies to give stakeholders the opportunity to make contributions to the policy.

## 5. Discussion

This study set out to examine the extent to which lack of public participation and trust contributed to the GMO policy-making impasse in Ghana. Through directed qualitative content analysis and critical discourse analysis, I explored the perceptions of Ghana's anti-GMO groups, based on their experiences and encounters with supporters of the GMO Bill. Based on the analyses, I will make some observations that can be used to improve our understanding of Ghana's GMO policy, address the policy standoff and can serve as a basis for further research. Since the study adopted an interpretivist approach, it is imperative to state that my interpretation of the texts is not sacrosanct which means other researchers' interpretations might lead them to conclusions that differ from those of this study. It is also important to add that a category's prevalence in the texts to some extent is an indication of its importance to the anti-GMO groups and to a large extent the role it might have played toward the standoff. The following findings were made from the analysis: public education on GMOs was lacking, lack of agricultural sector actors, government officials belittle anti-GMO groups, loss of confidence in government and the political class, GMO Bill is perceived as an illegality, anti-GMO groups shows confidence in the judiciary and sometimes make contradictory demands. These findings are discussed below.

### 5.1 Lack of Public Education on GMOs

The anti-GMO groups believed that Ghanaians and all relevant stakeholders have not been properly educated on the GMO Bill and GMO technology in general. They were dissatisfied with the government's information dissemination and stakeholder engagement efforts on the Bill. As a result, they made several requests for all stakeholders to be consulted. The finding that public education was lacking in the GMO policy-making process validates previous research conducted in the Northern Region of Ghana. A study by Zakaria, Adam, and Abujaja (2014) find that among 305 leaders of FBOs in Ghana's Northern Region only 54.8% had heard about GMOs. The most surprising aspect of this finding is that among the 54.8% FBOs leaders, only 3.6% had heard about GMOs from government sources. To some extent, the author's finding confirms assertions by anti-GMO activists that public education and consultations the government has conducted have been inadequate. Based on their finding, the authors admonish the government "to do more by way of education to win the trust and confidence of farmers in adopting the cultivation of genetically modified crops" (Zakaria, Adam & Abujaja 2014, p.

155). As noted in chapter 1, before trust can be established in policy-making, there is a need, as this study's definition of participation emphasises, for stakeholders to be able to influence decisions that affect their lives. However, the ability of stakeholders to influence decisions will be adversely affected if they do not have relevant information. As such, to some extent, the lack of public education on GMOs in the GMO policy-making might have affected stakeholder trust. Therefore, the finding of the content analysis that public education was inadequate validates previous literature which state that providing relevant information to policy stakeholders enhances their trust (OECD, 2001).

## 5.2 Lack of Engagement of Agricultural Sector Actors

The anti-GMO groups believed agricultural sector actors in Ghana are poorly engaged by the government. There is an occurrence in the agricultural sector that validates claims by the anti-GMO groups that agricultural sector stakeholders were poorly engaged in the GMO policy-making process. On Sunday, May 27, 2018, the researcher monitored a popular radio programme, Pukpar'bi Saha<sup>3</sup> on a Tamale-based Zaa Radio 99.3 FM between 19.30 and 22.00 CET. The panellists, two agricultural experts, Mr. Ibrahim and Mr. Alhassan and all twenty-five (25) farmers who called into the programme blamed challenges farmers encountered in obtaining improved seeds and coupons for subsidised fertiliser on lack of education and consultation. They lamented that agricultural policy-making is always concentrated at the top of government. Before their comments, the Chairman of government's Planting for Food and Jobs Programme (PFJ) and Technical Advisor to MOFA, Mr. Asante Krobea made the following announcement at a workshop in Bolgatanga on April 26, 2018:

*“For this year's planting for food and jobs programme, farmers can get seeds at only the District Agric offices, but that of the fertilizer can be gotten at both the district offices and fertilizer distribution agents. Any farmer who wants to buy fertilizer at subsidized rates must first go to the district Agric offices to buy seeds at a subsidized rate before you can get coupons to purchase the subsidized fertilizer. If a farmer does not buy seeds he or she will not get a coupon. If you don't get a coupon, you don't get fertilizer. In short, no seed, no coupon and no coupon, no fertilizer”*

*(Citi Newsroom 2018)*

The Chairman's tough tone appeared to suggest he was little prepared to dialogue with stakeholders. His utterances also demonstrated his excessive exercise of power in governance

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<sup>3</sup> Pukpar'bi Saha is a word in the Dagbani language which literally means Farmers' Hour

decision-making. As such, his lack of interest in engaging farmers is an indication of the elite decision-making approach which Cerovac (2017) observes gives “greater (or even all) political power to a small group of people (i.e., experts) who are considered to be better at producing correct political decisions” (p. 2). As noted in chapter two, one of the purposes of participation in policy-making and democratic governance is to enhance stakeholder trust. In the context of this study, participation involves giving stakeholders the opportunity to shape decisions that affect their lives. In this regard, Mr. Asante Krobea’s pronouncements show that he did not place much value on farmers’ contributions and trust.

### 5.3 Government Officials Belittle Contributions of Anti-GMO Groups

Around the world, (Buah, 2011) observes that “proponents of the GM technology hold the view that anti-GM food attitudes are [uninformed], emotionally driven and fostered by both media hysteria and non-governments that are opposed to biotechnology in general” (p. 542). From the analysis, this view was common as anti-GMO groups observed how supporters of the Bill accused them of lacking knowledge and understanding of GMO technology. The anti-GMO groups were accused of being uninformed and only engaged in public incitement. For example, in 2013, the Director of the Council for Scientific and Industrial Research (CSIR), a leading scientific institution in Ghana, Dr. Abdulai Baba Salifu described as “baseless” claims by anti-GMO activists that GMOs were harmful and that the Bill would be a threat to Ghana’s sovereignty (Ghana News Agency, 2013). Through the content analysis and critical discourse analysis how government officials use words and statements such as “*baseless*”, “*uninformed*”, “*unfounded*”, “*So, nobody can pretend that we haven’t spoken to people... If after consultations, you do stand where you are, fine!*” etc in describing arguments by the anti-GMO groups were identified. These quotes show how government officials exercised power using language in the policy-making process. Aggressive use of language in this way is inimical to policy-making and democratic governance. The study’s definition of trust puts emphasis on decision-makers and experts providing leadership and guidance to stakeholders such that policies that are in the interests of the public are made. As such, the way government officials responded to opponents of GMOs might have affected their trust. Instead of attacking anti-GMO groups, government officials should respond appropriately to them to dispel allegations that may create public suspicion. In this regard, ESRC (1999) advises governments that are making GMO policies to “be more attentive to social factors, rather than dismissing public unease as a matter of irrationality and lack of understanding” (p.13).

## 5.4 Loss of Confidence in Government and the Political Class

The anti-GMO activists held a strong view that the government, political class, and scientists are not committed to protecting the interest of Ghanaians. They claimed that the GMO bill in its current form is not in the interest of Ghana. As a result, they accused the bill's supporters of being self-seeking and sponsored by Monsanto and Syngenta to impose GMOs on Ghanaians. Even though the claims remain allegations, they do not augur well for policy-making and democratic governance in Ghana. From the analysis and previous research, three observations can be made about government officials' actions and inactions that gave credence to the allegations. For example, Buah (2011) observes that workshops and conferences on the GMO policy have been largely funded by developed countries where the GMO technology originated. In addition, the Dangwe DCE's attempt to stop the anti-GMO protest in his district had the potential to create an impression that he had an ulterior motive. Moreover, significant and worthy of note is the government's loud silence in responding to requests for public education and consultations. It does not show the government in a good light in its commitment to making a transparent, legitimate and inclusive GMO policy. To some extent, the examples noted above have the tendency to create suspicion and distrust in the government. This is in line with the study's postulation that the opposition to the Bill had to do with lack of policy credibility, acceptability, and legitimacy (Schiffino & Jacob, 2017; Kangmennaang et al., 2016). This concurs with propositions by ESRC (1999) that to avoid suspicions in GMO policy-making a government needs to maintain and or "restore its neutrality in the eyes of the public" (p. 13). This corroborates Offe's assertion that government institutions that are perceived to be biased are likely to lose their legitimacy and public trust (Offe, 2000). Thus, in the policy-making, government officials conducted themselves in ways that suggest they were biased.

## 5.5 GMO Bill perceives as an Illegality

First and foremost, it is evident from the analysis that the anti-GMO groups viewed the GMO bill in its current form as an illegality which contravened local and international biosafety protocols. This perception appeared to have significantly contributed to the policy impasse. Ghana's Biosafety Act 2011 (ACT 831) and the Cartagena Protocol on Biosafety clearly identified public education, public participation, and adequate risk assessment as crucial elements for a transparent, legitimate and inclusive GMO policy-making. Being aware of these provisions, the anti-GMO activists accused government officials of violating biosafety

protocols<sup>4</sup>. In this regard, they were worried that risk assessment before GMO field trials was lacking. This made them suspicious and doubtful of the government's commitment to protecting Ghanaians from the harmful effects of GMOs. To some extent, this finding corroborates results of a study conducted by Zakaria, Adam, and Abujaja (2014) to assess knowledge levels and perceptions of leaders of Farmer Based Organisations (FBOs) towards GMOs in the Northern Region of Ghana. Out of 305 FBOs leaders interviewed, 26.3% and 38.9% agreed and strongly agreed respectively, that the government was not doing enough to protect Ghanaians from the effects of GMO technology (Zakaria, Adam & Abujaja, 2014, p. 155). This shows even among agricultural sector actors, confidence in the government's preparedness to protect Ghanaians from the harmful effects of GMOs is low. Second, the finding also confirms Offe's (2000) observation that when governments violate rules and regulations that guide an activity it goes a great deal to affect public trust.

## 5.6 Confidence in the Legal System

The anti-GMO groups showed strong belief and confidence in Ghana's judicial system. They always referred to the courts for resolution of the GMO policy disputes. A country's democratic and national development depend largely on the fairness of its legal system and citizens' trust in the system. In Ghana, the judiciary is an organ of government with the responsibility of interpreting, applying and implementing laws in resolving legal disputes (Judicial Service of Ghana, 2018). Knowing the importance of the judiciary in dispute resolution in Ghana, opponents of the Bill on several occasions sought guidance from the courts whenever they suspect a violation of Ghana's laws or biosafety protocols in the GMO policy-making process. This shows the group's commitment and respect for the rule of law which is an important democratic principle which is needed for democracy to succeed. This is a good democratic practice which could contribute significantly to the development of democracy in Ghana. Ghanaians' respect for the law courts and rule of law might partly explain why Ghana is touted as the beacon of democracy in Africa (Godefroidt, Langer and Meuleman, 2017).

## 5.7 Anti-GMO Groups make Inconsistent Demands

It was revealed that the anti-GMO groups made inconsistent demands. Whereas some of them were generally against the adoption of GMOs into Ghana, others were against certain clauses

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<sup>4</sup> When political leaders/decision-makers are not committed to democratic values, it will become an impediment to democratisation (Huntington, 1991, p. 22)

in the Bill. First, FSG, CIKOD, and PFAG were against the Bill and GMO technology in its entirety. They believed research on GMOs effects on human and animal health are inconclusive and therefore, GMOs cannot be said to be safe for consumption. For this reason, they embarked on a campaign to get the government to abandon its plans to introduce GMOs into Ghana. For instance, during an FSG-organised protest march on May 21, 2016, in Accra, some placards of the protesters read: 'Blakk Rasta Says No To GMOs!', 'Che Guevara Says No To GMOs' etc indicating their opposition and rejection of GMOs (FSG, 2016). On the other hand, some of the bill's opponents raised objections against certain clauses in the Bill. According to them, the government violated local and international biosafety protocols which require that citizens and stakeholders in GMO policy-making must be properly informed and engaged decision-makers. This group also wants the government to put in place enough safety measures to protect Ghanaians from the unintended consequences of GMOs.

## 5.8 Limitations of the study

One of the limitations of the study was access to news articles and publications by Ghana's anti-GMO groups. I utilised text materials that were available on the internet to answer the research questions. It is possible several materials which are rich in content than those I gathered are sitting somewhere and cannot be accessed on the internet. Even though such materials may exist offline, I was able to gather enough relevant texts for the analysis. Another limitation of the study was the sample size. The number of text materials used for the analysis differed from the initial sample. Initially, I estimated that a sample of thirty-six (36) news articles and publications would be enough for the analysis. However, upon analysing twenty (20) of the text materials a saturation point was reached. In this case, the determination of the sample size was based largely on my intuition about how many text materials were enough. In addition, another limitation closely related to the above was the categories and coding scheme development. The development of the categories and coding scheme from the seven (7) sample text materials was based on the study's purpose and research questions. As such, the direction I preferred the study to take influenced significantly the development of the categories. In this regard, the inter-coder agreement test was conducted to check my biases and to ensure consistency of the categories. Lastly, based on the purpose of the study and research questions, the results of the study could not be generalised as responsible for the GMO policy standoff. Because the study was conducted through the lens of only anti-GMO groups. However, the



findings are still relevant and can help us to appreciate the policy standoff from the perspective of opponents of the Bill.

## 6. Conclusion

The making of the Ghanaian GMO policy has become a major source of controversy between supporters and opponents of GMOs. It has become clear from the analysis that the anti-GMO groups perceive themselves as being dominated by supporters of the GMO Bill. Specifically, they feel government officials, MPs and members of the science community are using state power to pass the Bill into law. As indicated in chapter one, the purpose of the study was to examine the extent to which lack of public participation and trust contributed to the GMO policy impasse. The study was premised on the assumption that public participation improves stakeholders trust in policy-making and democratic governance. Based on the analysis and purpose of the study, the following concluding remarks are worthy of consideration.

It is important to restate key observations made from the content analysis of the news articles and publications by the anti-GMO groups. One of the important observations from the study is that the anti-GMO groups perceived the Bill in its current form as an illegality because it contravened several provisions of local and international biosafety protocols. Another observation is that public education was lacking in the GMO policy-making. A research conducted by Zakaria, Adam and Abujaja (2014) on the knowledge of leaders of FBOs confirms this observation. The study also finds that the anti-GMO groups showed a lack of confidence in the government and political class. They expressed the feeling that the political class was not committed to protecting public interests. In addition, it was clear from the analysis that the anti-GMO groups showed confidence in Ghana's judicial system by referring their grievances to the law courts for redress.

Based on the findings it is important to make the following recommendations. First, the government of Ghana needs to respect provisions in Ghana's Biosafety Act (ACT 831) 2011 and the Cartagena Protocol on Biosafety. If the public awareness, public participation, and risk assessment provisions as these protocols proscribed are adhered to, it will go a long way to enhance the policy-making legitimacy, transparency and credibility which intend will boost Ghanaians and stakeholders trust. This is in line with ESRC (1999) recommendation to governments that they should "never shy away from publicity and never try to suppress information [because] in the age of the internet, someone is bound to find out if information is being distorted or hidden" (p. 17). In this regard, the government should leverage modern

communication tools to disseminating policy information to stakeholders and to obtaining their feedback.

In addition, supporters and opponents of the GMO bill should see the policy-making process from a win-win perspective. It is important they avoid attacking and abusing each other as indicated in the analysis. Government officials and scientists should do more in explaining their choices. This will not keep stakeholders in suspense as the current situation in the GMO policy-making process portrays. On the part of the anti-GMO activists, they should not discredit or boycott the government's public education and engagement efforts. Both sides should be opened for dialogue and to different perspectives on GMOs. They should put public interests above their differences and dialogue to resolve the standoff.

Moreover, even though Ghana's democratic consolidation has received global applause, it should not be loss on policy-makers that the country's democracy is still young, and that there is a need for all Ghanaians to work toward the creation of effective and efficient democratic systems and institutions. As shown in the analysis, Ghana government officials and the political class need to do more to avert the dwindling public trust and confidence in them and the democratic system. On 10<sup>th</sup> August 2018, MP for Tamale Central and former of Minister for Lands and Natural Resources, Mr. Inusah Abdulai B. Fuseini expressed worry about the widening inequality gap and its impact on trust in the political class. He bemoaned that "there is a real danger of lack of trust, especially if the gap between the poor and the rich continue to widen. Where they see an unexplained rise in the fortunes of political officeholders, they will rebel" (MyJoyOnline TV, 2018). On this score, the GMO policy-making and all governance issues related to it should be seen as opportunities to engage Ghanaians and all stakeholders to make a better GMO policy and to a large extent foster Ghana's democracy (OECD, 2001)

Moreover, as indicated above Ghana's democracy is young but undoubtedly it holds a promising future for the present and future generations. However, Ghana's status as a shining example of a democracy in Africa is at risk to some extent if decision-makers do not address the phenomenon of elitist decision-making. In the Ghanaian GMO policy-making, elements of an elitist approach to decision-making have been seen in some of the findings of the study. The government and all relevant stakeholders should nib the phenomenon in the budget to allow Ghanaians and CSOs to contribute in making public policies in a transparent, legitimate and

inclusive manner. To sum up, when this is done it may enhance in a tremendous way the democratic and economic development of Ghana.

In sum, if all or some of these action points adopted by the government of Ghana it will go a great length to make the policy-making transparent, legitimate, and inclusive. All these have the tendency to increase public and stakeholder trust which is observed as a necessary but not enough condition for making democratic decisions and policies.

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## 7. Appendixes

### Appendix A

#### Coding Schedule<sup>5</sup>

| No. | Category  | Category description   | When to use/operational definition   |
|-----|-----------|--|--|
| 1   | MSPPB     | The Ghanaian GMO policy-making is being sponsored by MNCs.   | Apply this category to units of the texts in which statements of bias are made against MPs and scientists as well as allegations of MNCs influencing the policy process  |
| 2   | GBMAG     | Public officials and scientists are misinforming Ghanaians about the GMO bill and GMOs in general  | Apply this code to units of the texts in which statements of public misinformation are made by the individuals and CSOs in the anti GMO group  |
| 3   | BMNMCN    | The government and parliament sidelined several stakeholders in the GMO policy-making. Before consensus can be reached broad consultations should be held. | Apply this category to units of the texts which suggest lack of consultation or inadequate consultations. It also includes statements of calls for more stakeholder consultations  |
| 4   | BDDAI     | Refers to attempts by individuals and CSOs to access information on the Bill are stifled, ignored or disregarded   | Apply this category to units of the texts that suggest the denial or withholding of information about the Bill and GMOs by government, parliament, MPs and scientists  |
| 5   | GBBIGDCMC | Relates to claims against the pro-GMO group of trying to pass the Bill without adequate public consultations   | This code is applicable to units of texts that allude to government, parliament and agriculturalist/scientists resolve to pass the GMO bill without adequate consultations and investigations conducted into the concerns of the stakeholders. It includes assertions of policy imposition |
| 6   | DDR       | Relates to anti-GMO groups assertions that decision makers disregard of rules regulating the making of biotechnology policies                              | Apply this code to units of the text in which Ghanaians decision-makers are said to be disregarding international protocols on making policies relating to biotechnology.  |
| 7   | LPE       | Refers to citizens and CSOs call for more public education on the Bill   | Apply this code to units of the texts that relate the stakeholders' call for public education on the Bill and GMOs   |

<sup>5</sup> The development of the coding schedule was guided by the purpose of the study, research questions as well as the previous literature of public policy-making in democratic settings

|   |     |  |  |
|---|-----|--|--|
| 8 | BOD | Relates to stakeholders' expression of willingness cooperate with government in the making of the GMO policy | Apply this code to units of the texts in which anti-GMO activists express their willingness to participate in the policy-making. It also applies to instances where anti-GMO activists made proposals to change the Bill |
|---|-----|--|--|

## Appendix B

### Steps taken in doing the content analysis

1. Choose sampling method
2. Collect the data
3. Read data
4. Generate initial categories
5. Conduct pilot study
6. Perform main analysis
7. Report findings

Adapted from Assarroudi et al. 2018.

## Appendix C

Final categories agreed upon by researcher and second coder

1. Ghanaians Being Misled or Misinformed to Accept GMOs (GBMAG)
2. GMO Bill Making Non-inclusive, More Public Education and Consultations Needed (BMNMPECN)
3. Being Disregarded or Denied Access to Information (BDDAI)
4. Ghanaian Decision-Makers are Bias, Trying to Impose GMOs on Ghanaians Despite Calls for More Consultation (GDBTIGGDCMC)
5. Decision-makers/GMO Policy-Making Violating or Disregarding Rules (DVDR)
6. Being Open to Dialogue (BOD)

## Appendix D

### Second coder's quotes from sample news articles and publications

#### Excerpts Related to Participation

1. First of all, we would like to reiterate our call for the publication of a report on the consultations so far undertaken by Parliament since the Plant Breeders' Bill appeared before Parliament in June, 2013. [2] We note that it is almost three years now since these consultations begun. We are also aware that a lot of petitions have been presented to Parliament. It does no one any good to ignore all these and organize a one-day symposium to replace such valuable and detailed work already presented to Parliament over the ears.
2. These consultations have supposedly been going on since 11th November 2014. We therefore believe that these series must not be used as an excuse for not accounting for the time and energy of Ghanaians who have already petitioned Parliament. There is absolutely nothing new to say that has not been said before. We are finding it difficult to shake off the thought that this is a way of avoiding the publication of the report on the consultations so far done by Parliament.
3. None of the demands by Ghana's civil society and faith-based organisations have been included. For thereto be a meaningful symposium, it would be professional to publish first the report on all the consultations, together with the proposed changes as a result of these consultations, so the symposium could serve as our final comments on this report. Otherwise, this symposium appears to be yet another convenient excuse to avoid accounting for the consultations so far and hiding under a symposium to pursue the same agenda.
4. Our first demand is that as a member of the International Treaty on Plant Genetic Resources (ITPGRFA) we expect Ghana to take steps to realise farmers' rights to use, sell, save and exchange farm-saved seeds, to protect their traditional knowledge and to allow their participation in national decision-making. Instead of rather than a Bill that is heavily tilted in favour of commercial breeders and which undermines farmers' rights.
5. We call on all those who have petitioned either for or against, to join us in demanding the publication of a report on the consultations done so far, and the conclusions of Parliament. A public account of these consultations would not only satisfy the order of the speaker who indicated, "This is because it is important to inform the people of Ghana". but render transparent all controversies surrounding the Bill.
6. FSG informed the gathered crowd that Burkina Faso who is a neighbour to Ghana had recently announced plans to abandon its five year old GM cotton agenda due to lower yields and poorer quality of fibre. What is then informing our policy makers in Ghana to proceed with field trials in the north when our neighbour has conclusive evidence against such a decision?

7. We, the undersigned organizations from Africa and around the world are concerned with the conservation of agricultural biodiversity for livelihood security and food sovereignty, promoting farmers' rights and self-determination and citizen involvement in the decision-making process.
8. According to Hon. George Loh, the "consultations" that we have been expecting from Parliament since 11th November 2014, have already taken place without our knowledge! He even claimed in the interview that a meeting with FSG, prior to the Speaker's call, on 4th December, 2013, was part of the "further consultations" called for by the Speaker on 11th November, 2014, almost a year later.

## Appendix E

### Initial categories derived from sample literature

1. MPs and Scientists are Paid to Pass GMO Bill (MSPPB)
2. Ghanaians Being Misled or Misinformed to Accept GMOs (GBMAG)
3. GMO Bill Making Non-inclusive or More Consultations Needed (BMNMCN)
4. Being Disregarded or Denied Access to Information (BDDAI)
5. GMO Bill Being Imposed on Ghanaians Despite Calls for More Consultations (GBBIGDCMC)
6. Decision-makers Disregarding Rules (DDR)
7. Lack of public education (LPE)
8. Being Open to Dialogue (BOD)



## Appendix F

36 collected news articles and publications

Articles obtained from Citi FM and ([www.citinewsroom.com](http://www.citinewsroom.com))

1. [Court orders Agric Ministry to halt production of GM products](#)
2. [Female farmers march against GMOs in Wa - citifmonline.com](#)
3. [Gov't must review plant breeders' bill - Group - Ghana News](#)
4. [Group petitions Parliament on Plant Breeders Bill - citifmonline.com](#)

Articles obtained from Joy FM 99.7 and ([www.myjoyonline.com](http://www.myjoyonline.com))

1. [Food Sovereignty Ghana sues gov't again over GMOs - MyJoyOnline](#)
2. [Plant Breeders Bill must be revised – CSOs tell parliament](#)
3. [Simplify GMOs for public – former Dept. Minister tells scientists](#)

Articles from Ghana News Agency

1. [Ghanaians should be properly educated on GMOs – Minister | Ghana News Agency](#)
2. [Food Sovereignty Ghana organises workshop on GMOs | Ghana News Agency](#)

Articles from other media sources

1. [A Protest March Against The Introduction Of Genetically Modified Organism \(GMO's\) By Farmer In Ghana](#)
2. [Activists petition against GMOs in Ghana | Genetic Literacy Project](#)
3. [CPP to support FSG to kick against release of GMO rice, cowpeas in a suit](#)
4. [Food Sovereignty Ghana: Commentary on GM Technology](#)
5. [Group demands parliamentary report on Plant Breeders Bill | General News](#)
6. <http://cbcgha.org/cbc/the-catholic-standard/321-cease-fire-on-gmos-debate>

Articles and publications by Food Sovereignty Ghana

1. [March | 2014 | Food Sovereignty Ghana](#)
2. [Attorney-General Must Withdraw The “Monsanto Law”! | Food Sovereignty Ghana](#)
3. [Court Case On GMO Commercialisation Goes To Appeal Court | Food Sovereignty Ghana](#)
4. [Court Ruling On GMO Case: Why We Intend To Appeal | Food Sovereignty Ghana](#)
5. [Ghana's Plant Breeders Bill Lacks Legitimacy! It Must Be Revised](#)
6. [January | 2014 | Food Sovereignty Ghana](#)
7. [Ghanaians March Against Monsanto in ACCRA | Food Sovereignty Ghana](#)
8. [GM Technology Is Not What Ghana Needs! | Food Sovereignty Ghana](#)
9. [DFID | Food Sovereignty Ghana](#)
10. [GMOs, Blackmail and Lies, Pressures To Pass the Plant Breeders Bill](#)

11. [June | 2014 | Food Sovereignty Ghana](#)
12. [Hon. Osei-Owusu Insults CSOs, FBOs... | Food Sovereignty Ghana](#)
13. [May | 2014 | Food Sovereignty Ghana](#)
14. [Parliament Distorts Opposition To Plant Breeders' Bill! | Food Sovereignty Ghana](#)
15. [February | 2014 | Food Sovereignty Ghana](#)
16. [Parliament Must Respect Their Own Word On the Plant Breeders' Bill](#)
17. [PETITION TO PARLIAMENT ON THE PLANT BREEDERS' BILL, 2013](#)
18. [PRESS STATEMENT: COALITION FOR FARMERS' RIGHTS AND ADVOCACY AGAINST GMOs \(COFAM\)](#)
19. [Publish Report On “Consultations” Over Plant Breeder's Bill! | Food Sovereignty Ghana](#)
20. [Replace Plant Breeders' Bill With A “Sui Generis” PVP System. | Food Sovereignty Ghana](#)
21. [Summary of CSO/FBO Position Paper: The Plant Breeders' Bill | Food Sovereignty Ghana](#)