UNIVERSITY OF CAPE COAST

FOOD SAFETY GOVERNANCE IN THE CAPE COAST METROPOLIS, GHANA

SOPHIA OHENE-DARKO

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UNIVERSITY OF CAPE COAST

FOOD SAFETY GOVERNANCE IN THE CAPE COAST METROPOLIS, GHANA

BY

SOPHIA OHENE-DARKO

Thesis submitted to the Department of Hospitality and Tourism Management of the Faculty of Social Science, University of Cape Coast, in partial fulfillment of the requirements for the award of Doctor of Philosophy degree in Hospitality Management

JUNE, 2018

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:..... Date:....

Name: Sophia Ohene-Darko

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature:..... Date:....

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Co-Supervisor's Signature: Date:....

Name: Prof. Francis Eric Amuquandoh

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ABSTRACT

In Ghana, as in most countries in the world, there are legal frameworks, institutions and agencies at every level of government for food safety management. In spite of these regulatory structure, Cape Coast in the Central Region continues to grapple with foodborne related diseases, thus being identified as a hotspot area among Greater Accra, Ashanti, Eastern and Western regions of Ghana for foodborne related outbreaks. The Metropolis appears to experience foodborne related issues such as typhoid and cholera on an annual basis. This study therefore sought to explore how food safety regulations are enforced and complied with, limitations in implementing the food safety regulation, the relational dynamics among the major stakeholders and the experiences of food service providers in their engagement with the law enforcement agencies. The purposive sampling technique was used in selecting food safety regulators while food service operators were selected using the accidental and snowball sampling methods. The study revealed amongst other things that weak institutional capacity, weak collaboration among the major stakeholders and insufficient regulator-food service operator contact have translated into ineffective food safety management and regulation in the Metropolis. The study recommends the provision of stronger institutional capacity building, effective collaboration among stakeholders, sufficient regulatorfood service operator contacts and an impartation of effective education on the specific requirements of the laws before food service operators are given the permit to operate their business.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Governance in everyday language can be conceptualized to be the manner in which a state manages the affairs of the people and territory under its jurisdiction. This concept of governance has been in existence ever since humans began to live together in communities. The concept became more practical and evident as people tried to organize themselves politically to undertake functions for their mutual benefit. Governance and its use both in political and intellectual discussion dates back a long way, referring in original sense to the job of managing a government or any other entity or organisation (Hyden & Bratton, 1992).

Governance has further been defined in varied ways. For example, Trower (2010) perceives governance as a collective effort through smooth and suitable processes, to take actions that advance a shared purpose consistent with a country's mission. This definition encompasses the state's institutional and structural arrangements, decision making processes, implementation capacity and the relationship between government officials and the public. Rhodes (1997) opined that governance provides the institutional framework within which the civic-public realm is managed. Kironde (1999) claims governance encompasses the totality of the frameworks and processes for exercising state powers through official institutions and procedure, the relation between the exercise of these

powers and society at large and the organizations a society sets up to respond to the state and promote society's interest. McCarney (1995) sees governance as the relationship between civil society and the state, between rulers and the ruled, the government and the governed.

The current notion of governance, however, goes beyond this traditional sense and is perceived as the task of running not only the affairs of a given country but also ensuring accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment and broad-based participation (Kironde, 1999). The varied definitions make it imperative to note that the importance of governance in a civil society is worthy of note. According to FAO and WHO (2004) the need for and the purpose of governance can be defined by the adverse effects of its absence. For instance, society needs government, law and order to provide protection from robbery, violence and the excesses of individual power and deception in commerce and industry. FAO (2005) further commends that society needs government to protect the right and health of its people, resolve conflicting demands on the natural resources and prevent pollution and destruction of the shared environment. In this direction, government remains the main authority in whose hands the various sectors of a country are entrusted. Like the normal practice of many countries, ministries and other departmental agencies responsible for various sectors at the national and local levels, collaborate to achieve the common goal of the government.

Perhaps, of the numerous endeavours, the food safety regulatory sector stands as one of the most critical. Its importance stems from three reasons. Firstly, food safety is regarded as an essential component of sustainable development and contributes to better public health, increased food security and environmental protection (Omari & Frempong, 2015). Secondly, cases of foodborne related illnesses occur daily throughout the world, from the most to the least developed countries. This widespread of foodborne illnesses have been described as one of the most global problems of the contemporary world (Zotermans et al., 1994). In rich and poor countries alike they pose substantial health burdens, ranging in severity from mild disposition to fatal illnesses. Lastly, the public health and economic implications for unsafe food worldwide can be costly (Patil, Cates & Morales, 2005; Schlundt, Toyofuku, Janse & Herbst, 2004, WHO, 2002). In this regard, adequate supply of safe, wholesome and hygienic food is essential for the health and wellbeing of human sustenance. Governing the food industry is thus more of an imperative than a choice.

Food safety governance according to the World Health Organization (2010), refers to governments use of system control to ensure that conditions and practices that preserve the quality of food to prevent contamination and food related illnesses is upheld. Ogus (1994) explains that food safety governance thrives on laws and social regulation and seeks to direct or encourage behaviour which is believed would not occur without such intervention. Food laws are the laws, regulations and administrative provisions governing food in general at community and national levels. It covers the stages of production, processing and

distribution of food. The laws further seek to control the quality and safety of the food consumed, the expertise required of the people that provide the food to the public and the entity through which food is served.

Laws governing the manufacture of foods and beverages have been in existence for thousands of years. As Janssen (1979) suggests, food laws were among the earliest of enactments known to man and date back to ancient Greece and Rome where the first recorded food laws made it illegal to dilute wine with water. In ancient civilizations, these laws were initially created to ensure fair trade practices through proper labeling and accurate declaration of weights and measures to prevent adulteration and for taxation purposes (Popkin, 2006). Regulations governing the manufacture of beer for instance can be traced back to the Code of Hammurabi, written in 1700 B.C. during the Babylonian era. Laws written to control the sale of wine and bread also go back to the Roman Empire. During medieval times, the Assize of Bread and Ale was enacted in the 13th century to establish proper weights, quality standards and prices of bread and beer sold in England (Cuprasitrut, Srisorrachatr & Malai, 2011). Each loaf of bread was required to be labeled with the baker's identification "mark" to regulate quality and ensure fair taxation. In 1215, the Magna Carta established standard measures for quantities of wine, corn, potatoes and other goods to be sold or made available for sale in the English villages.

Until the late nineteenth and early twentieth centuries, with the urbanization of societies, food laws as understood today were prepared (Lasztity, Petro-Turza & Foldesi, 2014). Lasztity et al. (2014) hypothesized that the proper

implementation of such law encourages fair trade practices, protects the honest food industry against unfair competition and also stimulates development of the food industry because quality control tends to promote better consumer acceptance of foods. Currently, goals of global food safety regulation mandate every country to; protect and promote public health; protect consumers from products that are spoilt, fraudulent or otherwise unfit for consumption; and provide consumers with relevant and accurate information so that consumers can make informed choices with regard to safety and nutrition (FAO, 2005).

Implications of the goals seem to suggest that government is heavily relied on for the protection of its citizens' health and interest as consumers of publicly marketed food. This duty can only be met by implementing an effective and transparent food safety control measures which considers all aspects of the food chain from farm to fork; including primary production, food processing, storage, transport, and retail services (European Food Safety Authority, 2015). Although governments have an overarching responsibility of ensuring the safety of food consumed, the food industries also have a direct responsibility for ensuring the safety of food at all times (FAO, 2010; Khalid, 2015). This is because despite the important contribution of the food industry in providing a source of inexpensive, convenient, attractive, varied and often nutritious food for both the urban and rural dwellers (Monney, Agyei, Badzi, Campaore & Nyaw, 2014; Monney, Agyei & Owusu, 2013), the food service operation is also considered to be a major cause of health hazards to the general consumers (Nicolo & Bendech, 2012). This has been substantiated in some other studies (Monney et al., 2014; Griffith, 2010). It

has been estimated that 70% to 80% of foodborne illnesses are linked to food prepared and served from the foods service sector (Food and Drugs Authority, 2013; Chapman, Eversley, Fillion, Maclaurin & Powell, 2010). Borrowing the words of Jones, Pavlin, LafFleur, Ingram and Schaffner (2004, p. 127) *"the food service industry cannot ignore the fact that they have been labelled as one of the most recurrent sources of foodborne illness outbreak"*. Food handlers may introduce pathogenic microbes to the food during the process of preparation and service (Green, Radke & Mason, 2007).

Generally, the food producing industries could compromise the safety of food by inadequately addressing and enhancing hygiene and sanitary practices (Annor & Baiden, 2011). WHO's (2015) survey of hundred countries including Ghana revealed that inadequate hygiene practices during food processing and storage contributes to the major health threat facing the public. Food and Drugs Authority (2006) also maintain that the top three factors contributing to foodborne illnesses in the food service sector are poor personal hygiene, cross contamination and ineffective time/temperature control. FAO (2005) also reiterates that lack of food safety training for food handlers, purchasing from unapproved sources, inadequate time/temperature control, cross contamination and lack of personal hygiene are some of the common reasons for the production of unsafe food, causing foodborne illnesses in the world. Feglo and Sakyi (2012) in addition also posit that traditional food processing methods further aggravate the situation. Mahami and Odonkor's (2012) study findings pointed to the fact that poor

vending environments, food handlers' practices and enforcement issues contribute immensely to the offer of unsafe food.

Incidence of foodborne related illnesses is global. Estimates from the Centre for Disease Control and Prevention (2004) show an annual incidence of 750,000, 2 million and 47.8 million foodborne illnesses in France, United Kingdom and United States, respectively. In Australia, about 5.4 million cases of foodborne occur every year causing 120 deaths, 18,000 hospitalization and 21 million lost days of work. Similarly, Ghana recorded about 420,000 out-patient reported cases of related foodborne illnesses such as diarrhoea, typhoid and cholera (Food and Drug Authority, 2006). An annual mortality rate not less than 65,000 resulting in the loss of US\$ 69 million to the economy were also recorded (Ministry of Food and Agriculture, 2006; Mahami & Odonkor, 2012; Monney, Agyei & Owusu, 2013).

While a precise figure is impossible to calculate, given current data limitation, the healthcare cost and lost productivity attributable to foodborne illness is likely to be high. The economic burden encompasses many direct and indirect factors; cost related to lost worker productivity and cost to the food industry from loss of sales. Cost to the national government stems from increased medical expenses, outbreak investigations and increased demand on the over-burdened and poorly funded health care systems in most African countries (Ehiri & Morris, 1996). The food service industry can also experience significantly reduced sales, high recall cost and lower consumer confidence. Cost to consumers may also include medical expenses as well as absenteeism at work or school (WHO, 2005).

The aforementioned reasons indicate that it is required of the food producing industries to demonstrate to regulatory authorities that their operations are in line with national laws, standards, guidelines and codes of practice (WHO 2012). The consumer, on the other hand, also play a role by ensuring safe handling of food they purchase and their choices and concerns influence decisions of government and the food industry. These stated responsibilities concur with WHO (2010) and Khalid (2015) arguments that managing and ensuring food safety is a shared responsibility. Governments, food industries (including producers, processors, and food service establishments) and consumers have diverse roles to play to improve and address current and emerging food safety risks. However, government takes the overarching role and develops food safety policies which create an enabling institutional and regulatory control that support and guarantee the achievement of the national food safety goals (Khalid, 2016). The role of government also includes setting standards, monitoring compliance (through surveillance and inspection), managing emergency responses to outbreaks and communicating with industry, consumers and other governments about how to reduce and manage food safety risks.

As is the case in most developed and developing countries, governments execute these responsibilities through various ministries, agencies and departments. In the United States of America for instance, agencies such as the Food and Drug Administration, Environmental Protection Agency, US Department of Agriculture, Centre for Disease Control and Prevention and the Public Health Service, work together to achieve a safe food delivery system.

Similarly, in Ghana, such ministries and departments include Ministry of Health, Ministry of Food and Agriculture, Food and Drugs Authority (FDA), Ghana Standard Authority (GSA), Ghana Tourism Authority (GTA), the Veterinary Services Department and the Public Health Directorate of the Metropolitan, Municipal and Districts Assemblies (MMDA's) with broad overlapping mandates. Each of these agencies has the mandate to ensure that food produced and supplied to the public is safe and wholesome. However, this multi-agency responsibility has been noted to lead to problems such as duplication of regulatory activities, increased bureaucracy, fragmentation of functions and lack of coordination between the different bodies involved in the food safety control (WHO/FAO, 2014).

Effective food safety controls have been suggested to be the way forward in achieving the goal of food safety. Food safety control measures have been defined to include all the mandatory activities necessary to assure the quality and safety of food (FAO, 1999). More generally, it has been referred to as the systematic set of activities carried out by food producers, processors, retailers and national or local authorities in an effort to provide consumer protection against food poisoning and prevent dishonest food traders (Walker, Prichard & Forsythe, 2003). The control measures are made up of three basic components: food legislation, enforcement and infrastructure and is applicable throughout the entire food safety system (FAO, 2006). The components are further discussed.

One of the components being food safety legislation, is the legal expression of the government to ensure food quality and safety and to carry out consumer protection measures as a matter of public policy. Ogus (1994) maintains that food safety legislation is a form of social regulation with which government seeks to direct or encourage behaviour which is believed, will not occur without such intervention. Generally, food law is used to apply to legislation which regulates the production, trade and handling of food hence covers food control, food safety and relevant aspects of food trade.

Enforcement as the second component of the food control system emphasizes the execution of the law by the enforcement agencies and adherence to the food laws by food producers of a given country. Thus, enforcement may include formal inspections and prosecutions, information initiatives and the provision of advice to business (Richardson, Ogus & Burrows, 1982). The food safety regulators then become the key functionaries who have day-to-day contact with the food industry, trade and the public. The reputation and integrity of the food control system depends to a very large extent, on the integrity and skill of the regulators. As current food systems are quite complex, the regulator must have the skill and experience to inspect premises, collect food samples and carry out an overall evaluation.

Nago (2005) is of the view that in many African countries such as Benin, Burkina Faso, Togo, Malawi and Mozambique, the lack of human and material resources does not allow the institutions to carry out their control, education and enforcement tasks efficiently. Equally, FAO (2010) remarks that as human

resource in some food control agencies in developing countries may be limited, environmental inspectors are often used to work as food inspectors. They maintain that this is not an ideal situation as they may lack the skill and knowledge to effectively evaluate and inspect food service operations. Thus, if environmental health inspectors must be used, then they should be provided with the necessary training and be carefully supervised by the appropriate entities.

Lastly, infrastructure has been defined to include all the facilities and resources such as food laboratories, equipment, office space, funds and human resource capacities needed by the regulatory agencies to conduct inspections, collect food samples for analysis and evaluation. Facilities such as laboratories reinforce decisions of food control services and helps in the monitoring of contamination at relevant stages in the food chain and the timely investigation of foodborne disease. However, it has been noted that in most developing and less developed countries, limited resources for equipping and maintaining laboratories are often cited as major constraints to the enhancement of national laboratories (WHO, 2010). Adequate provisions of these components have proved to enhance food safety (Hutter & Amodu, 2008).

Although the aforementioned components give detail of what ought to be in place to ensure the safety of food, in most circumstances they appear to be inadequate. For instance, Yatsco (2000) concludes in his study that lack of food safety training and certification, problems of equipment and layout of facilities and lack of inspection and supervision by law enforcers are contributing to the offer of unsafe food for public consumption. The conclusion drawn by Yatsco

(2000) concurs with WHO's (1996) claim that training of food handlers is an essential part of any strategy to improve the safety and quality of out of home vended foods. They intimate that successful training should culminate in the licensing of food vendors and in addition, retention of license should be dependent on participation in education and training sessions at regular intervals. These studies have suggested that activities of food service operators and the role of enforcers can help reduce or increase eventual health consequences.

Invariably, Johnson and Yawson (2000) also contend that due to the important contribution of the food producing industries to urban livelihoods especially, it is crucial that the food service industry is effectively regulated to ensure safe and hygienic food supply to promote the socio-economic well-being of consumers. However, to realize this, Johnson and Yawson (2000) suggest a major interaction and collaboration among key stakeholders working within the food service industry. To promote collaboration, interaction and beneficial relationship among stakeholders, it is essential to first understand who these stakeholders are, the nature of their involvement and the institutional context within which they work. These issues bring into focus the importance of food safety governance and the imperative of undertaking a scholarly inquiry into the phenomenon in the Cape Coast Metropolis.

Research Problem

Access to wholesome food is an indispensable renovation to life and every human being has the right to safe and hygienic food. For this reason, over the years in Ghana and around the globe, the food service sector has been an

important area of research interest for people in the academia, governmental and non-governmental organizations and other research bodies (Mwanmakamba, Mensah, Kwakye, Darkwah-Odame, Jallow & Maiga, 2012; Annor & Baiden, 2011; Griffith, 2010; WHO, 2009; Hutter & Amodu, 2008; Yapp & fairman, 2006; Mensah, Yeboah-Manu, Owusu-Darko, & Ablordey, 2002; Johnson & Yawson, 2000; Ehiri & Morris, 1996) due to the high number of people eating outside their homes more frequently.

In a bid to investigate the causes and find possible solutions to the foodborne related issues, researchers in the aforementioned studies have largely focused on food safety knowledge, attitudes, and training of food service providers. For instance, Monney et. al. (2014) investigated food hygiene and safety practices among street food vendors in Ghana and found out that there was good compliance with food hygiene and safety principles. Omari and Frempong (2015) in their study sought to determine the food safety issues of importance to consumers and the extent to which they worry about them. Sanlier and Konalioglu (2012) assessed the food safety knowledge, attitude and food handling practices of university students in Turkey. Rheinlander, Olsen, Bakang, Takyi, Konradsen, and Samuelsen (2008) explored the social perceptions of the safety of street vended foods. The remainder have explored microbiological status of vended foods. Samples from various food contact surfaces and from bare or gloved hands have also been analysed to gain a better understanding of risk factors affecting food safety yet, improvement in food safety issues have not been fully realised. Though the aforementioned studies and many others have provided insight into

the food safety phenomenon for policy makers to use in evidence-based decision making and policy formulation, a closer look also reveal certain thematic and structural gaps which have not been addressed and therefore beckon further investigation.

First, paucity of data regarding how the food service operation sector is regulated continues to exist. For instance, detailed evidence on how the food service establishments are regulated, the challenges faced in the food safety regulation and the participation of stakeholders in the regulation are seen to be lacking in the literature. Furthermore, stakeholder relationship (the relationship among regulators and between regulators and food service operators) for ensuring food safety has also been an often-ignored dimension. In their everyday work, both parties either by design or inadvertently interact and it may be safe to assume that the outcomes of these interactions are likely to shape the levels of compliance or otherwise (Hutter & Amodu, 2008; Yapp & Fairman, 2004). In addition, the relational dimensions and power dynamics of food safety control agencies and food service providers are another important aspect of the phenomenon yet to be tapped into. These present a major weakness in the available literature.

In the light of the above identified weaknesses and gaps, this study sought to explore how food safety is governed in the Cape Coast Metropolis. Findings could contribute to knowledge and further enhance the development of effective regulatory policies which will in turn have positive impact on food safety issues. The gaps in the literature transform into the following research objectives.

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Study Objectives

The main objective of the study was to explore food safety governance in the Cape Coast Metropolis. The specific objectives of the study were to:

- 1) assess enforcers' food safety regulatory activities,
- 2) examine stakeholders view on food safety regulations,
- explore the barriers to food safety regulation within the Cape Coast Metropolis,
- analyse the relational dynamics among stakeholders in ensuring enforcement and compliance,
- explore the experiences of food service providers in their engagement with law enforcers.

Research Questions

- What are the food safety regulatory activities of enforcers' in the Cape Coast Metropolis?
- 2) How do stakeholders perceive food safety regulation within the Cape Coast Metropolis?
- 3) In what ways do barriers to food safety regulation impede effective enforcement and compliance?
- 4) How do stakeholders perceive their relational dynamics?
- 5) What have been the experiences of food service providers in their engagement with the enforcers?

Significance of the Study

To the extent that regulation remains an important but under represented issue, both in literature and in practice (academic and policy) the findings of this study portend important implications for the aforementioned dimensions. From the academic perspective, this study will add to the debate by providing information in the following issues; activities of stakeholders, regulatory challenges faced and the relational and power dynamics that exist among stakeholders. Information on the regulatory challenges faced by stakeholders for example, significantly complements the scanty literature on food safety regulation studies in Ghana. This dimension has not been researched extensively, thus findings from the study will contribute to knowledge in that regard. In addition, the contextual evidence provided by the study with regard to the network relations and how stakeholders interact and collaborate also opens up avenues for further exploration as this work seeks to do.

From the policy perspective, first, the contextual evidence on the reported barriers to effective food safety regulation gives policy makers an understanding of what officials go through in an attempt to ensure the safety of food consumed. This may enable policy makers to develop appropriate policies that are relevant to the needs and challenges of food safety regulators. Secondly, the study is also significant as it provides information on the nature of stakeholder collaboration and relational dynamics. By understanding the collaborative efforts and the relational and power dynamics among stakeholders in such an environment, policy makers will be able to identify and strengthen problematic areas and thereby

adopt strategies that can ensure effective collaboration and a strong network relation for effective enforcement of the rules and regulations. This may as well help to enhance food service operators' compliance to the food safety rules and regulations.

Research Design

The study adopts a combination of the positivist and interpretivist epistemologies but skews towards the interpretivist epistemology. The dictates of contemporary social investigations are becoming increasingly necessary of triangulation in all aspects of the research design and less tolerant of a strict adherence to only one method (be it quantitative or qualitative). Depoy and Gitlin (1998) argue that the practice of triangulation offers a richer theoretical base to the study by providing a wider grasp of the issues at hand as well as enabling the researcher to cover wider dimensions of the phenomenon from different perspectives.

Limitations of the Study

Hemingway and Brereton (2009) argue that researchers must be prepared to acknowledge their short comings and judge objectively the impact on their study findings, conclusions and recommendations. Such approach has been adopted by the study to present the limitations impartially. With regard to the methods employed, data was gathered from an exploratory view point which notwithstanding its advantages has a challenge in representativeness. Such processes produce data whose validity and generalizability cannot be easily guaranteed. Implication of this is that though the information presented is authentic, reliable and valid, extrapolation onto the larger Ghanaian perspective needs to be done with great restraint as they only represent findings from accidentally and purposively selected sample population within a limited period of time.

Secondly, the food safety system includes many stakeholders some of whom were not part of this study, especially, consumers and other nongovernmental organisations. These were other stakeholders whose views could have enriched the study further. Information from these can, in future studies, shed more light on related issues. In terms of the impact on the overall study findings, conclusions and recommendations, the range of mixed methods data collected, analysed and interpreted has minimized any effect. In addition, the limitation must be set against the advantages of the study design, such as its ability to collect data from multiple sources and to collect them without subjective influence from each other (Creswell & Plano-Clark, 2011).

Thesis Organisation

Chapter one of this thesis has introduced the entire study, beginning with the general background to the study, the research problem, objectives and research questions as well as the significance and limitation of the study. The second chapter analyses concepts, theories and the conceptual framework of the study. The concepts to be discussed include the meaning of governance and food safety laws such as the Public Health Act, Tourism Act and the Local Government Act. Details of the theoretical framework includes the social control theory, power and

relational dynamics and the health belief model and finally, ends with the conceptual framework of the study

Chapter three focuses on the review of related literature. Chapter four looks at the methodological issues. It specifically describes the area of study, the types and sources of data, description of the sampling technique, data collection methods, approach to data analysis, ethical consideration and fieldwork and related challenges. Chapter five concentrates on food safety regulation from enforcers' perspective, focusing on their activities, individual interpretation of the laws in the field and their views on compliance. Chapter six assesses food service operators' views on food safety indicating their awareness to food safety regulation, dimension of compliance and self-regulation.

Chapter seven examines barriers to food safety governance from the perspective of regulators. It looks at the institutional capacity for regulators and challenges encountered by regulators in their daily operations. In chapter eight, collaboration in food safety governance is analysed, concentrating on inter-agency collaboration, regulator-operator collaboration and power relational dynamics. Finally, chapter nine focuses on the summary of the study, conclusions and recommendations. It also gives account of the contribution of the study to both knowledge and practice.

CHAPTER TWO

Food Safety and Governance: Concepts and Theories

Introduction

This chapter is devoted to a review and analysis of the various concepts and theories that guide the study. The concepts to be reviewed include food safety, governance and food laws. The theories that underpin the study include the social control theory, theory on power, health belief model and the deterrence theory. The conceptual framework is also analysed.

Defining the Food Safety Concept

Codex Alimentarius Commission [CAC] (2007) postulates that food safety is the assurance that food will not cause harm to the consumer when it is prepared and eaten in accordance with its intended use. This definition embodies several important ideas. First, the notion of harm to the consumer, separates safety aspects of food from other quality aspects that make food unfit for human consumption without necessarily presenting a danger to health. Secondly, the concept of assurance, thus, food safety and its management are based on measures that are in place to provide a guarantee that food is safe. In other words, food safety depends on the conditions in which food is produced and prepared and not on the results of the end product testing, which for many contaminants cannot be a reliable method of food safety and suitability. Thirdly, preparation and/or use of a food product is also considered in the design of the safety and vice versa.

Food becomes potentially harmful whenever it is exposed to biological, chemical or physical hazardous agents capable of causing harm to the consumer (ISO 22000, 2005). The presence of these harmful contaminants not originally present in the food is believed to be introduced by humans although some of them do occur naturally (Foodlink, 2004). This has been substantiated by some studies (International Food Information Council (IFIC), 2014; U.S Food and Drugs Agency, 2012) that 100% safety does not exist and foods cannot be totally devoid of the presence of the multitude of hazards in the environment. Generally, food is considered safe, provided that care is taken during development, primary production, processing, storage, handling and preparation (Foodlink, 2004).

For many foods, the level of safety generally accepted by the society reflects the history of their safe consumption by humans. In many cases the knowledge required to manage the risks associated with foods has been gained through their history of use. However, this general acceptance of historical safety does not necessarily mean that some traditional foods may not cause adverse effects under some circumstances. The main health hazard suggested to be associated with food consumed outside the home is microbial contamination, although pesticide residue, transmission of parasites, the use of unpermitted chemical additives, environmental contamination and limited access to safe water have all been identified as possible hazards from production and preservation (FAO, 2011; Arambulo, Almeida, Cuellar & Belotto, 1994; Abdussalam & Kaferstein, 1993). The potential for the contamination of food with pathogenic micro-organisms has been well documented and several disease outbreaks have

been traced to the consumption of micro-organism contamination (Greig, Todd, Bartleson, & Michael, 2007; Kaferstein, 2003; Abdussalam & Kaferstein, 1993). However, the risk of microbial contamination is dependent on the type of food and how the food is prepared or handled.

Food contaminants can also be introduced into food supply at numerous points along the way from the farm to the table. For example, meat (all forms) consumed as food can carry harmful pathogens without any physical manifestations. Likewise, fresh vegetables and grains can harbour pathogens and mycotoxins without any discernible loss of quality (FAO, 2005). These help to explain that by the time any raw food gets to the catering establishment, it might be carrying its own load of contaminants. Unfortunately, this presents no excuse for food businesses as they are liable for harms suffered by consumers. It is therefore incumbent on the food service establishment to either control the load of contaminants that already exist or prevent any further liabilities. To control or prevent further contamination, Ghana Food and Drugs Authority asserts that establishments should first, develop and implement practices that reduce the risk of unsafe food, secondly, maintain records of suppliers of food products and lastly maintain records of production practices.

Governance: Definition and Components

The concept of governance is not new as already indicated in the background of this study. The concept has been engaged in both political and academic discourse for a long time. It means different things to different people (Goss, 2001). To some authors, government and governance are synonymous, both

denoting the exercise of authority in an organization, institution or state. Yet to others, it refers to structures and processes that are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment and broad-based participation. International agencies such as UNDP, World Bank and OECD Development Assistance Committee (DAC) have defined governance as the exercise of authority or power in order to manage a country's economic, political and administrative affairs. By the working definition used by the British Council, governance is perceived as a broader notion than government, encompassing related concepts such as the state, good government and regime.

United Nations Development Programme [UNDP] (2000) asserts that the actual meaning of the concept depends on the level of governance being talked about, the goals to be achieved and the approach being followed. The UNDP added that good governance is a fundamental ingredient in achieving sustainable human development:

Good governance is epitomized by predictable, open and enlightened policy-making, a bureaucracy imbued with professional ethos acting in furtherance of the public good, the rule of law, transparent processes and a strong civil society participating in public affairs (UNDP, 2000).

Many of the components and philosophies underlying "good government" have become an essential part of the meaning of governance. This may imply a high level of organisational effectiveness in relation to policy-formulation and the

policies actually pursued, especially in the conduct of economic policy and its contribution to growth, stability and popular welfare. Subsequently, good governance is not an end in itself but a practice that provides for greater quality of life for peaceful existence, more efficient delivery of services and growth of socioeconomic opportunities. Progress towards inclusive socioeconomic growth, protection of rights and improved wellbeing can be achieved by the continual deepening of democracy and expansion of public participation (Trower, 2010). The transparent and accountable exercise of political, economic, and administrative management increases public confidence and equitable participation to underpin sustained development.

Food Safety Laws

Food safety law can be seen as a form of social regulation whereby government seeks to direct or encourage behavior which is assumed will not occur without such intervention (Ogus, 1994). According to Bareham (1995) and Antle (1995), food laws aim at making sure that consumers do not get sick or die from what they eat. Thus, the legislation is enacted as a mechanism to supervise those who supply food and to prevent them from supplying food that is harmful to human health. In many respects, the rules and regulations motivate and guide the behaviour of both the food handler and the regulator and provide the foundation for a food safety regime. From another perspective, food laws consist of legal definitions of unsafe food and the prescription of enforcement tools for removing such food from the market and taking punitive actions against responsible parties after the act. These interventions include regulations, standards and enforcement

that are in operation. While also encompassing other consumer protection issues such as fraud, food law serves as a mechanism for formalizing and collating strategies and policies for food safety. It is an important means by which food safety policies are enforced. Such legislation should be implemented to the maximum in order to encourage the development of the industry.

Fundamentally, food law serves two purposes; protection of consumers' health and the prevention of fraud and increase economic viability (WHO, 1984). The law defines the role and responsibility of stakeholders such as the industry, government (inspection service, scientific committees) and consumers. To the food industry, it specifies the criteria to be met if a manufactured or processed food is to be accepted as safe (FAO, 1999). It informs producers' and processors of requirements regarding production, processing methods and product standards and provides the consumer expectations of a given food (WHO, 1998). To the consumer, it defines what is safe and wholesome for consumption. Bareham (1995) believes that such legislation is endorsed as a mechanism to control those who supply food and to prevent them from supplying food that will endanger human health. Despite the good intent of ensuring maximum protection of the consumers' health through the formulation and implementation of the laws, the street food service outlets in many countries is often left outside the scope of official control system and remains the least controlled (Khalid, 2015). This call for attention as a lot of people, both young and old, rich and poor depend on the services of these food service operators for sustenance.

Ghana's Food Safety Laws

In Ghana, various food safety laws have been enacted to protect public health. These food safety laws go a long way to ensure that food producers and processors maintain high safety standards to promote health. The food safety laws that are directly related to this study include; the Public Health Act, 2012, the Tourism Act, 2011 and the Local Government Act, 1993. The dictates of these laws are further discussed.

Public Health Act, 2012 (Act 851)

The Public Health Act, which contains the Food and Drugs law, establishes all public health enforcement agencies with the objective of providing and enforcing standards for the sale of food, herbal medicinal products, cosmetics, drugs and medical devices. Section 82 (b and f) gives the Food and Drugs Authority power to monitor compliance and any other functions that are additional to attaining the objectives through the District and Metropolitan Assemblies. With regards to food hygiene, the Public Health Act indicates eight specific duties of all food safety enforcement agencies. These duties include: *Planning (identification of needs and data collection for programme development); Sanitary inspection of slaughter houses/slabs; Meat inspection (in slaughter houses and outside slaughter houses); Inspection of food premises; Medical examination of food handlers and issuance of health certificates; Protection of food source; Hygiene education on proper food storage, Preservation and handling and; Law enforcement.*

In Part 7, section 100 (subsection 3, 5 and 6) the act defines specifically what constitutes an offence of the law.

3) A person commits an offence if that person sells or offers for sale a food that: has in or on it a poisonous or harmful substance, is unwholesome or unfit for human or animal consumption, consists in whole or in part of a filthy, putrid, rotten, decomposed or diseased animal or vegetable substance, is adulterated, is injurious to health or is not of the nature, substance, quality or prescribed standards.

5) A person shall not sell, prepare, package, convey, store or display for sale food under insanitary conditions.

6) Food shall be stored and conveyed in a manner that preserves its safety, composition, quality and purity and minimizes the dissipation of its nutritive properties from climatic and any other deteriorating conditions.

The Public Health Act, further stipulates that a person shall not manufacture, import, export, sell, distribute or supply food unless the food has been registered with the Food and Drugs Authority. Under the act, the Authority has the mandate to register food if it is satisfied that the preparation of the food complies with the prescribed codes of good manufacturing practices.

Tourism Act, 2011 (Act 817)

The Tourism Act, 2011 (Act 817) which replaces the Tourist Board Decree, 1973 (N.R.C.D. 224) as amended, establishes the Ghana Tourist Authority to regulate the tourism industry. Under this law, the authority is tasked to 1) grant licenses for the tourism industry 2) regulate and supervise tourism

enterprise and attractions including the food service sector and 3) regulate and monitor the activities of licensees. Ghana Tourist Authority is empowered to satisfy itself that proper provision has been made for sanitation in the premises, storage, preparation, cooking and serving of food and drinks before issuing a license. Stipulations of the Ghana Tourism Act further states that the premise on which food and drinks are produced and sold should conform to the national laws on sanitation and public health safety. The Tourism Act consequently mandates the Ghana Tourist Authority to form an inter-agency with other authorities such as EPA, FDA and MMDAs to review permits issued by the agencies.

Local Government Act, 2016 (Act 936)

The Local Government Act ensures that MMDAs assume the ultimate responsibility for the development, improvement and management of human settlements and the environment in districts, municipal and metropolitan areas. They are also mandated in collaboration with other agencies to seize, destroy and otherwise deal with all raw foodstuffs, prepared food and liquids considered unfit for human consumption. As indicated above, under the Public Health Act, the Food and Drug Authority is to monitor through the MMDAs compliance with the food safety provision.

Theoretical Framework of the Study

As part of the broad theoretical lens and concepts that underpinned the study, the social control theory, the health belief model, the compliance process decision model and the concept of power and relational dynamics and enforcement and deterrence were used to explore and offer a profound

understanding of the interrelations and interactions among stakeholders in ensuring food safety.

Social control theory

Social control theory, propounded by Hirschi (1969) refers to a perspective which predicts that when social constraints on antisocial behaviour are weakened or absent, delinquent behaviour emerges. Further assertions indicate that ties to family, school and other aspects of society for instance, serve to diminish one's propensity for deviant behaviour. As such, delinquency occurs when such bonds are weakened or are not well established. Control theorists in addition argue that without such bonds, crime or misbehaviour is an inevitable outcome (Lilly et al., 1995).

Unlike other theories that question why people refrain from offending, the social control theory seek to explain why people engage in deviant behaviour (Akers & Sellars, 2004). As a result, misconduct is seen as a possibility for all individuals within society, avoided only by those who seek to maintain the social bond. In other words, when an individual has experienced a lack of social connections or a lack of social network that would normally prohibit an unlawful activity, the likelihood that the individual will participate in that unlawful activity is high.

In the social context, the controls could be internal or external. The internal means of control is the individual's own sense of right and wrong, which decreases the likelihood that one will deviate from social norms. Through an external means of control, individuals conform because an authority figure

threatens sanctions if the individual disobeys. Hirschi (1969) advances his argument that weak bonds between the individual and society allow people to deviate. In the case of food safety regulation, weak links between food service providers and the regulatory institutions could encourage deviant behaviour. This has been recognized in works of Mensah et al., (2002) and Monney et al., (2014) where weak regulatory inspection and enforcement was found to have contributed to food safety malpractices among some food vendors in the country. In addition, Gilliland and Manning (2002) also used the social control theory to develop a conceptual model that addresses the effectiveness of regulatory agencies' (Food and Drug Administration and Occupational Safety and Health Administration) field-level efforts to obtain conformance with product safety laws. Central to the model were the control processes agencies used when monitoring organisations and enforcing the safety rules. These approaches were labeled formal control (rigid enforcement) and informal control (social instruction). The theoretical framework identified an important antecedent of control and the relative effectiveness of control's alternative forms in gaining compliance and reducing opportunism. The model predicts that the regulated firms' level of agreement with the safety rules moderates the relationships between control and firm responses. The study findings inform a discussion of effective methods of administering product safety laws.

Despite research that supports the principles of social control theory, some researchers have questioned the strength of the theory. As Gibbons (1994) notes, some have questioned whether the notions of self-restraint as proposed by Hirschi (1969) can be used to explain more serious offending behaviour. Critics of the theory contend that the theory may be better able to explain minor offending, but does not necessarily adequately account for more serious misconduct (Gibbons, 1994).

Power dynamics theory

Power, according to Turner (2004), is an inescapable feature of human social life and structure. Its nature, form and content have been debated in various ways but few would deny that power is central to human affairs or a key concept in the social sciences (Turner, 2004). Roberts (2003) argues that power is the basis of society, the basic building block upon which all collective human endeavours are based. For Anderson (2003), power is the basic force in social relationships. Weber (1922), a significant contributor to the analysis of power also perceived power as the ability of actors, either as groups or as individuals, to get what they want despite resistance from other actors. This accord with Dahl's (1961) concise definition of power as the ability to make somebody do something that otherwise he/she would not have done. Amid the definitions by the various authors, the basic thoughts are that power is the capacity to influence other people that are conferred by the control of resources that are desired, valued or needed by others and which makes them dependent upon the influencing agent for the satisfaction of their needs or reaching their goals (Dzorgbo, 2013).

Weber (1922) opines that there are two main avenues of gaining power: legitimate and illegitimate. Legitimate power is said to exist when those on whom power is being exercised acknowledge that those exercising the power have the

right to do so. Power is illegitimate however, when those on whom power is being exercised view those exercising power as having no right to do so. By establishing these distinctions, Weber (1922) laid a solid foundation for a further discussion of the concept of power within Sociology. Foucault contribution towards the analysis of power presented a different perspective.

As a continuation approach and also a critique to Foucault's perception about power, Giddens (1982) structuration or duality of structure viewed power as something that is created and exercised by human agents, which influences them and also limits them. In other words, power is not a quality or a resource of people or a position in the social structure, but a social factor which influences these components of human society. This then shifts the analysis from a focus on the source, ownership and use of power to a focus on the manifestation of power within the day to day interaction and subsequent negotiation among individuals within a system. Giddens (1982) argues that power is not a fixed entity and neither is it inherent in an individual but rather it is dynamic and fluid, with different individuals coming to possess power at different points.

Power, as suggested by Foucault (1982), is exercised in a relationship and is evident when certain actions modify and constrain the actions of others. Power then must not be perceived as a fixed and independent entity but rather must be understood to exist through action (Foucault, 1982). Within a social negotiated setting, some actors, be they groups or individuals, may have more power and control over others. Who has power and who does not may depend to a large extent on the social situation and relationship within which interaction takes place

(Fine, 1984). Thus, those who are in need of something are usually constrained by the conditions laid down by those who can satisfy their needs. As Fine (1984) rightly puts it, "*when an individual has a need that must be satisfied, he or she is severely constrained by the wishes of those who can satisfy it*" (p.366). It is worthy to note however that, the individual or group on who power is being executed is an active rational person, who within a power relationship has other alternatives in relation to reactions or responses, implying that the ruled or the powerless can restrain the actions of the one with whom power resides since power relations and influence are not unidirectional (Fine, 1984).

Relating this to the interaction that exists between regulators and food service providers, regulators may be those who may possess the legitimate power to control and ensure compliance. Food service operators on the other hand may be those who may be constrained by the conditions laid down by the regulatory agencies. Nevertheless, there could be the possibility that those food service operators under certain conditions through their actions and inactions negotiate their situations.

Health Belief Model

The Health Belief Model is one of the common theories mostly used in environmental health education and health promotion (Glanz, Rimer & Lewis, 2002). This model evolved in the wake to explain why medical screening programmes offered by the United States' Public Health Service, predominantly for tuberculosis were not very successful (Hochbaum, 1958). The principal theme underlying the health belief model is that health behaviour is determined by personal belief or perceptions about a disease and the strategies that exist to decrease its occurrence. Four perceptions serve as the main constructs of the model. They are perceived susceptibility, perceived seriousness, perceived benefits and perceived barriers and each of these individually or collectively can be used to explain health behaviour.

Perceived susceptibility: This construct relates to one's vulnerability to a disease or risk and therefore one of the prevailing perceptions in encouraging people to adopt healthier behaviours. Perceived susceptibility sums up to the fact that the greater the perceived risk, the greater the likelihood of engaging in behaviours to decrease the risk (Etter & Perneger, 1999). This indicates that people would be more likely to do everything possible to prevent its occurrence when they believe that they are at risk for a disease. However, the reverse can also occur. Unhealthy behaviours tend to result when one believes that he/she is not at risk. Further implication of this is that susceptibility perception explains change in behaviour to some extent but not in all situations. This is firmly encapsulated in Hanson and Benedict's (2002) conclusion in a study that even though food handlers perceive a

threat of illness from unsafe food handling practices, they still do not adopt safe food handling practices all the time.

Perceived seriousness: Perceived seriousness as a construct identifies an individual's belief about the seriousness or severity of a disease. Though the perception of seriousness most at times is based on medical information or knowledge, it may also come from beliefs a person has about the difficulties a disease would create or the effects it would have on an individual's life generally. For instance, if a food service operator happens to eat what he/she sells and contracts any foodborne related illness due to improper food handling practices and is unable to work for a number of days, in this case, the person's perception could be that attracting food related illness as a result of improper handling is a serious issue and therefore care should be taken at every stage in the food preparation and handling process.

Perceived benefits: It explains the benefits an individual stand to gain in the adoption of a new behaviour. This construct argues that most people resort to appropriate behaviours when they believe the new behaviour will decrease their chances of developing an illness. The applicability of this is seen in the effort of some food service operators to prepare and sell food in hygienic environment in a study of Monney, Agyei, Badzi, Campaore and Nyaw (2014). Food service operators were of the view that cooked foods devoid of illnesses were likely to attract repeated patronage from consumers. The effort made is based on the premise that preparing and selling food under hygienic conditions help to attract and maintain customers. Probably, efforts toward this direction would not have

been made if the health benefits which lead to increased patronage were not greater.

Perceived barriers: this construct underscores the hindrances an individual is likely to encounter in the bid to adopt a positive behaviour. Knowing and overcoming the barriers to the new behaviour to Sedlak, Doheny and Jones (2000) is the most significant factor in the determination of behaviour change. In the adoption of a new behaviour, the individual needs to believe that benefits of the new behaviour outweigh the consequences of continuing an old behaviour (Centre for Disease Control and Prevention, 2004).

Several studies have applied the health belief model to predict behaviours such as visiting a doctor (Haefner & Kirscht, 1970), weight control (Sturhard, 1981) and food safety (Schafer, Schafer, Bultena & Hoiberg, 1993). Schafer et al. (1993) for instance applied the health belief model to determine food safety attitudes and behaviour of adults in Midwestern State in the USA through the use of a questionnaire. The findings provided evidence that actions were being taken to ensure the safety of food. These actions centered on information seeking, good food preparation and appropriate food purchase. These included the perception that unsafe food is a personal health threat, the perception that one could do something about the threat (self-efficacy), and the motivation to maintain good health. Those who felt a personal threat and believed they could do something about it engaged in food safety behaviour.

The adoption of a construct or a combination of the constructs in the Health Belief Model therefore helps to explains why food service operators should be encouraged to adopt behaviours that would result in low risk for contracting foodborne related diseases. The believe that everybody is susceptible to illness through contaminated food serves as a motivating factor for both food safety regulators and food service operators in their enforcement activities and compliance to regulations respectively.

Deterrence theory

The principal objective of deterrence law enforcement system is to secure conformity with law by detecting violations of law, determine who is responsible for the violation and penalize violators to deter violation in the future (Reiss, 1984). Although penalties may be applied in both compliance and deterrence systems, they are integral to a deterrence strategy. The deterrence – based system mobilizes its detection mechanism to await a violation in order to punish, whereas a compliance-based system will attempt to prevent its occurrence using the threat of punishment.

This theory extends to incorporate non-compliance and maintains that there must be credible likelihood of detecting violations; swift, certain and appropriate sanctions upon detection; and a perception among the regulated firms that these detection and sanction elements are present (Rechtschaffen & Markell, 2003). As with the more nuanced international rationalist models such as institutionalism, a view of "costs" broader than merely monetary cost opens up a range of enforcement options, including extra-legal "punishments" such as moral stigma and loss in reputation.

The compliance process model

The compliance process model originally propounded by Henson and Heasman (1998) came about as a result of the two researchers finding specific differences in the way businesses comply with food safety regulation. They reported the occurrence of a distinct and common series of actions as businesses decided whether or not to comply with the legislation and eventually led to the creation of a model to reflect the compliance process. Henson and Heasman's (1998) compliance process model as shown in Figure 1 describes the decision- making process carried out within a business when faced with legislative requirements. Key features of the model are its assertion that the process of compliance is a cycle of eight distinct stages ordered sequentially to include; identify regulation, interpret regulation, identify changes, compliance decision, specify method of compliance, communication, implementation and evaluation/monitoring of the process.

Nevertheless, in 2004, Yapp and Fairman adapted and examined the applicability of the model to medium, small and micro businesses. They noted three main differences between their model and that of Henson and Heasman (1998) model. In the first instance as depicted in Figure 2, they found no proof to support the identification and interpretation of regulation as two distinct steps and therefore combined those sequential stages into one. Secondly, they intimated that making a decision to comply followed the specification of how to comply and so these steps were order reversed. Lastly, their findings suggested that formal communication was not always utilized and therefore found no reason to maintain this as a separate step. Rather they merged it into the implementation stage.

They suggested that the compliance process is initiated by the business becoming aware of the existence of regulations (identify regulation), understanding what it means for the business (interpret regulation) and whether the existing operating procedures need to be changed in order to meet the requirements (identify changes).

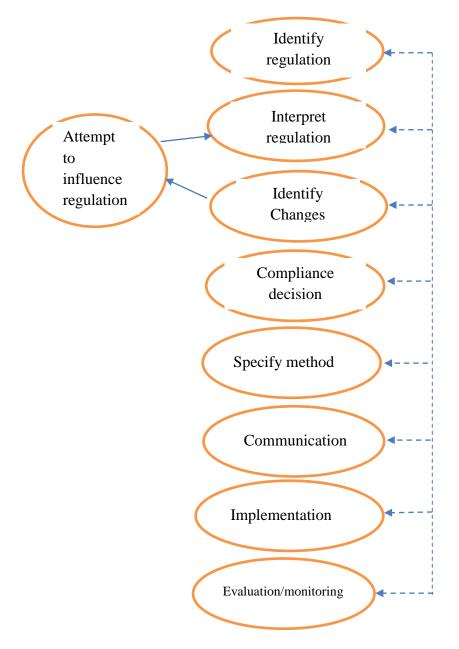


Figure 1: Compliance process model by Henson and Heason (1998)

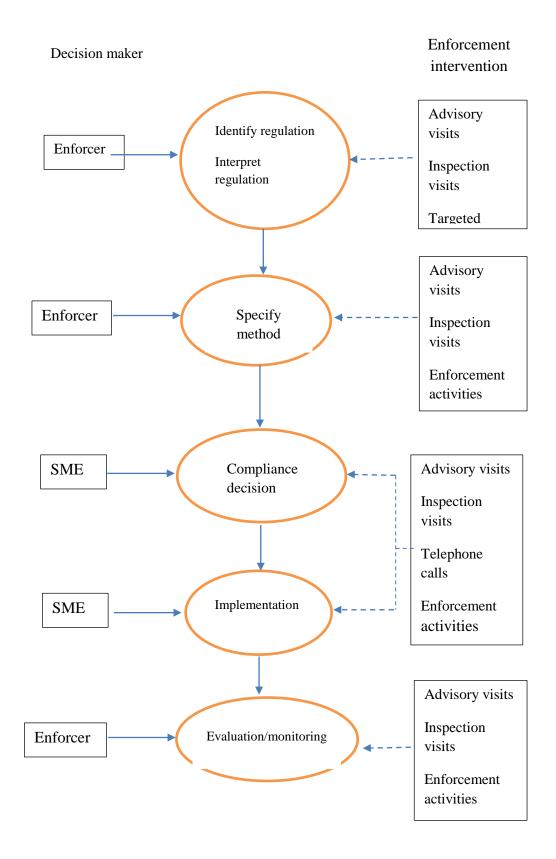


Figure 2: SME specific compliance model by Yapp and Fairman (2004)

Once it has been established that the changes are necessary, the business needs to decide whether it wishes to take steps to comply (compliance decision). This compliance process model has been widely adapted and used predominantly within the field of food safety and other fields of study (Fairman & Yapp, 2006; Chalmers, 2009).

Conceptual Framework

In an attempt to offer a conceptual framework that determines the regulatory activities and food service operators' compliance to Ghana's food safety regulation, the SME specific compliance process model developed by Yapp and Fairman (2004) was adapted and modified for the purpose of this study. The compliance process model establishes that businesses make decisions to comply with a regulation based on precisely what is required of them. The chosen model confers the responsibility of food safety governance on both the food business operators and regulators (departments and agencies). It does not shift the focus to only one party. However, in spite of its advantage over the other models, it does not account for variables which may prevent food businesses from identifying and interpreting regulations. Taking into account the limiting factors in the model, the framework has been modified to include variables that account for food safety measures and the motivating factors that account for food safety compliance.

Within the compliance process model, the food service operator becomes aware of relevant regulation through regulators who might have identified a breach from the code of practice and therefore instructs the operator to make changes. The operator is again made aware of relevant regulation through enforcement interventions

which can be in the form of inspection visits, education, training, seminars, workshops, media information and phone calls. After the operator has been made aware of what needs to be done, he/she in turn interpret the regulation and take a decision as to whether the regulation is worth complying with. The interpretation of the relevant regulation may be influenced by such factors as the level of education, level of motivation and ignorance.

The identification of Winter and May's (2001) three categories of motivation - calculated motivations (which suggest that regulated entities comply with a given regulation when they feel that the benefits of compliance exceed the cost of compliance); normative motivations (combine sense of moral duty and agreement with the importance of a given regulation); and the social motivation (desire of the regulated to earn the approval and respect of significant people with whom they interact) then comes to the fore. Although the last factor has been isolated as the most single factor that accounts for non-compliance (Brown & McKinley, 1982; Yapp & Fairman, 2004; Yapp & Fairman, 2006), the use of the compliance process model does not make this justifiable. The model is suggestive that through enforcement intervention, food service operators are provided with information regarding food safety hence operators have no excuse for not knowing and complying with the regulation.

Through enforcement interventions, regulators specify method of compliance which ensures supreme realisation of food safety. The operator on the other hand has the power to choose the method of compliance based on his/her level of understanding, level of motivation and other beliefs. In the course of implementation, regulators who possess legitimate powers backed by appropriate resource infrastructure are expected to monitor progress to ascertain and evaluate whether operators actually complied with the regulation. Any discrepancies are fed back into subsequent interventions as postulated by Yapp and Fairman (2006). In totality the conceptual framework for this study establishes regulatory measure, monitors system performance and facilitates continuous improvement. This is presented in Figure 3 as follows:

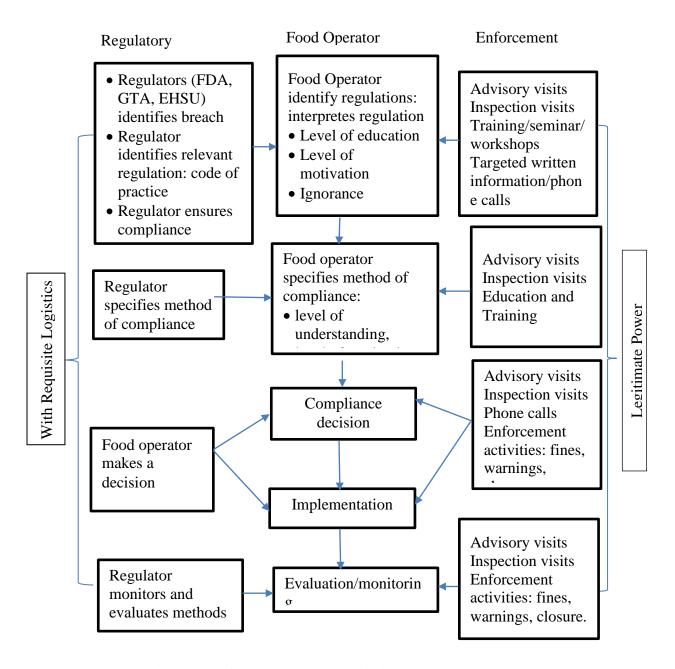


Figure 3: Conceptual framework underpinning the study

Summary

To end this chapter, the concept food safety has been explained to mean all the necessary steps taken to ensure that food will not cause harm to the consumer when it is hygienically prepared and eaten according to its intended use. To ensure the achievement of this purpose, government has promulgated food safety laws such as the Public Health Act, 2012 (Act 851), Tourism Act, 2011 (act 817) and Local Government Act, 1993 (Act 462) to serve as a guide to enforcement and compliance activities.

In addition to concepts explained, the underlying theoretical framework of the study explains why some people act on deviant impulses and why others do not. From the social control theory perspective for instance, it is envisaged that people engage in unlawful activities when their bond to society has weakened. In other words, when an individual has experienced a lack of social connections or a lack of social network that would normally prohibit an unlawful activity, the likelihood that the individual will participate in that unlawful activity is high. Theoretical perspective of power also suggests that who has power and who does not may depend to a large extent on the social situation and relationship within which interaction takes place. Thus, those who are in need of something are usually constrained by the conditions laid down by those who can satisfy their needs. In the ensuing chapter, a further review of literature on food safety regulation is undertaken.

CHAPTER THREE

FOOD SAFETY GOVERNANCE: HISTORY AND EXPERIENCES Introduction

An attempt was made in the previous chapter to define some concepts, review some theories about why some people act on deviant impulses and why others do not as well as an overview of the available conceptual frameworks within the food safety context. In this chapter the literature review continues but this time, the focus is turned onto the available empirical evidence on various facets of the relationship between food safety and regulation. To be reviewed include the emergence of the food service operation, food safety related issues, safety concerns in the food service sector and the role of government in ensuring food safety.

The Emergence of the Food Service Operation

The term food service operation is used to describe food available for sale in a public place such as from the restaurant, hotel, chop bar or a vendor on the street. The emergence of the food service sector in most developed and developing countries are well attributed to the growth and urbanization of city life (Muinde & Kuira, 2005). As people moved from one place to the other in search of jobs, for tourist attractions and other business activities, the existence of the food service operation provided the nutritional needs of such people (WHO, 1996).

Food service operation in Ghana dates back to the early post-independent era when many people migrated from rural areas into towns and cities to undertake various kinds of work brought about by Ghana's new industrialization initiatives (Laryea, 2012). At the dawn of the democratic dispensation, expectations were high that the new political era would provide a better life for all. Unfortunately, these hopes did not materialize due to economic circumstances and therefore a lot of people ceased the opportunity to enter into small businesses popularly referred to as the informal service sector. Definitions of the concept "informal service sector" have not been consistent. Varied definitions of the concept exist in literature. Hupe and Hill (2007) for instance referred to the informal service sector as all economic activities that contribute to the officially calculated gross national product but currently unregistered.

The food service business as part of the informal service sector from Tomlins and Johnson (2010) perspective received a boom as workers relied on these food service operators while away from home. Reliance on the food service operation became necessary as many workers had little time for food preparation while at work or did not have time to travel back home for their meals (FAO, 2012). With people leaving for work outside their homes and their inability to carry food with them, some people saw the need to provide these workers with various kinds of food, a practice which eventually grew into what is seen today as formal and informal food service operation. Formal food service operation refers to those businesses and establishments such as the hotels, restaurants and fast food joints responsible for any meal prepared outside the home while the informal

food service operation is described as "foods and beverages prepared and/or sold by vendors in streets and 'other public places' for immediate consumption or consumption at a later time without further processing or preparation" (FAO, 2009). The common denominator here is that both the formal and informal food service operations are establishments that provide food services outside the home for public consumption. For the purposes of this study, the informal food service operation is referred to as the food service operations such as food hawkers, table top operators, street side food vendors and chop bar operators that exist in the Cape Coast Metropolis.

FAO/WHO (1995) noted that the informal food service business is growing at a fast rate in Ghana and other parts of West African countries as a result of global socio-economic changes and unemployment. With a little initial capital and food preparation skill, a lot of women have turned to the food service business as an alternative means to make a living. This informal business has been a source of employment for a significant number of women in most African countries and other developing world (Chen, 2008). This gender-based employment offers a dual advantage for women; women have access to income as well as regular access to food for their families. In addition, it contributes to household incomes and the education and health of their children (Amoah et al., 2004). People in the informal food vending business according to the International Labour Office (2002) constitute a greater majority of the food service sector and therefore should attract the attention of the government and other policy makers.

Per the suggestion of the International Labour Office (2002), this sector has attracted the attention of the government and therefore contributes to the gross domestic product of the country. This sector is regulated by established food safety laws through selected ministries, agencies and departments within the various regions of the country. As part of their regulation, they are to be licensed and their activities scrutinized and supervised by the appropriate authorities. However, in many developing countries of which Ghana is inclusive, the informal food service providers mostly operate in grey areas without licenses (Draper, 1996). They have been identified as working with limited or no infrastructural facilities and limited access to competitive space for business. Furthermore, Osei-Boateng and Apratwum (2011) maintain that most of these food service operators lack skills, technology and are either ignorant about safety issues in their field of work or cannot simply afford to put in measures for self-protection. They intimate that most workers in the sector are exposed to bad environmental and other hazardous conditions that constitute a threat to health and safety.

Food Safety Related Issues

Food is an important basic necessity; it is a critical contributor to the physical well-being and a major source of pleasure and livelihood (Scharff, 2009; Rozin, 2002) but like the two sides of the proverbial coin, food takes on dualistic properties of being both good and evil. The very element that provides sustenance can also become the conduit through which hospitalization or death can occur (Food and Drugs Authoriy, 2016). Thus, on one hand food is a necessity for life and on the other hand, as the primary cause of disease and death for that matter. It

is difficult to find anyone who has not encountered an unpleasant moment of food related illness at least once in the past year. Hardly a day passes without the occurrence of some food borne related issues. The print and electronic media are replete with stories of food related issues and diseases which are causing great human suffering and significant economic losses (FAO/WHO, 2010).

Foodborne illnesses have been described as one of the most widespread problems of the contemporary world (WHO, 2010; Zotermans et al., 1994). In rich and poor countries alike, foodborne diseases pose substantial health burdens, ranging in severity from mild disposition to fatal illnesses. Foodborne illness is attributed to the consumption of contaminated food with a wide variety of bacteria, parasites and viruses (WHO, 2007). The number of reported outbreaks of foodborne illnesses continue to increase both in developed and developing countries (Initiative to Estimate the Global Burden of Foodborne Diseases, 2013).Within developed countries, one third of the population are thought to be affected by foodborne diseases each year, and the problem is likely to be similar or more wide spread in developing and less developed countries with poor surveillance systems (FAO/WHO, 2009) although there is likely to be intercountry variability in the causative agent (Griffith, 2010).

Studies have shown that foodborne diarrhea diseases are considered as the leading causes of illness and death in most of the less developed countries (Schlundt et al., 2003), causing an estimated 2.2 million deaths annually out of which 86% are children (WHO, 2010). In Ghana, about 65,000 people die annually from foodborne diseases resulting in the loss of some US\$ 69 million to

the economy (Monney et al., 2014; Mahami & Odonkor, 2012; Ministry of Food and Agriculture, 2006). The problem is however exacerbated in developing countries due to economic reasons; poverty, inadequate health care facilities and dearth of data regarding foodborne diseases (WHO, 2009). Less documented, developing countries are believed to have higher tolls due to observed challenges in the food control systems (WHO, 2005) and this greatly compromises the achievement of the Millennium Development Goals (particularly MDG 1, 4, 5, and 6) (FAO/WHO, 2015). WHO highlights concerns over foodborne diseases and argues that many indicators point to the fact that the incidence is increasing globally and is a substantial cause of morbidity and mortality world wide. In less developed countries, neglect of the problem constitutes a major threat to health and development itself (Ehiri & Morris, 1996)

In spite of the increase in the morbidity and mortality rate, WHO (2007) opine that the extent of the problem is still unknown and Griffith (2010) suggests that even notified cases represent the "tip of an iceberg" since foodborne diseases often go undetected or underreported. While a precise figure is impossible to calculate given current data limitations, the health care cost and lost productivity attributable to foodborne illness is likely to be high (Canadian Food Safety Initiative, 2009). The economic burden encompasses many direct and indirect factors; cost related to lost worker productivity, and costs to food industry from loss of sales. Cost to national governments stems from increased medical expenses, outbreak investigations and increased demand on the overburdened and poorly funded healthcare systems in most African countries (Ehiri & Morris,

1996). Food businesses can also experience significantly reduced sales, high recall costs and lower consumer confidence. Consumer costs on the other hand include medical, legal and other expenses as well as absenteeism at work and school. For many consumers who live at subsistence level, the loss of income due to foodborne illness can perpetuate the cycle of poverty (WHO, 2004). Chronic diseases caused by contaminated food, like reactive paralysis can be even more damaging than the initial disease and add dramatically to the medical cost and lost wages (Recourt, Moy, Vierk & Schlundt, 2003). The loss of human capital and productivity through the consumption of unsafe food is therefore a critical regulatory issue (FDA, 2016).

Safety Concerns in the Food Service Sector

Concerns raised by WHO (1999) suggest that the development of a country's economy to a large extent depends on the health of its citizens. The organization believe that the higher the experience of poor health, the greater the experience of human suffering caused by food-borne diseases. Increased risk factors associated with foodborne related pathogens in a foodservice establishment can cause critical health and financial consequences for both the consumers and food business operators (Knight, Worosz & Todd, 2007). Absenteeism from school and the work place, cost of investigation, as well as legal expenses can also result in huge economic losses.

Human beings have been identified as one of the major sources through which microorganisms get into foods. Some explanations for this phenomenon are poor sanitary practices in food storage, handling, and preparation in a much larger

and less easily controlled environment where bacteria such as salmonella, campylobacter, listeria, and Escherichia coli 0157 and other infectious agents are more easily transmitted (Fielding, Aguirre & Palaiologos, 2001), causing these establishments to be at a higher risk of causing foodborne outbreaks. This problem is not only a local concern but many examples exist in regional, national and international fronts. On an international level, perhaps one of the most unforgettable was the Jack in the Box restaurant E. coli outbreak in 1993, where regretfully, 700 people reported illnesses and four children died as a result of eating contaminated meat purchased at 73 Jack in the Box restaurants in the Northwest U.S. (Golan, Roberts, Salay, Caswell, Ollinger & Moore, 2004). Jack in the Box reported an estimated \$160 million in reduced sales and other costs, including the recall of all hamburger meat from their restaurants and legal costs associated with law suits filed by customers (Knight et al., 2007). Locally (within Cape Coast), two university students lost their lives after eating contaminated rice and beans popularly known as "waakye" (University of Cape Coast Hospital, 2014).

Research has indicated that food safety is the aim of every consumer, but in real life, Antle (1995) argues that 100% food safety is unachievable. This limited safety factor is not confined to street food alone. Draper (1996) concurs and further argues that the risks posed by street foods are not necessarily greater than those foods from other sources. Studies in other countries indicate that the microbial quality of street food is equivalent to, if not better, than foods bought from hotels and restaurants. Every food supplier should be encouraged to aim at improving the safety of food for public consumption and this can only happen if street vendors supply information on the activities as suggested by WHO (1999) as food-borne diseases

should be given priority because of the public interest. WHO (1999) suggests this because 10% of the population is affected annually by food-borne diseases in industrialized countries. Unlike in most industrialized countries where a large proportion of the population is knowledgeable about food safety, Antle (1995) concludes in his study that majority of African consumers are still ignorant about such issues, for they buy street food without knowledge of how such food has been handled.

Role of Government in Ensuring Food Safety

Globally, the role of governments in ensuring the safety of the food goes a long way to depict how the health and interests of its citizens are held paramount. As a result, food safety issues have gained prominence in political decisions (Hardallu, 2003). For example, the frequency of foodborne disease outbreaks that results in morbidity and mortality could be used by the general public to judge the efficiency or otherwise of the government. To achieve the expected result, vended foods are controlled by rules, regulations and bye-laws, licensing and regular inspection by government officials.

Food safety regulation has conventionally been the responsibility of a number of central government organizations such as ministries or departments of health, agriculture, trade and commerce at the national level. At the local level, such responsibilities are delegated to local authorities, municipalities or local governments. Collaboration and cooperation mechanism between the national and local government organizations is needed for stronger and effective food safety control. For all partners or stake holders to be fully involved in the food safety governance process demands that each of them is aware of the food safety problem. On the contrary, Reily (2004) intimates that effective food safety governance can be undermined by the existence of fragmented legislation, multiple jurisdiction and inconsistencies in enforcement responsibilities.

International Food Safety Regulatory Body

The main international body concerned with the setting of international food standards is Codex Alimentarius Commission (CAC). This body, established in 1962 with over 170 country membership, is jointly funded by the Food and Agriculture (FAO) and the World Health Organization (WHO). These two international bodies are concerned with strengthening the food control systems of individual countries based on scientific evidence (FAO/WHO, 2003). CAC creates guidance document and sets modalities which are required to ensure optimum global coordination and to strengthen the national authority's overall capacity to identify the most effective measures to prevent, reduce or eliminate a risk for human health. The guidance document further serves as the basis for national and local regulation for food businesses and permits an optimized approach for the safety of the global food chain encompassing all products for both human consumption and animal feed (FAO/WHO, 2003).

Standards set by Codex contain requirements aimed at ensuring the consumer a sound and wholesome food product correctly labeled and free from adulteration and contamination. On the other hand, as a result of the wide variety of ingredients used in food preparation and the different methods of food preparation in different context, Draper (1996) concludes that is has been difficult for CAC to develop general laws, codes and guides that could be used by different

national governments in regulating the street food sector. Nonetheless, CAC recommends that every member states' food control system must possess the three important aspects of the food safety regulation; food safety laws, regulations and standards; enforcement including inspection and laboratory services and; performing educative functions such as education and training, public information and communication.

The Food Safety Policy Situation in Ghana

Food safety policy is a part of a broad social policy which can be defined as social relations and regulations essential for human wellbeing and the structures by which the wellbeing may be advanced (CAC, 2003). Nationally and globally, the interest in the safety of food is heightened when the food is intended for the market, both local and export. In addressing these concerns, national and international strategies are put in place to provide the requisite information, standards and regulation to ensure that consumers get the best value for health and nutrition. Ministry of Health, (2013) argue that the government of Ghana has not been left out of this increasing awareness, with the public and private as well as international agencies showing support and commitment to improve the food safety situation in the country.

The ministry further contend that there have been multiplicity of programmes instituted by key actors and institutions who contribute to ensuring that the quality of foods consumed by Ghanaians are safe and contribute to good health. But these programmes and actions are so far not driven by any uniform national food safety policy to allow effective coordination and evaluation

(Ministry of Health, 2013). Ghana is yet to implement a draft national food safety policy which the Ministry of Health in collaboration with relevant ministries, departments, agencies and other partners have prepared (Ministry of Health, 2013).

The need for a National Food Safety Policy became necessary when a team of key stakeholders were tasked to assess and analyse the food safety situation in Ghana. They found out that there is an urgent need to develop a national food safety policy for Ghana with the ultimate aim of establishing and maintaining an integrated farm to fork food safety system that ensures consumer health and public safety. Based upon the assessment and analysis, a National Food Safety Policy has been developed and adopted but pending implementation. The Ministry of Health (2015) notes that the adoption and implementation of the National Food Safety Policy can help reduce the burden of foodborne diseases and other related problems in the country and also provide a basis for the establishment of objectives, requirements and guidance for application to specific sectors of the food chain. The question that readily comes to mind is that why has it taken Ghana so long a time to develop and implement a national food safety policy? As Ghana seeks to improve its competitiveness on the global market, there is an urgent need to implement the National Food Safety Policy to ensure quality and safety to the consumer.

Food Control

Food control is defined by FAO/WHO (2008) as "a mandatory regulatory activity of enforcement by national or local authorities to provide consumer protection and ensure that all foods during production, handling, storage, processing, and distribution are safe, wholesome and fit for human consumption; conform to safety and quality requirements; and are honestly and accurately labelled as prescribed by law". Food control is seen as an institutionalized policy field, involving certain characteristics, based on distinctive institutions, comprising traditions and values formed over time. The relevance of understanding food control as a particular form of regulation with a specific history and its own institutions has been argued in a work on food control in Norway (Elvbakken, 1997). Elvbakken has shown that regulation of food and food control is an important undertaking of the state, a task that is of essential value for society. Elvbakken (1997) again intimates that to secure safe food and adequate food supplies is also to secure order, an essential task for any state, regardless of state form and political system. Consequently, a crisis that challenges food safety arrangements challenges the state itself, society order and further question arrangements in several different policy areas.

Food safety control involves public health and safety issues, but also includes market and business interests and further comprises both political and economic issues. It may also involve ethical concerns and question production methods. Elvbakken argues the usefulness of Selznick's definition of food control described as sustained and focused control exercised by a public agency over activities that are socially valued (Selznick 1985 as cited in Elvbakken 1997). This understanding of regulation brings the regulating institution or agency into focus and emphasizes the significance of embedded social values.

National Food Control Systems

National food control systems are designed to address specific needs and priorities of countries. They differ from country to country yet have basic key components such as food legislation and regulations, policy and institutional framework (Omojokun, 2013; FAO, 2005). Objectives that are crucial to a national food control system from FAO (2005) perspective are: to protect public health by reducing foodborne illnesses; to protect consumers from insanitary, contaminated unwholesome, mislabelled or adulterated food and; to maintain consumer confidence in the system which will give rise to economic development and international trade.

A well planned and structured food control system gives rise to a suitable national system developed in line with international best practices and harmonized with Codex Alimentarius Commission (CAC) standards and World Trade Organization (WTO) requirements. Codex Alimentarius Commission sanctions three main types of food control systems. These are the single agency system, the multiple agency system and the integrated agency system. From WHO (2005) perspective, the type of system does not matter as much as it fits the intended purpose. Thus, whatever system is in place, adequate communication and coordination among different institutions is crucial. The system that would facilitate regulatory action for food safety should be based on the principles of

transparency, inclusiveness, integrity, clarity of roles and rules, accountability and science/risk-based approach (Hood, Rothstein, and Baldwin, 2001). The types of systems are explained in detail as follows:

Single agency system

A single agency system involves a unified, single regulatory body responsible for national food control. The single agency system puts the responsibility for food safety and public health protection in a single food control agency. The relevant bodies responsible for food control along the value chain are domiciled in one agency and under the same management therefore the system is coordinated and makes for quicker response and effectiveness. This kind of system shows that government places high priority on food safety and reduction of foodborne illnesses (Omojokun, 2013). The single agency system has advantages such as:

- Coordinated and uniform approach to food safety and public health protection
- Reduction or elimination of overlap of functions, duplication of efforts, delays, increased cost of doing business and wastage
- Improved efficiency, cost effectiveness and better use of resources and expertise
- Increased ability to respond quickly to emerging challenges
- Delivering more efficient service that facilitates the growth of industry and promotes trade.

Multiple agency system

A multiple agency system involves two or more regulatory bodies responsible for the national food control. With the multiple agency system, the food control responsibilities are usually shared between government ministries and departments. The enabling laws specify the roles and responsibilities of the relevant government bodies. However, this kind of control system has been identified with challenges such as fragmentation of activities, increased bureaucracy, increased cost of doing business, duplication of functions and lack of coordination among the various responsible bodies (WHO & FAO, 2014). These challenges can affect the implementation, enforcement and compliance of the food safety regulation. Omojokun (2013) also substantiates that while the multiple agency system may be the most preferred system by most countries, the drawbacks may include:

- Differences in the level of expertise and resources resulting in uneven implementation
- Conflicts arising from overlap of functions and lack of cohesion between bodies leading to over-regulation and undue delays
- Limited capacity for appropriate scientific inputs in decision-making process
- Lack of domestic consumer confidence and foreign partners in the credibility of the system.

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Integrated system

An integrated agency system is based on a national integrated approach. The integrated food control system is operated where there is the desire and political will to achieve effective collaboration and coordination between agencies across the farm-to-table continuum (FAO/WHO, 2004). An integrated national food control agency addresses the entire food chain and has the mandate to move resources to high priority areas and to address important sources of risk. Such an agency's role is to establish food control goals, put into effect the strategic and operational activities necessary to achieve the goals. As part of the integrated approach, it also becomes imperative to update the national food control strategy as needed; advise on policy matters including determination of priorities and use of resources; draft regulation, standards and codes of practice and promote their implementation; coordinate the activities of the various inspection agencies and monitor performance (Omojokun, 2013).

Fundamentally, Ghana has a food control system whose structure and functions is not confined to a single government department or agency. Regulations, laws, standards, enforcement and analytical services are scattered and control and administration is a shared responsibility among more than one ministry and department (Bruckner, van de Venter, Rademeyer, Malan, Jansen van Rijssen & Wolhuter, 1998). The segregated function of the Ghanaian food control systems is better understood in the context in which the food control system operates. In the government agencies, legislation and functions are agency based with the majority of agencies having indefinite mandates based on acts and

regulations to administer and carry out functions. The main agencies enforce their respective mandate according to their own acts, internal procedures, structure and budgets. For instance, the FDA under the auspices of the Ministry of Health, has an entire directorate dedicated to inspectorate service inclusive food safety and quality assurance. In addition, this agency has dedicated laboratories for food analysis, test quality aspect of food stuffs and analyse export products.

Ghana's Regulatory Framework on Food Safety

Realising the importance of meeting the nutritional needs and safety of food consumed by the large proportion of the population, the preparation and handling of food by service operators in most countries are controlled by rules, regulations and bye-laws. In Ghana, the sale of food and other consumable items are controlled by legislation passed by parliament and other specialized people (Ministry of Health, 2013). This include laws governing food and drugs, standards, health and safety of animals and animal products and laws aimed at controlling pests affecting plants and plant products. Subsequently, the laws relevant to food safety include the Public Health Act, 2012 (Act 851), the Tourism Act, 2011 (Act 817), and the Local Government Act, 1993 (Act 462) (Ministry of Health, 2013). These laws are in place to protect the health and safety of the Ghanaian public through the regulation of food, drugs, household chemical substances, cosmetics and medical devices.

Thus, the legislation controls the sale of consumable items including street food. Departments and agencies such as Food and Drugs Authority, Ghana Tourist Authority and Metropolitan and Municipal Assemblies under the auspices

of Ministry of Health, Ministry of Local Government and Rural Development and Ministry of Tourism, Art and Culture have respectively been empowered to ensure achieving the aims of the legislation. Figure 4 depicts the various ministries under which the agencies/departments operate to ensure food safety.

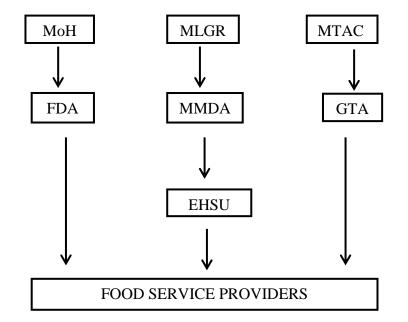


Figure 4: Framework and structure for food safety regulation

Food Safety Regulatory Institutions in Ghana

Traditionally, institutions for food safety regulations were predominantly responsible for monitoring food safety standards and food safety quality attributes (FDA, 2012). However, development and food safety legislation worldwide occurred after Codex Alimentarius Commission was adopted as the source of international food standard by World Trade Organization on Sanitary and Phytosanitary measures (SPS Agreement in 1996). Against this backdrop, Ghana has over the years developed quite a number of legislations and mandated various institutions to provide the Ghanaian the right to health and safety. This right is

protected through the regulatory work of state institutions such as Food and Drugs Authority (FDA), Ghana Standard Authority (GSA) and, Ghana Tourism Authority (GTA) to ensure hygienic and safe food from farm-to-table, as widely reported in literature (FDA, 2013; FAO, 2009; GTA, 2008). All these agencies fall under various ministries of the country (as shown in Figure 4). At the local level, Municipal, Metropolitan and District Assemblies (MMDAs) also support the regulatory and enforcement work of the three major institutions. Their roles are briefly described.

Food and Drugs Authority

Food and Drugs Authority is a state regulatory agency mandated by the Public Health Act 2012, Act 851 to protect the health and safety of the Ghanaian public through the regulation of food, drugs, household chemical substances, cosmetics and medical devices. The Food Safety Division (FSD) executes FDA's national food safety mandate by providing technical support to the food industry to promote the production of safe and quality food through the application of contemporary food safety management systems throughout the food supply chain. This is envisaged to reduce the incidence of the production of unsafe food and poor quality food with its socio-economic burden on consumers, the food industry and international trade. The department collates information on industry needs and identifies deficiencies which serve as inputs for the adoption of strategies to address these needs. The agency further develops food safety guidelines to guide out-of home service operations such as restaurants, food joints, street vended foods and other catering facilities. The agency inspects and register these facilities

and also conduct consumer awareness campaign and education programmes on food safety issues and manages the Food Alert System INFOSAN for exchange of food safety alert notification (FDA, 2012).

Environmental Health and Sanitation Unit

The Environmental Health and Sanitation Unit under the auspices of Metropolitan, Municipal and District Assemblies (MMDAs) and further under the umbrella of the Ministry of Local Government and Rural Development are responsible for implementing policies, rules, regulations and bye-laws that guide food service establishments at the local level. MMDAs are constitutionally recognized as the local authorities with a legal mandate to enact bye-laws and further tasked with an oversight responsibility of protecting public health by granting licenses/trade permits, monitor and enforce rules, regulations and bye-laws, conduct inspection at food production and service premises and monitor medical examination status of food handlers at the local level (ISSER, 2002). All these institutions also carry out education and training sessions independently for food service establishments across the country and their efforts in this regard are complemented by the Ghana Traditional Caterers Association and Ghana Hotels and Restaurants Association; union of food service establishments in Ghana.

Approaches to Food Safety Regulation

Typically, there are two main approaches; command and control and selfregulatory styles to food safety regulation. The adoption of a particular approach may differ from one country to the other. Command and control (at times referred to as prescriptive regulation, state-controlled regulation or classic regulation)

typically involves regulation through public agencies charged with implementing the law (Hutter, 1999). For food safety regulation this means that the regulator defines rules and acceptable procedure and standards for industry, which are then enforced by the agents of the state (Yapp & Fairmann, 2006). This style of regulation is most common but has been heavily criticized for stifling innovation, inefficient, costly, hard to enforce and focusing on 'end of pipe' solution (Hutter, 1999; Gunningham et al, 1998; Aalders & Wilthagen, 1997; Ayres & Braithwaite, 1992).

In contrast, self-regulatory approach moves the emphasis away from specific requirements and towards wider broad-based goals. Pure self-regulation is primarily seen as a process whereby an organized group regulates the behaviour of its members (Organization of Economic cooperative Development, 1994). From other perspectives, self-regulation comprises a distinct group of people who follow or are bound by a set of mutually agreed rules developed by those directly involved (Chalmers, 2009).

The ability to self-regulate according to Reid (1996) has been viewed as a desirable quality throughout history because of its positive effects on behaviour. The positive effect is seen in the continuous monitoring of progress towards a goal, checking outcomes and redirecting unsuccessful efforts (Berk, 2003). In order for food service operators to be self-regulated they need to be aware of their own thought process and be motivated to actively participate in their own compliance process (Zimmerman, 2001). With legislation on food safety, self-regulation is enforced by regulators imposing a requirement for businesses to determine their

internal rules and procedures to fulfil the regulator's policy objectives (Braithwaite, 1992). This approach offers the organizations that adopt this style the chance to reflect the needs of the sector to which the regulation applies stimulating a sense of ownership and creating a climate for greater compliance.

Self-regulation is also believed to be cheaper for both the regulated and the regulator compared with the command and control style (Baldwin & Cave, 1999; Advisory Committee on the Safety of Nuclear Installations [ACSNI], 1993; Braithwaite, 1992). Yapp & Fairman (2004) further substantiate that although the approaches are different in nature, in reality most countries adopt a mixture of both. The adoption of both approaches; command and control and self-regulation styles is typically practiced by the US system of food safety mechanisms where the self-regulation tool is seen in the use of supply chain pressure. Pressure from consumers using the common law and the culture of freedom of information is seen to be a force for food safety. Consumer pressure and action is seen to act as one of the best motivators for food service establishments and other firms. The effect of consumer pressure in the US has tended to force a deterrent type of enforcement strategy within states (USFDA, 1995).

The use of the command and control gives the assumption that those being regulated are undependable and self-centred and that strict enforcement is required to secure compliance. On the other hand, self-regulation style considers those regulated to be well-intentioned and work to secure compliance (Yapp & Fairman, 2005 as cited in Chalmers, 2009; Walshe, 2002). Among the approaches mentioned, securing compliance is the main objective, both through the remedy of

existing problems and the prevention of others. For Hutter and Amodu, (2008), the preferred methods to achieve these ends are co-operative and conciliatory. Where compliance is less than complete and there is a good reason for it being incomplete, persuasion, negotiation and education are the primary enforcement method (Hutter & Amodu, 2008). Hence, for Hutter and Amodu (2008) compliance is not necessarily regarded as being immediately achievable, relatively, it may be seen as a long-term aim.

Enforcing the Regulation: The Role of the Field Inspector

Yapp and Fairman (2004) have substantiated that sound food safety legislation and policies are meaningless unless they are effectively enforced. In addition, the regulatory compliance literature points out to the fact that the roles and behaviours of inspectors help in shaping the perceptions of food service operators. Accordingly, to Murphy (2005), regulatory compliance and its effectiveness not only rest with the entity concerned but also the food safety agency's attitude and interaction with food service operators. He advances three characteristics of a field inspector; first, the field inspector is the one who operationalises regulatory objectives in the field, secondly, the field inspector is a key functionary who has day-to-day contact with the food industry, trade groups, and often the public and lastly must be honest and well-trained, independent, and be in a position to avoid external influence, including potential conflicts of interests. The signals made by the regulatory agencies through the enforcement activities are of crucial importance.

Three studies buttress Murphy's view point. Edelman, Petterson, Chambliss and Howard (1991) maintain that compliance invokes a process of reinterpreting agency mandate on the ground, therefore the approach of the field inspector certainly shape compliance. Hawkins (2002) agrees that the activities of the field inspector rely heavily on developing co-operation with those regulated and so getting the job done effectively and efficiently. Nielsen (2007) opinionated that the variability in the field inspector's approaches, the settings in which they operate and their position relative to the regulated community all influence compliance. The position of all of these studies to a large extent implies that the organizational and institutional settings within which regulators operates, their attitudes, moral stance, and approach towards the regulated goes a long way to influence compliance levels.

Regulation of the Street Food Service Sector

The trend towards increased consumption of meals outside the home is found in many countries to form an essential part of the food chain (IBGE, 2010; Economic Research Service - USDA-ERS, 2009; Ministry of Trade and Industry, 2003; FAO & WHO, 2003). Regulating the street food sector falls within the food control system of most countries. As it has been stated earlier, this helps to ensure adequate safety of the food consumers obtain for sustenance. However, most countries do not have regulations specific to the Street Food Sector (International Food Safety Authorities Network (INFOSAN), 2010). Most West African countries, for instance, regulate street food service by depending on general food safety laws and procedures which may also pertain to the handling and labelling

of food and animal products (Nicolo & Bendech, 2012). There remains no clear and specific rules and regulations targeting the street food services (Nicolo & Bendech, 2012). In most West African countries, for example, the food service industry is regulated by the general food safety law and procedures which have no clear and specific rules and regulation that target the smaller food service industries (Nicolo & Bendech, 2012). Draper (1996) found out in his study that the street food sector in most countries is generally regulated by the national food safety laws which are on food, environmental sanitation and health. Bessy (2009) contends that these regulations are unsuitable for street-vended food and cannot be relied upon.

These national food safety laws and policies are most often drawn from laws and policies of WHO and FAO. The two international organizations mentioned work hand in hand to ensure and strengthen the food control system of member countries based on scientific evidence (FAO/WHO, 2003). In addition to FAO and WHO is another international body known as Codex Alimentarius Commission (CAC), an international organization made up of 176-member countries (including Ghana) that has been set up to ensure the actual implementation of food standards (Bessy, 2009). Among their mandate includes ensuring that producers and consumers are protected. More importantly they ensure that consumers are protected from harmful and unhealthy foods (Bessy, 2009). Unfortunately, as a result of the diverse ingredients used in food preparation and the different food preparation methods, Draper (1996) maintains

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that CAC finds it difficult to develop general food laws that can be used by different countries to regulate the street food sector.

However, general guidelines and standards have been developed by CAC to ensure food safety in all the member countries. Their guidelines and standards developed in conjunction with other international bodies touch on fruits and vegetables, milk and dairy products, fish, import and export certification, risk analysis and the reduction and prevention of food contamination (Bessy, 2009). Bessy (2009) indicated that four aspects are required for effective food regulation. These include food laws, regulation and standards; inspection and laboratory services; monitoring and surveillance of foodborne diseases and; education, communication and training. Though these laws and policies may not be specific in addressing the needs of the small food service sector, Bessy (2009) maintains that they go a long way to ensure the safety of food consumed outside the home.

Enforcers' Approach in Reducing Risk

Reducing risk can be described as a process of putting measures in place to avoid or reduce the occurrence of food related outbreaks. Consequently, strategies such as license acquisition before the commencement of business, routine inspection and hygiene training have been developed by many countries to help curb foodborne related illnesses. Routine inspection of the food service establishments performed by the regulatory agencies and the local health departments is one of the commonest strategies to reduce or eliminate food safety risks (Reske, Jenkins, Fernandez, VanAmber, Hedberg, 2007). Routine inspection is a public health activity intended to prevent future foodborne disease outbreaks.

These inspections generate a written record of conditions observed in foodservice establishments and has been used retrospectively in studies to assess the effect of increased inspection frequencies on the reduction of foodborne outbreaks (Phillips, Elledge, Basara, Lynch & Boatright, 2006).

Even though there is a need for food service establishments to comply with food safety regulations, good food hygiene practices, compliance with regulations may sometimes require additional operation expenses and some operators are tempted to downplay food safety compliance to maximize profit (Jin & Leslie, 2003). During routine inspection, the food safety education provided also forms a primary approach to support safe food handling practices and compliance with regulations at food service establishments.

While inspection protocol varies across authorities, the inspections are conducted by trained regulatory professionals who validate a food service establishment's compliance with applicable food safety regulation (Issacs, Abernathy, Hart & Wilson, 1999). Routine inspections are usually unannounced and conducted with some regularity, while follow-up inspections typically occur only when an establishment fails to meet minimum food safety requirement but does not impose immediate food safety risks (Fielding, Aguirre & Palaiologos, 2001). Reske, Jenkins, Fernandez, VanAmber & Hedberg, (2007) however, observed that routine inspection performance in some aspect of food hygiene was significantly better for establishments that previously received announced inspection visits. Announced inspections may also serve to identify particular deficiencies in food safety knowledge among operators. Since operators were more

likely to prepare their establishments for an announced inspection, any observed violations cited were possibly unknown to them (Reske et al., 2007). In addition to monitoring compliance, inspection also serves as an opportunity for food safety promotion and education.

Routine inspections, although adopted worldwide, can suffer from several limitations. Zablostky, Resnik, Fox, McGready, Yager & Burke (2011) contend that the ability of a routine inspection to accurately capture an establishment's level of food safety compliance is limited by financial and human resources. Suggestions from Zablostky et al. (2011) indicate that a larger workforce of full-time trained inspectors may be associated with lower incidence of foodborne illness but may also be associated with high financial cost. Inspections are often effective in identifying and communicating risks to operators, but they may be less effective in promoting sustained behavioural changes in food safety (Green & Selman, 2005).

Stakeholder Identification and Participation

An important step in the national food safety policy process is to explicitly identify who is either affected by or have a vested interest in food safety and hence in the design, discussion and implementation of the policy. This is important to ensure consultation, include all stakeholders to build a broad-based commitment and make the end result as effective and achievable as possible. A country's food safety or supporting administrative statutes should establish procedures to ensure that the regulations, policies and directives are developed and enforced in a consistent, transparent and interactive manner and that the associated processes are

generally open to the public in a manner that ensures the objectivity and integrity of all food safety decision making (Carnevale, 2001). This stakeholder involvement is viewed as an on-going partnership that encompasses all aspects of the development phase of the policy. Policy dialogue may take place in a variety of ways employing different avenues for the exchange of ideas and eliciting views; examples include stakeholder forums, workshops, seminars, conferences and informal meetings.

Stakeholders generally include government ministries, agencies, institutions and food producers who are or may be affected by the national food safety policy. Involvement of consumer organization is also invaluable to the policy process. It has been noted that one of the assets consumer organizations bring to the table in the food policy process is sensitive to a broad range of societal and ethical issues (National Food Safety Systems in Africa, 2005). Consumer organizations can often articulate concerns that should be given weight in policy. Consumer participation in policy making can serve as an "ethical compass", pointing in directions that government and industry will need to go in order to meet public expectation (FAO/WHO, 2004).

Participation and Partnership

Forming partnership and ensuring that all the partners participate in achieving a specific goal is crucial to effective food safety management regimes. The concept of participation can be thought of broadly as a process whose objective is to enable people to initiate action for self-reliant progress and acquire the ability to influence and manage change within their society, including shaping

decisions that affect their lives and business directly (Mangal, 1998). Participation also means that all stakeholders are involved in all the various stages of a project, facility or decision. Participation requires recognition but it can again take many forms which range from simply informing or hearing affected parties to giving them effective power in decision making and right to contest decisions and actions. The relative power of involved parties determines to which extent they can make their interest to count in food safety planning, decision making and governance (Paavola, 2007).

Partnership, on the other hand, is lasting, equally advantageous dealings between two or more actors based on a written or verbal agreement and having a concrete, physical manifestation that must contribute directly or indirectly to a public goal (Post & Obirih-Opareh, 2003). Partnership can be formal or informal. The formal ones are those that are supported by law. However, partnership can also be informal depending on the socio-cultural setting. Partnership helps to enhance the participation and performance of actors by bringing together their resources and commitments. Partnership also helps to make actors more effective by bringing all of them together therefore avoiding the problem of exclusion and rather encourages participation, capacity building and empowerment. According to Post and Obirih-Opareh (2003), partnership must:

Enhance the effectiveness of actions by taking on board all relevant stakeholders and avoiding problems of exclusion and fragmentation; recognizing the complex social dynamics surrounding interventions and taking these into account in the design and implementation of actions; and most importantly, saving on cost through the resource input and commitment of civil society actors and the synergy resulting from combining skills and resources of various actors (p.227).

Stakeholder Participation in Food Safety Governance

One of the defining features of the governance term refers to the interaction between various actors in the public problem solving. Accordingly, food safety governance emphasizes that analysis and management of food safety risks cannot be confined to public food safety authority alone. It denotes the involvement of a wider array of actors in pursuing risk governing purposes. This also includes policy makers, economic actors, scientists (not directly affiliated to food safety authorities) and the affected and interested civil society actors, besides regulators and official expert advisors. Several authors have argued that the governance process as a whole should be rendered more sensitive and responsive to the relevant knowledge (systematic, practical and experiential) and the preferences and values of affected and interested parties. They claim that mutual exchange around framing assumptions, knowledge claims and acceptability judgment in relation to food risk and ways to manage them may be able to substantially improve the final decisions. In this view, dialogue is a tool to shed light on the different dimensions of food safety problems as well as to stimulate reflection, mutual learning and more balanced judgments. Such an inclusive approach is also meant to improve trust.

Current approaches to food safety governance by developed and some developing countries indicate a greater role for the stakeholder and public involvement in achieving risk handling solutions. At the developed country level, there have been growing efforts to involve stakeholders in both the management and assessment of food safety risk. Declaration of the value and the need for connecting and addressing the concerns of stakeholders and consumers now present a standard part of the official rhetoric of many national policy makers, regulators and expert advisors.

Some studies have pointed to the complex relationship between participation and trust. They have stressed that increased participation may actually destroy the public trust if applied in inappropriate circumstances. One context variable that deserves special attention, in this view, is the level of trust in the food safety authorities. If a regulatory system wants to draw on this trust resource, too much openness and participation in the risk assessment and management process may jeopardize this goal. Inputs by stakeholders may be seen as compromising scientific objectivity and independence and as challenging the claim that authorities act in the best interest of perceptions and preferences across lifestyles into food safety regulation.

Food Safety Regulatory Challenges

A number of studies have revealed that food safety regulatory activities in some African countries have been hampered due to a number of reasons. In relation to this, FAO (2010) has advanced five major challenges in the food control system. The challenges identified include; inadequate and or out-dated food

legislation, ill equipped food inspectorate, inadequate laboratory facilities, limited awareness about food safety and lack of collaboration and active participation among the main stakeholders.

FAO (2010) explains that existing legislation in many countries are outdated, incomplete and fails to adequately address current and emerging food safety issues. In some instances, food legislation was formulated decades ago and has since not been updated to take into consideration current food safety principles and trade agreements that are being developed by Codex. In addition, most laboratories which are essential component of a food control system for the analysis and determination of contamination and foodborne diseases are either unavailable or inadequate in some part of the African countries (FAO/WHO, 2006).

Ghana is reported to have various laws and regulation that have been enacted over the years to regulate and enhance food safety. In the past however, there was no unified policy that regulates issues of food safety (Ministry of Health, 2005). The various sectors involved in food safety and quality control had their own pieces of legislation that govern their operations according to their area of focus. Fortunately, the Food and Drugs Law of 1992, (PNDCL 305B) was revised and changed to Public Health Act, 2012 (Act 851). The revision was upon the recognition that legislation on public health was scattered in several enactments and thus sort to bring together and provide a comprehensive legislation on public health. But even with an amendment of the food law and regulations, enforcement may be undermined by the lack of infrastructure and institutional capacities to ensure compliance. Again, failure to clearly identify in legislative documents the respective responsibilities of the main stakeholders involved in food safety, the mechanisms through which they should work together results in duplication of regulatory activities and inadequate coordination in policy implementation and surveillance.

Monitoring the safety of food produced is complicated by the fact that food safety has many facets. Most national food safety control systems often have a fragmented structure. Under such fragmented arrangements, the food safety control responsibilities are shared between several government agencies. The roles and responsibilities of the agencies are often not properly defined and lead to duplication of efforts by the various enforcement agencies. In Zimbabwe where multiple food control agency is practiced, authorities noted that their duties were being hampered due to fragmentation of activities and a lack of collaboration between the food safety control departments (Nago, 2005).

Nago (2005) explains that the fragmentation and lack of collaboration was as a result of some of the laws and regulations being out-dated and not effectively addressing new trends and also not specifying jurisdictions. For this reason, effort to create a single food safety control is at an advanced stage (Nago, 2005). Similar fragmentation was observed in South Africa and the creation of a unified food safety control agency has been investigated as a way of addressing such fragmentation (Tomlins & Johnson, 2004).

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Furthermore, information, education, health promotion and training programmes for food industry and consumers are limited in a number of African countries (Mwamakamba, Mensah, Kwakye, Darkwah-Odame, Jallow & Maiga, 2012). This group of researchers postulates that there has been high increase in small scale food industries and ever-growing number of food vendors. However, the increase in food service operation has not been accompanied by the improvement of food safety patterns. Personnel engaged in food production and processing have insufficient knowledge to comply with food safety assurance schemes including the HACCP system (Mwamakamba et al., 2012). In Ghana, for instance, among the challenges reported in the implementation of food safety programmes is the inadequate awareness among the general public on the dangers of unsafe foods. FAO (2003) further intimated that the fact that there is limited coordination among the stakeholders involved in food safety programmes means that the public does not get standardized messages and information.

Regulatory Compliance

Compliance is an act of conforming to a rule, specification, policy, standard or a law (Hutter & Amodu, 2008). On the other hand, regulatory compliance describes the goal that organizations aspire to achieve in their efforts to ensure that the regulated are aware of and take steps to comply with relevant laws and regulations (Fairman & Yapp, 2004). In simple terms, compliance is all about doing what is asked and achieving compliance means conforming to the law. However, Edelman, Patterson, Chambliss and Erlanger (1991) with a different mind-set view compliance as encompassing the earlier definitions and more. They

underscore compliance as not simply an event but as a process. Baldwin and Cave (1999) and Hutter and Amodu (2008) also argue that what constitutes compliance is also subject to negotiation and change. This led to the conclusion drawn by Hutter and Amodu (2008) that achieving and securing compliance can thus be viewed as both immediate and/or long term.

However, Hutter and Amodu (2008) explain compliance as a formal concept that compares the conduct of the regulated against a formally defined legal requirement. From this perspective, Hutter and Amodu (2008) assert that viewing compliance as a negotiated process is constructed and flawed and away from its legal intent. Amidst the debates over regulatory compliance as a process, event, or negotiated, food safety regulatory compliance basically requires businesses to carry out their operations safely and hygienically according to the stipulations of laws. This is seen in the shared responsibility among the major stakeholders where on one hand food producers have the responsibility of ensuring that food produced and sold are safe for consumption and on the other hand government monitors and verifies that they carry out activities and responsibilities as expected.

In achieving and securing regulatory compliance, Food and Drugs Agency (2012) asserts that major factors such as ignorance and low level of education of the regulated militates against it. They intimate that most food service operators are simply ignorant or unaware and have insufficient knowledge on how to protect food from contaminants. Low level of education of most food service operators which present itself as a barrier to communication and training can also not be overemphasized. In view of that a larger proportion of food service operators in the

industry have little motivation to change their work habits and be in conformity with the regulation. This is concurred by WHO (2002) assertion that the reluctance of food service operators towards regulatory compliance to a large extent is as a result of their socio-economic conditions.

Food Service Operators' Regulatory Experiences

Regulatory experiences of food service operators' in some part of the world have been marked with tensed relationships between regulators and food service providers. The stressful relationships have often been based on confrontation over space for business, environmental conditions, registration and licensing (Milgram, 2011; Asiedu & Agyei-Mensah, 2008; Anjaria, 2006; Popke & Ballard, 2004). As Zhouxiang (2013) in Beijing, and Abdelrahman (2013) in Cairo report, the confrontations sometimes result in death of one or both parties. The studies of Drummond (2000), Rajagopal (2001), Anjaria (2006), Donovan (2008), Alfers and Abban (2011) and Milgram, (2011), on food service providers often portray enforcers as bullies who often use their legitimate powers to oppress, extort, remove and prevent poor, weak and defenseless operators from making a living.

From the perspectives of Worosz, Knight, Harris and Conner, (2008) and Walker, Pritchard and Forsythe (2003), food service providers have largely had negative experiences of the regulation because of a number of reasons. First, interpreting and implementing regulation require expertise, time and financial resources that most food business owners lack. Hutter and Amodu (2008) buttress this assumption and explain that without expertise in interpreting regulations, food business owners may not understand the relevance of requirements to their operations. Yapp and Fairman (2004), for instance, found that small food business

owners did not understand the connection between structural maintenance requirements and food safety. Similarly, in a research by Clayton and colleagues (2002), small food business staff underestimated risk levels of their products and only partially implemented sanitation requirements (Clayton & Griffith, 2004; Clayton, Griffith, Price & Peters, 2002). Consequently, food businesses compliance tends to be reactive as owners respond to inspector directives (Yapp & Fairman, 2004; Henson & Heasman, 1998).

Second, these practical constraints are compounded by a perception of unfairness, a sense that regulations are formulated in scientific and political processes that are stacked against small businesses. There is evidence that requirements raise entry costs and make it more difficult for small businesses to start up and to grow (Antle, 1996). Food business owners see regulation as impacting their operations disproportionately compared to the risks that they feel their operations actually pose (Petts, 1999). Regulatory standards are seen to reinforce the technologies and practices of larger-scale production.

Third, studies also suggest a more optimistic view of small businesses experience of public health regulations. Regulations may prompt business owners to internalize improved practices. Petts (1999) opine that regulations help drive small businesses to adopt resource saving practices. Inspectors may play critical role in helping businesses to achieve these benefits by interpreting requirements and providing information and assistance (Worosz et al., 2008; Yapp & Fairman, 2006).

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Food Service Operators Motivation to Regulatory Compliance

The meaning of motivation generally encompasses the internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job, role or to make an effort to attain a goal (Business Dictionary. Com). According to Winter and May (2001) a combination of calculated, normative and social motivations as well as awareness of rules and capacity by food service operators are thought to foster compliance. They advance three reasons why individuals and firms are generally motivated to comply with social and environmental regulations; fear of detection of violation and punishment for them, feel of a civic duty to comply and feel of social pressure to comply. In addition to these three reasons, Yapp and Fairman (2006) also include fear of loss of credibility to the motivators encouraging compliance. These collectively constitute calculated, normative and social motivations for compliance.

Calculated motivations from the works of Becker (1968) suggest that regulated entities comply with a given regulation when they feel that the benefits of compliance, such as averting fines or other sanctions, exceed the cost of compliance. The assumptions of Heyes (1997) confirm Becker's (1968) assertion that firms will choose to comply only if its cost of compliance is no greater than the expected penalty from non-compliance. Winter and May (2001) recount that this calculus could be framed in a variety of ways and depending on how one calculates the benefits and cost of compliance, the calculation is most often based

on the expected utility which involves choosing the option (compliance or not) that has the higher net return.

The role of these calculations in shaping compliance draws attention to the role of enforcement in shaping calculated motivation (Winter & May, 2001). Nonetheless, empirical studies about compliance to social and environmental regulations provides to a certain degree counterintuitive and varied set of conclusions. Thus, most studies on compliance have shown that the perceived risk of detection is more important in shaping compliance than is the likelihood and severity of sanctions. For instance, relating this to other fields in environmental health, a research by Braithwaite and Makkai (1991) on regulatory compliance by nursing home operators found little evidence for a restrictive effect of inspections or sanctions. Kuperan and Sutinen (1998) as cited in Winter and May (2001) report inconsistent findings on the deterrent effect of detection and conviction in the study of Malaysian fisheries regulation. Yet other studies (Gray & Scholz, 1993) found a specific deterrent effect of the imposition of sanctions in affecting compliance with occupational health and safety regulations.

Normative motivations combine sense of moral duty and agreement with the importance of a given regulation. Normative motivations have been labelled differently by different writers; these include normative commitment (Burby & Paterson, 1993), moral or ideological compliance (Levi, 1988, 1997), commitment based on civic duty (Scholz & Pinney, 1995) and perceived obligation to obey the law that constitutes a form of legitimacy (Tyler, 1990). Though titled differently by different authors, normative commitment is

principally based on the internalized value and the willingness to comply with a given regulation. This has been noted in several studies of regulatory compliance (Yapp & Fairman, 2004; McGraw & Scholz, 1991; Tyler, 1990; Schwartz & Orleans, 1967).

Winter and May (2001) note that the acceptance of rules and the internalised value depends on several characteristics. One is the reasonableness of the regulation, which in part depends on the recognition of harm from violation of the regulation. Another is the fairness of the authorities in enforcing the rules and several studies provide empirical support for these considerations (Scholz & Lubell, 1998; Andersen, 1998; Levi, 1997; McGraw & Scholz, 1991; Tyler, 1990).

Social motivation, a third motivation to compliance from Grasmick and Bursik (1990) perspective comes from the desire of the regulated to earn the approval and respect of significant people with whom they interact. According to them while such desires may over time have a socializing effect on regulated parties leading to normative commitment, social commitment differs in the sense that a regulated person complies to earn the approval of others even though those values may not have been internalized. Potential sources for such social pressure include other regulated firms, trade associations, external advocacy groups, the media, and family and friends. Apart from these potential sources, Winter and May (2001) opinionated that interaction involving the interplay of inspectors and the regulated entities can be expected to foster and form the basis of expectations of social motivation.

Indeed, as explained by Ayres and Braithwaite (1992) and by Scholz (1984) among others, regulatory inspection is a game involving multiple interactions over time between inspectors and regulated entities. These interactions have both formal aspects (i.e. setting forth rules and consequences of non-compliance) and informal aspects (i.e. establishing social relationships with regulatees). Hawkins (1984) substantiates that both aspects seek to define shared expectations of what constitutes acceptable levels of compliance with the formal mechanisms contributing to specific deterrence and the informal aspects contributing to negotiated expectations.

Knowledge of rules and capacity to comply: The preparedness to comply is not enough unless regulated entities are also aware of what is desired and are able to carry out the requisite steps (Winter & May, 2001). Evidently, awareness of what a given regulation requires is prerequisite to compliance therefore if regulatees (food service operators) are not aware of a regulation or the regulation is too new or insufficiently publicized to gain attention of regulated entities they will not comply with that regulation (Becker, 1968). Furthermore, even if the existence of a regulation is known but the requirements of the regulation is not understood or too vague or complex for regulated entities to understand what is required, compliance becomes difficult (Becker, 1968). These considerations led to Winter and May (2001) theorising that the role of awareness of rules in bringing about compliance, assuming all other factors are more or less equal. Their proposition states that: A minimum threshold level of awareness of regulations and their requirements is required before regulated entities can comply with regulations. The threshold value will differ depending on the precision and complexity of the regulation. This formulation establishes the expectation that awareness of regulations act as a threshold variable for which regulatees with low levels of awareness will have limited compliance and those with higher levels of awareness will have higher compliance (p.45).

Again, Becker (1968) in his submission accentuates that awareness of rules and willingness to comply, whether brought about by calculated, normative, or social motivations, are insufficient to bring about compliance with regulations if regulated entities do not have the financial capacity to comply. In the view of Winter and May (2001) regulatory compliance often entails new equipment and materials along with reporting and other administrative requirements and each of these entails cost. These aspects of capacity they explain go directly into the expected utility calculus for compliance, thus entities with greater capacity will view the costs of compliance as lower than those with lesser capacity.

This explains why capacity considerations are also a relevant consideration for the normative and social bases of compliance. For instance, a regulated entity may want to comply (normative commitment) or feel social pressure to comply (social commitment), but compliance will not occur unless the entity also has the ability to comply. Because ability to comply is an issue for each of the three motivations for compliance, it is considered a separate factor.

These considerations lead to compliance being greater when regulated entities have greater financial capacity to comply with the regulations.

Food Service Business Registration and Licensing

Registration and licensing of food service operators is one of the most common aspects of the regulation within the food service sector (Food Safety Unit, 1996). Registration and licensing is a requirement before the commencement of the food service business. Though a prerequisite, very few food service operators are registered and licensed (Food Safety Unit, 1996). Even in more industrialized countries such as USA, specifically in the New York City, out of the estimated 16,000 food service operators only 850 of them are registered. Similarly, in Kuala Lumpur, less than 10,000 of the estimated 25,000 operators have legal permit to operate (Cohen, Bhatt & Horn, 2000). In addition, in Central Bombay 40,000 out of the estimated 200,000 have been licensed (Cohen, Bhatt & Horn, 2000).

Also, in four West African countries, Nicolo and Bendech (2012) also found out that 400 food service operators interviewed had no license to operate and attributed it to a number of reasons. Factors accounting for the nonregistration and permit acquisition included the following; firstly, food service operators perceive that registration and licensing has very limited advantage for them but have a lot of benefits for regulators. They believe that though registration and licensing may protect them from harassment and confiscation of their prepared food items, the time and cost involved in getting registered and licensed is a great disincentive to them therefore, they are less motivated to do so.

This underscores Becker (1968) and Heyes (1997) assumptions of calculated motivations which suggest that regulated entities are motivated to comply with a given regulation when they feel that the benefits for compliance exceed the cost for compliance. The food service operators however may believe that for regulators, it helps them to keep record and track of food service operators within a particular area in addition to raising revenue.

Secondly, food service operators are less likely to acquire licenses because they believe that consumers who patronize their services hardly pay attention to whether they are licensed or not. Most consumers pay attention to taste, quantity and the general hygiene of where the food is sold than being concerned with whether the food vendor is licensed or not. Amoah et al. (2004) also substantiate that consumers choice is largely determined by the price, quantity and taste. Consumer's interaction with food service operators is then said to be purely based on social principles of pleasure (Kornblum, 2003). This augment the argument that registration and licensing offer very little advantage to food service operators' businesses.

In addition, food service operators may fail to secure license because of perceived unfairness and inconsistencies in licensing and taxation (Cohen et al., 2000). This notion of unfairness and inconsistencies seen in Cohen et al's study was largely based on the categorised food service operation; permanent and mobile point of business. Permanent food service operators, as Draper (1996) explains, are those operators who operate from a permanent structure while mobile vendors are those who move from place to place to sell their dishes.

Cohen et al. (2000) in their submission note that in some countries, while mobile vendors are not taxed, permanently stationed operators are taxed on daily basis. They again noted that vendors who sell from their homes, especially in the restricted residential areas were most often not affected by the regulation. Due to these imbalances, and unfair implementation of the rules and regulations, most operators are less motivated to get registered and acquire licenses. Thus, food service operators in their daily social interaction with regulators seek to be fairly treated to serve as a motivation for compliance.

The Need for Education and Training for Food Service Operators

Although some research has shown that food safety training and subsequent acquisition of knowledge do not necessarily translate into the practice of handling food safely (Powell, Attwell & Massey, 2010; Ehiri & Morris, 1996), Draper (1996) disagrees with this assertion and has proved in his study that training of food handlers is essential in achieving change of attitude and an improvement in the preparation and sale of food. Education and training implies the act of imparting knowledge and special skills or behaviour to a person. Due to the derived benefit of education and training, food handlers in most developed nations such as Britain and America are compelled by law to undergo some form of education and training in food handling and safety in order to improve their food handling skills. WHO (1999) concurs with Draper's conclusion and also postulates that low level or no training in food safety are the probable causes of foodborne diseases. Against this background, it becomes apparent that there is a need to develop a training programme for the purpose of achieving effective and permanent changes in the behaviour of those who handle food for public consumption. Operators should be given some basic training on how to safely prepare and store food. In training these operators', WHO (2006) encourages enforcers and other trainers to include their *Five Keys to Safer Food*. The five keys are;

- Keep clean
- Separate raw and cooked food
- Cook thoroughly
- Keep food at safe temperatures, and
- Use safe water and raw materials

With the exception of the fifth practice, the rest are directly related to personal food handling practices. These five keys to safer food are basic principles that each individual all over the world should know to ensure safe food handling practices and prevent foodborne diseases (WHO, 2009). The organizations stress on the need to increase the awareness of food service operators through training has become necessary in order to improve the conditions under which food is handled. This they acknowledged ensures that the food sold does not jeopardize public health. In addition to the five keys to safer food, FAO (2002) also suggests that education and training of food service operators should take into account two important aspects; the concept of foodborne diseases, operators must be trained to understand what contaminated food is as well as the various categories of contaminants; biological, physical and chemical. On health,

issues regarding the qualities of food considered suitable for human consumption should be addressed.

Summary

It has been noted from the literature that the emergence of the food service sector in both developed and developing countries can be attributed to the growth and urbanization of city life. As people move from one place to the other in search of jobs and other business activities, the existence of the food service operation provides the nutritional needs of such people. Nonetheless, the activities of the food service operation have been found to be associated with possible health hazard. This has led to the involvement of international bodies such as the Codex Alimentarius Commission (CAC) in setting the global food safety standards. Standards set by Codex contain requirements aimed at ensuring the consumer a sound and wholesome food product free from adulteration and contamination. In compliance with the mandate of CAC, Ghana adopts the multi-agency system approach in handling the standard set. Literature points to some challenges faced by some countries in implementing the standard. As the country seeks to reduce foodborne related illnesses, it is important to address such challenges.

CHAPTER FOUR

METHODOLOGICAL ISSUES

Introduction

This chapter explains the processes followed and the methods used in conducting the research. It begins with the philosophical assumptions of the study, the research design, and a description of the study area. In addition, data sources, methods and techniques that were used to collect data are described. This is followed by an outline of instruments used, their validity and reliability, sampling techniques, the sample size and data analysis approach. It finally ends with the limitation of the study and issues from the field.

Philosophical Assumptions of the Study

The study is largely driven by both the interpretive and positivist approach to social research. Consequently, the study used triangulation at two major levels: ideology as well as methods. This is mainly due to the study's multiple foci. Some aspects of the data required a better understanding from the positivist perspective whereas, issues such as perceptions of the food safety regulation as well as barriers to food safety governance from enforcers' perspective was also better understood from the naturalist (interpretive) viewpoint.

Each strand of epistemology has its inherent strengths and weaknesses; however, as Depoy and Gitlin (1998) affirm, it is becoming progressively imperative to triangulate both ideologies and their attendant methods. An approach of this nature provides strength that offset the weaknesses of both quantitative and qualitative research. According to Creswell and Plano-Clark

(2011) while some research scholars argue that quantitative data is weak in understanding the context or setting in which people talk and voices not directly heard, qualitative data makes up for these weaknesses. On the other hand, while qualitative data is seen as deficient because of the personal interpretation made by the researcher and the difficulty in generalizing the findings to a large group because of the limited number of participants studied, qualitative data, is argued, does not have these weaknesses (Creswell et al., 2011). An approach of this nature offers diverse advantages of better understanding the phenomenon, complementing their respective strength and smoothing out each other's short fall.

Research Design

An exploratory sequential case study was employed in this research. The choice of the case study assisted in exploring into the various features or dimensions of the food safety regulatory system over a period of time. This design was appropriate since it allowed the use of a variety of methods (questionnaire, interviews and documentary review) to fully examine the regulatory dimensions of food safety as well as the perceptions, activities and barriers to food safety governance (Creswell & Plano-Clark, 2011).

The Study Area

The study area was Cape Coast Metropolis located in the Central Region of Ghana. Cape Coast is situated 165 kilometres west of Accra, the capital city of Ghana and to the south, the Atlantic Ocean. According to the 2010 Population and Housing Census, Cape Coast has a total population of 227, 269 (Ghana Statistical Service, 2012) with the Akan ethnic group making up approximately 84% of the entire population. Cape Coast is one of Ghana's tourism triangle (i.e. Cape Coast,

Accra and Kumasi) (Boakye, 2008) and receives people from all over the world for its varied tourist attractions. The city is well-endowed in different attraction offerings.

Cape Coast, as considered the hub of education, has a University, College of Education, Nursing Training College and 10 public first class second circle institutions such as Wesley Girls', Holy Child, Mfantsipim, and Adisadel College. This has contributed to the influx of students and tourists both within and outside Ghana patronizing the town for one reason or the other. Cape Coast is both a Metropolis and a Regional Capital with good transport network linking other towns and even other West African country (Cote D' Ivoire). This predisposes the city to other commercial activities such as travellers, goods and services passing through. For these students, tourists, workers and travellers, street food serves as a source of easily available food as they visit or pass through to other parts of the country and even beyond. As a result of the important role street food plays for residents, travellers and tourists, the regulation of the street food has major implication for all those concerned and the city as a whole.

In spite of the major contribution of the town to the national economy, Cape Coast for some time now has been noted to be battling with foodborne related cases. Central Region, particularly, Cape Coast has been identified as a hotspot area among Greater Accra, Ashanti, Eastern and Western regions of Ghana for foodborne related outbreaks (UNICEF, 2015). The town continues to record relatively high incidence of foodborne related cases in which many people are hospitalized and some losing their lives. For instance, per the statistics from

the Ministry of Health (2014) out of the total recorded incidence of 4,271 cholera outbreak that occurred in the Central Region, Cape Coast had the highest recorded cases of 2,182 with 80 deaths, followed by Awutu Senya East and Efutu with recorded cases of 601 and 134 respectively. The Ministry of Health (2014) attributed most of the recorded incidence to insanitary conditions, high consumption rate of street foods and non-compliance to food safety measures. This and many others make Cape Coast strategically placed and an ideal area for a research study into the enforcement and compliance of food safety regulation of street food operation. Figure 5 is the map of Cape Coast indicating where food vendors are mostly concentrated.

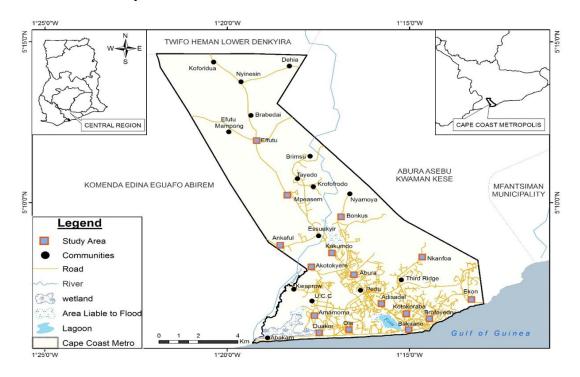


Figure 5: Map of Cape Coast showing study areas

Source: Cartographic Unit, Department of Geography, University of Cape Coast

Population

The population of the study comprised food safety enforcers from agencies such as Food and Drugs Authority, Ghana Tourism Authority and Environmental Health and Sanitation Unit of the Cape Coast Metropolitan Assembly, as well as food service operators within the Cape Coast Metropolis. Food service operators included individual owners of the business within the age range of 18 years and above. They were individuals who have been in the business beyond a year and prepare and sell cooked foods such as fufu and all kinds of soups, banku and okro stew, waakye, boiled yam palava sauce/garden egg stew, fried rice, plain rice, beans and gari, kooko and tuo zaafi. These were food service operators who were either stationary or mobile vendors and operated either in the day or night time. These were the population from which information regarding the study was required (Sarantakos, 2013; p. 167) and units or groups from which the study's population was drawn (Cox, 2008).

Sampling Procedure

Nonprobability sampling techniques such as purposive, accidental and snowball were used in selecting the sample for the study. Purposive sampling technique was used in selecting the food safety regulators. Regulators were purposively selected because they were the people the study deemed appropriate to offer adequate and useful information in relation to the problem under investigation. Another important reason for the use of this sampling technique was to tap into the knowledge and expertise of these participants in terms of the food safety regulatory laws, enforcement and compliance.

Accidental and snowball sampling techniques were also used in selecting food service operators. The choice of this sampling technique relates to the difficulty encountered in locating the actual places where food operators sold their food. Per the sample frame offered by the Environmental Health and Sanitation Unit (2016) which had the location and business names attached, randomly selected food service operators were to be located at specific places within the communities. Unfortunately, some food service operators were non-existent at the locations cited in the document from the Environmental Health and Sanitation Unit. This then led to the use of the accidental and snowball sampling techniques. The sample frame from the Environmental Health and Sanitation Unit was therefore found unreliable.

The accidental sampling technique was therefore considered convenient in selecting the food service operators within the communities whereas the snowball technique was used in identifying other places of food service operation within the communities through individual community members, food service operators themselves and some taxi drivers. The sample size for the food service operators was determined by Krejcie and Morgan (1970) sample determination table.

The Sample Size

Three hundred and five participants were drawn from two different population for the study; regulators and food service operators. Five food safety regulators were purposively selected; one each from Food and Drugs Authority and Ghana Tourism Authority and three from the Environmental Health and Sanitation Unit. Three participants were chosen from Environmental Health and

Sanitation Unit because the Cape Coast Metropolitan area has been divided into North and South Metro in addition to its main head office. Thus, one person was chosen from each sub-metro in addition to one from the main head office.

Other food safety regulatory agencies such as the Environmental Protection Agency and Ghana Standards Authority were not included in the study. The reason for their non-inclusion was that these agencies are not directly involved in regulating the activities of food service operators. For instance, when Ghana Standards Authority was invited to participate in the study, they explained that the core mandate of the agency is to establish and promulgate standards, provide quality assurance through inspection, testing and metrology. They also assist operators in the manufacturing and service sectors to improve their competitiveness by establishing effective Quality Management Systems along ISO/IEC 9001: 2008 and 22000: 2005. They also promote standards in public and industrial welfare, health and safety. However, they do not necessarily regulate the activities of food service operators (Head of the agency, Cape Coast Branch, 2017).

Though the sample frame from the Environmental Health and Sanitation Unit was mainly registered food service operators and was found unreliable, it offered the basis upon which the sample size could be determined. The population of food service operators as determined by the Environmental Health and Sanitation Unit (2016) was 1185. These food service operators were those that had been drawn from the various communities in the metropolis. Table 1 describes the population and the numbers chosen from each area. As indicated by Krejcie and Morgan (1970) sample determination table, with a population size of 1185, 219 respondents could be used. Due to the possibility that food service operators could be more than the total number offered, sample size was then moved from 219 to 300. This paved the way to include both registered and unregistered food service operators. Further, the proportional allocation technique was employed to determine the sample size for each area.

Area/Cluster	Number of operators	Number selected
Kotokuraba	242	61
Abura	117	30
Efutu	113	29
Bakaanu	92	23
Nkanfoa	77	19
Ebubonko	77	19
Mpeasem	70	18
Amamoma, UCC	66	17
Adesadel	64	16
Brofoyedru	61	15
Ola	49	12
Kakumdo	45	11
Ankaful	42	11
Ekon	37	9
Duakor	19	5
Akotokyir	18	5
TOTAL	1185	300

Table 1: Sample size by communities/clusters

Source: Environmental Health and Sanitation Unit, Cape Coast Metropolitan Assembly

Types and Sources of Data

The study employed both primary and secondary sources of data. A combination of these two sources provided the researcher the opportunity to learn about the phenomenon directly through first-hand information which were of importance to the study. Two categories of primary data were sought. The first category of the primary data intended to solicit enforcers' views on compliance, limitations in implementing the food safety regulation and the relational dynamics among the major stakeholders. The second category of the primary data constituted the personal experiences of food service operators in their engagement with enforcers, license/permit acquisition, support and education they receive either from the government or their trade associations.

The secondary data comprised information from sources such as Ministry of Health for statistics on the prevalence of foodborne related outbreaks that had occurred in Ghana and more specifically Cape Coast in the Central Region. Secondary data was reviewed in order to have a broader understanding of the research being conducted.

Data Collection Instruments

The data collection instruments included interview guide and questionnaire. Interview guide was used to collect the qualitative data whereas the questionnaire was used to obtain the quantitative data. An interview guide was prepared to cover the perception of regulators on regulatory laws, compliance, challenges to food safety regulation, collaboration and relational dynamics among

the major stakeholders. These were deemed important in providing answers to the research questions and further helped in achieving the objectives of the study.

Questionnaire was used in soliciting information from food service operators in relation to their views and experiences of the regulation. The questionnaire was made up of both open and closed-ended items and was administered by the researcher and nine other trained research assistants. The open-ended items offered participants the opportunity to formulate their own answers the way they considered to be most appropriate and in their own words. The closed-ended items were used because the responses were fixed and participants were expected to choose the option within which they subscribe to the most. The questionnaire had 56 items, sub-divided into four sections (A-D) (Appendix 1). The sections included:

- A- Experience of the license acquisition process
- B- Perception of the food safety regulation and enforcement
- C- Self-regulation
- D- Personal profile of participants

The instruments for the data collection were highly scrutinized by the supervisors after its preparation. Suggestions and corrections made by the supervisors were effected and sent back for approval before the commencement of the actual fieldwork. This helped in securing data that was essential in answering the research questions.

Pre-Testing of Research Instrument

A pre-test of the instrument was conducted in Takoradi in the Western Region of Ghana. Specifically, two food safety regulators, each from Food and Drugs Authority and Environmental Health and Sanitation Unit availed themselves for an interview section. Thirty copies of the questionnaire were administered to food service operators both mobile and stationary who sold prepared dishes such as *fufu, banku, omo tuo, waakye, jollof rice, fried rice and kooko*. These sample population had similar characteristics as that of the samples that were involved in the main study.

The pre-testing of the instrument drew the researcher's attention to some limitations of the instrument. For instance, the researcher was able to identify ambiguous items that did not bring out the desired responses. In addition, difficulties in understanding due to the wording of the items for food service operators were also encountered. Such challenges were rectified before the commencement of the actual field work. Another reason for pre-testing the instrument was to ensure as far as possible that the items detect the kind of responses the study intends to get. Finally, pre-testing of the instrument ensured that items were acceptable in terms of content and adequately covers all aspect the study wished to explore. Table 2 presents a summary of issues, unit of analysis and the data collection methods employed in the study.

Information Sought	Sampling Technique	Data
		Collection
		Method
Views on regulation	Purposive	In-Depth
		Interview
Barriers to food	Purposive	In-Depth
safety regulation		Interview
Relational dynamics	Purposive	In-Depth
among regulators		Interview
Relational dimension	Accidental//Snowball	Questionnaire
between vendors and		
enforcers		
Experiences	Accidental//Snowball	Questionnaire
	Views on regulation Barriers to food safety regulation Relational dynamics among regulators Relational dimension between vendors and enforcers	Views on regulation Purposive Barriers to food Purposive safety regulation Relational dynamics Purposive among regulators Relational dimension Accidental//Snowball between vendors and enforcers

Table 2: Overview of issues, unit of analysis and data collection methods

Source: Field Work, 2017

Instrument Validity and Reliability

The content validity and reliability of the instrument for the study was determined through pre-testing, where the response of the subjects was checked against the research objectives. Member-checking was used to check the validity and reliability of the in-depth interview instrument. Responses provided by the interviewees were played back to the interviewees for confirmation or modification of the content. This ensured that the interviewees understood the issues very well and that their responses were not misinterpreted by the interviewer.

To establish the reliability of the questionnaire, the reliability coefficient was determined by test-retest technique. The instrument was then administered to subjects from the same communities after an intervening period of one week. This technique was used to determine the stability of the research instrument. Feedback obtained from the pre-test also assisted in revising the questionnaire to ensure that it covered the objectives of the study.

Establishing Access and Making Contacts with Participants

In this study, access to participants involved in the in-depth interview was gained through formal gatekeepers. Gatekeepers in this direction were the people who control access to the potential participants (Sarantakos, 2013). For instance, formal letters detailing the key objectives, focus of the research and the nature of information needed was obtained from the researcher's department and were sent to the directors or heads of the various enforcement agencies for their approval and access. A contact visit prior to the actual interview was made and this aided in building a foundation for the data collection process (Sarantakos, 2013).

Ethical Considerations

Generally, ethical principles dictate that research should be of equal benefit to both the society and the participating individual. Care should be taken to ensure that research does not cause harm but should be truthful and fair to all individuals concerned. Parahoo (2006) contends that the right of the participants which include the right not to be harmed; the right of full disclosure; the right of self-determination and; the right of privacy, confidentiality and anonymity should be respected. In a bid to protect these rights, the research study was subjected to

scrutiny by the UCC Institutional Review Board for consent, confidentiality and anonymity consideration.

Informed consent was obtained before each data collection. Potential participants were given enough time to reflect on the information given and to consider fully their possible involvement. Anonymity was ensured when instrument for collecting data such as questionnaire did not request participants' name. Anonymity was however not possible where data was collected through interviews. For this reason, appropriate handling of information gained was crucial in retaining the privacy of respondents. This required that collecting and presenting information in ways that prevented the identification of participants was paramount in assuring confidentiality. For the interview data, care was taken to use verbatim quotes sensitively in reporting the findings to further promote confidentiality. In support of this, pseudonyms were used to hide the real identity of each participant (Table 3). The selection of the assumed names in this study reflects the mix of males and females but not necessarily the sex of the participants. Furthermore, popular expressions were adopted in documenting verbatim quotes to avoid the identification of an area or a person.

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Interview code	Regulator assumed	Regulator code
	name	
1	James	Enf 1
2	Naomi	Enf 2
3	Gloria	Enf 3
4	Mike	Enf 4
5	Nathan	Enf 5

Table 3: Participants (Regulators) of the study

Further to the confidentiality of the data (hard copy/ paper or electronic version) required secure storage (Parahoo, 2006). As such, copies of transcripts from interviews along with completed copies of questionnaire were stored in locked cabinet while electronic records were held on a secure computer and backed up on a separate secure data drive.

Fieldwork

Prior to the actual fieldwork, a month was set aside to identify and familiarize with communities in which food service operators were found and to select and train field assistants. The trained field assistants were thoroughly briefed by the researcher prior to the commencement of the fieldwork. Training was done in two days and included practice session on how to administer the questionnaire. They were also taught on how to handle participants who wished to participate in the study but could not read and write as well as handling those who appeared not to be interested in responding to the questionnaire.

The fieldwork for food service operators was conducted between July and September, 2017. The in-depth interview was however conducted by the researcher alone after the fieldwork for the food service operators. The researcher did this aspect alone because of the relatively minimal number of the respondents involved. Though a relatively small number was involved, it took the researcher two months (October and November, 2017) to conduct the interviews. It took that long because of the usual busy schedule which resulted in the typical "go and come" attitude of the officials at those agencies and departments. This notwithstanding, officials were very cooperative.

Approaches to Data Analysis

Data analysis was done after all data had been collected. The range of data collected was based on the research questions and a focus on the conceptual framework. The basis of this study's analysis was to utilise the results the different but complementary methods of data collection, to enhance completeness and expansion, leading ultimately to a greater understanding than would have been achieved through one source of data collection.

Analysis of data began with the conversion of data into useful forms. To manage and organise the quantitative data, SPSS version 20.0 was used. The categorical questionnaire data were coded by assigning a numerical coding for each option. Exploring the data, descriptive analysis to determine trends and selecting appropriate statistical test was initiated. Descriptive analysis such as the use of frequencies and percentages distribution were used to address the research

questions. Less rigorous statistical tools were used because the direction and focus of the study did not require demanding statistical tools.

The qualitative data from the five in-depth interviews were transcribed verbatim. The broad open-ended questions from the interviews were also explored by reading and re-reading of the texts, recording initial thoughts in the transcript margins. Transcripts were then re-organised under the specific objectives that guided the study. These served as the main categories for the data analysis. Furthermore, under each of the main categories, the responses of the various respondents were subsequently separated. In some instances, statements made by food service operators (though from the quantitative aspect) were used to support or oppose views expressed by enforcers.

Again, main ideas or responses were then tagged with either single words or phrases to represent the presenting idea. Similar codes were considered and put together to form a theme. Data analysis was also driven by theory, where there was a shift from an exploration of the data to an exploration of the theory and concepts that helped further in explaining aspects of the data.

Field Experiences and Challenges

Three main challenges were encountered in the process of the data collection. The first challenge pertained to getting the exact location of food service operators within the clusters as indicated by the Environmental Health and Sanitation Unit. At the time of data collection, some of the operators were nonexistent in their location. In such instances, the researcher had to abandon the initial simple random technique for the selection of food service operators and

replace it with the accidental and snowball sampling techniques. Thus, the researcher had to use food service operators both mobile and stationary chanced on. Also, the researcher had to rely on food operators themselves and other community members to give locations of other food service operators. This continued till the required number for a particular cluster was achieved. In general, hundred percent response rate was achieved.

The second challenge was getting food service operators to willingly respond to the items of the instrument. While some food service operators were eager to respond, others also felt a little hesitant in accepting to participate and to respond to the items. Some of the comments captured from the hesitant respondents include: "you people always come here to ask us questions but never bring any feedback or give us anything in return for the time we waste on you, we are tired of talking to you". In this regard, another participant also said: "you are coming to spy on us and report us to the authorities; we will not give you any information". There seemed to be an unhealthy stance by some food service operators not to allow any form of data collection regardless of the plausibility of explanations given them. This problem was however surmounted by taking extra time to explain to the food service operators that the study is purely for academic purposes and not an exercise for government or any private project. With this explanation, most hesitant operators agreed to participate.

Finally, getting the participants from the food safety law enforcement agencies was also difficult as their work schedules did not permit them to be at their various offices all the time. Sometimes the scheduled days rather turned out to be one of their busiest days and the researcher was asked to return another time (in some instances, three visit were made before the actual day). This prolonged the data collection process. However, researcher exercised patience and moved back and forth till the last person was interviewed. In all, their participation contributed immensely to the study.

Summary

This chapter has explored the methodological aspects of the study and has addressed issues such as the philosophical assumptions underlying the study, research design, the study area and the population for the study. The chapter further discussed the sampling techniques and sampling size, types and sources of data as well as data collection instrument and the pre-testing of the instrument. In addition strategies for addressing the issues of validity and reliability, issues from the field as well as their ramifications for the study were discussed. The ensuing chapters analyse and discuss findings of the study.

CHAPTER FIVE

FOOD SAFETY REGULATION: REGULATOR ACTIVITIES AND PERSPECTIVES

Introduction

From the literature review, high incidence of foodborne related diseases continue to emerge as a result of what is done or not done. Particularly, government ministries, decentralised local government departments and agencies and food service providers are held accountable for the upsurge of these occurrences. Thus, food safety management takes into consideration the existence of numerous actors, their responsibilities and activities to handle the system efficiently. All these actors have roles and responsibilities that influence the performance and sustainability of the safety of food consumed in the country. This chapter explores how regulators ensure food safety in the Cape Coast Metropolis. Specifically, this section first examines activities of food safety regulators and secondly, regulators perspective on food safety regulation with regards to their personal interpretation of the law, views on compliance and perception about the license acquisition process.

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Activities of Food Safety Regulators

The study found five activities performed by regulators, namely; inspection, registration and licensing, education and training, research and communication. Details of each of these are discussed in turn.

Inspection

Inspection was found to be one of the key activities regulators undertake. This activity appeared to cut across almost all the regulatory agencies. The following narratives buttress the point.

As mandated by law, inspection forms part of the core activities of every enforcement agency. It is through inspection that we get to ensure that the food that will come out of the kitchen is safe (Regulator James).

Another regulator also indicated that:

Since proper provision would have to be made before and during the business operation, we conduct inspection to satisfy ourselves that operators meet the specific requirements (Regulator Gloria).

From the narratives, inspection appeared to be the relatively dominant activity compared to the others. It was found out that the key areas inspected included the operators' immediate surroundings; personal hygiene and food handling practices. The following narratives highlight the specific details of regulators' inspection. On the immediate surroundings, the following narratives were observed:

We inspect the cleanliness of the kitchen, dining area and urinary or toilet facility. Inspections in these areas mostly apply to restaurants, hotels and chop bar operators whose clients most often eat their food there. For the table top and mobile food service operators, their immediate surroundings (where they sell the food) are often checked to avoid food contamination (Regulator Naomi).

Relative to the immediate surroundings another regulator also narrated that: We ensure that dirty water and solid waste such as leftover food which is often dumped at the site where food is prepared and sold is discouraged. These unhygienic practices by some food operators can result in physical and microbial contamination of food (Regulator Gloria).

These comments seem to suggest that regulators try to ensure that operators observe a clean environment that possibly eliminates condusive conditions for the growth and multiplication of microorganisms. Regulators' emphasis on environmental cleanliness reflect part 7 (sub-section 5 and 6) of the Public Health Act. This part of the Act defines and shows regulators what to look out for during inspection.

It was found out that inspection on personal hygiene of operators related to checking the hygienic appearance of operators as well as their health certificate. The regulator reported that:

We look out for the overall appearance of the operators including their mode of dressing, their finger nails and the nature of their skin. By the nature of their skin, we mean to say that we check to see whether they have any skin rashes and other infections (Regulator Mike).

This comment from the regulator perhaps, suggests that as human beings are noted to be major source of contamination to food, these body parts may harbour and serve as breeding grounds for certain disease-causing organisms. Upon contact with any food item, these microorganisms may cause the food to be unfit for consumption.

Another regulator also substantiated that:

We check to see if operators are wearing earrings, necklaces and rings. We look at all these things just because the jewellery can fall off and form part of the food and so these things have to be prevented (Regulator Gloria).

With respect to the inspection of the medical health certificate, Officer James maintained that:

If you want to engage in this service, you must ensure that you are medically fit, devoid of any communicable diseases like skin rashes, tuberculosis, typhoid and all those diseases that could be carried from one person to the other.

An operator acquiring a medical health certificate (renewable every year) indicates clearance from all communicable or contagious diseases that can be passed on from the operator to other consumers. Considering the possible risk of contamination, these checks were seen to be very important and conform to sections of the Public Health Act (2012), Local Government Act and the CCMA Bye-laws of 2000. This regulatory requirement expressing a high interest in

checking the personal hygiene and health status of operators can go a long way to improve the health and safety of most foods sold around.

The study also revealed that while on inspection regulators looked out for food handling practices of operators. Food handling practices connote the attempt to ensure that introduction, growth and survival of harmful bacteria that can render food unsafe for public consumption are avoided (FAO, 2009). Regulator Gloria explained that:

The laws and bye-laws require food vendors to wash their hands using soap and water before food preparation and service, after using the restroom and handling cash or switching activities. It is therefore our duty to ensure that operators abide by what is stated in the laws and bye-laws and so we do just that.

The dictates of the laws and bye-laws governing the food service operation requests operators to maintain high standard food handling practices. Nonetheless, one of the regulators conceded that:

.... we have observed more than once, that operators handled both food and cash intermittently without washing their hands in between these activities. This happens most of the time due to the unavailability of water supply in most food vending areas (Regulator Mike).

Implication of this comment to an extent could suggest that the poor hand washing practices identified by the officer may not only be due to operators' lack of knowledge of rules and regulation but could also be due to the fact that water

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supply facilities are not readily available to operators. The narrative of regulator James captures the entire situation

As a result of many vending site not included in the city or the town's plan for example, social amenities such as public stand pipes, toilets and refuse dump sites are not available, this becomes a public health hazard and further contributes to the deteriorating conditions under which food is prepared and sold.

Related to the inspection of safe food handling practices, it was indicated the use of items such as tissue papers and chopping boards were emphasised. Explaining what the various items were used for, the regulator indicated that:

> We look at whether operators have tissue papers to be used to wipe off sweat or cover their mouth when coughing or sneezing. We encourage the use of tissue papers because a piece of tissue cannot be reused over time. The use of handkerchiefs is discouraged because its use and reuse without washing can cause contamination which is unknown to most operators but for the tissue, the nature of it alone does not support it reuse (Regulator Gloria).

For the chopping boards, the explanation given was that:

When operators use the same chopping board for meat and vegetables for example, it aids cross contamination so we encourage the use of separate boards for different purposes such

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as a board for meat and fish and another for vegetables (Regulator James).

Worthy of note however, is the fact that, most of these inspection details pertain generally to the formal food service establishments (hotels and restaurants) leaving out the informal (food hawkers, table top and wayside) food sector because of the nature of their business.

Yes, for now, what we are handling most is the restaurant and hotel kitchens. This is because hotels and restaurants kitchens are permanently stationed and easy to locate. For mobile and wayside food vendors, where they prepare their food is most often different from where they sell and therefore it becomes very difficult to inspect the place of food preparation. For instance, some food vendors prepare food from their personal kitchen, how do I get to know and go there for inspection (Regulator, Naomi)

However, a section of the informal food service operation such as the chop bars and fast food joints also get to be inspected fully (that is from preparation to service) because of their permanent location.

Chop bar operators and fast food joints are permanently stationed and therefore locating them is not as difficult as locating mobile food vendors and table top operators. However, we do not allow mobile and table top food operator to escape our lens. We inspect their food handling practices, personal hygiene and certificates as and when we meet them (Regulator Naomi).

Implication of these comments suggests that some food service operators get inspected right from the point of food preparation to service while others get inspected midway (at the point of sales). Thus, thorough or complete inspection is geared towards the formal and parts of the informal food service sector such as the hotels, restaurants, chop bars and fast food joints because of their permanent location and not necessarily on the mobile food hawkers and table top operators. This finding consequently, supports Draper's (1996) argument that the informal food trade such as food hawkers and other mobile food vendors are seen as a marginal and transitory economic activity emanating from traditional market activities that will soon disappear; this makes them easily over looked and not effectively regulated.

Registration and licensing

The study revealed that registration and licensing of operators was an important aspect of the regulatory process and a prerequisite to the commencement of the food service business. Regulator Nathan in his discussions pointed out that:

As part of our responsibilities, we ensure that food vendors get registered and obtain licenses from the appropriate agencies.

Regulatory officers ensure that food service providers get registered and obtain licenses from the appropriate regulatory agencies before the commencement of the food service business. As explained:

Operators are to obtain establishment permit from Ghana Tourism Authority, hygiene permit from Food and Drugs Authority and health certificate from the Environmental Health and Sanitation Unit respectively (Enforcer Naomi).

Deducing from Regulator Naomi's narrative in effect imply that operators are to acquire three separate licenses concurrently from the respective agencies. This is depicted in Figure 6.

Figure 6 portrays that a food service operator has the responsibility to obtain establishment permit from Ghana Tourist Authority, hygiene permit from Food and Drugs Authority as well as health certificate from Environmental Health and Sanitation Unit before the commencement of their business and renewed on an annual basis. There seems to be no central register for the registration of the food service business. Every agency has its own way of registering and keeping records on food service operators. These agency-based registrations are however not coordinated to ensure that every operator has acquired the necessary permits from the various regulatory agencies as enshrined in the legal framework.

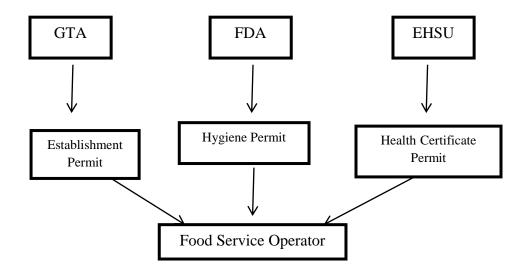


Figure 6: Permit acquisition process

To acquire a permit from any of the regulatory agencies, food service operators are expected to pick forms and formally apply. The application process as described by the enforcers includes that: Food service operators need to put in an application and write to our agency that they need their business to be licensed. Operators will then pick a form, fill and submit. We will in turn come and conduct food handlers test at a fee (Regulator James).

Regulator Gloria reported that:

Vendors would have to pick a form from our outfit and fill. We then give operators a form to be presented at any medical laboratory for a thorough medical check-up.

Regulator Naomi also pointed to the fact that:

An application would have to be made to us by either picking a form from our office or down loading it via the internet. We will subsequently give feedback and arrange for an inspection.

Another regulator however remarked that:

Food service operators only get to be registered and licensed only when they are declared medically fit by a medical practitioner. In the case of unfavourable report from a medical officer, applications are withheld until full medication is done and another test conducted. Upon a favourable report, the necessary fees are charged for registration and licensing (Regulator Gloria).

An analysis of the narratives conjures a sense of self-motivation on the part of a food service operator to move from one agency to the other to be in compliance of the regulation. This could be a barrier to achieving the target of getting all operators registered and licensed. This is because the movement of operators across the metropolis in accessing this service may be found expensive and time consuming (Food Safety Unit, 1996; Nicolo & Bendech, 2012). Furthermore, this could also validate food service operator's perception that registration and licensing has very limited advantage for them but have a lot of benefits for regulators as in the case of Kuala Lumpar, Central Bombay and some part of West Africa (Food Safety Unit, 1996; Cohen, Bhatt & Horn, 2000; Nicolo & Bedech, 2012).

Training and education

As one of the key elements of food safety regulation and a mandate from CAC, it was found out that food safety regulatory officers organise education and training for food service operators, food processing and manufacturing companies on food safety and its related issues. The following narrations were made to this effect.

Education and training is one of the major areas we concentrate on and as such we organise it for vendors and other food processing companies from time to time as the need arises (Regulator Nathan).

It is our duty to educate food vendors and other manufacturing companies on the need to prepare and sell food under strict and hygienic conditions. Most especially, food operators are educated on personal hygiene, environmental sanitation and safe food handling practices as some vendors may have entered the business without prior formal training in large scale cooking (James, Male Regulatory Officer).

Education and training was perceived by regulators to be very relevant to food safety governance. Its relevance lies in the fact that the knowledge acquired during the workshops and seminars could enlighten and broaden the operators understanding on food safety and its related issues. The use of the local television station and others in addition helps in the dissemination of educational messages on food safety.

We use the medium such as the local television stations (for example, Coastal Television Station), radio stations, the print media and others to educate the general food service operators and consumers on general hygiene and good food handling practices (Regulator Naomi).

Though the use of the television and print media may be another way of reaching operators, it could also be argued that operators may not necessarily watch or read to benefit directly as a result of their busy schedule.

However, apart from education and training in the form of workshops and seminars and the use of other medium, an enforcer however acknowledged that education and training was not as frequent as expected.

Yes, we (regulators) are to conduct training and education for food service operators as mandated by the laws but you know, there are other equally pressing responsibilities, lack of funds prevent us from doing so on a regular basis (Regulator Mike). Insufficient money allocation to the agencies (as discussed further in chapter seven) appears to reduce the number of times effective education and training sessions were organised for operators. This could in turn have a negative impact on achieving the common goal of safe food.

Research

The result showed that research was another activity carried out by regulators. One regulator noted that:

Yes, we are expected to conduct research into emerging risk to the food supply and possibly find solutions to them. For many reasons however, we are not able to do so as expected (Regulator Gloria).

Nevertheless, its practice was found to be barely existent as revealed by the following narratives:

Though the research activity forms part of our core mandates, this aspect is not given much attention compared to inspection, registration and licensing (Regulator Mike).

The research aspect appears to receive less attention in our department. The reason is that we don't have enough funds to employ personnel with the expertise to undertake such an activity on regular basis (Regulator Gloria).

The comment suggests a major weakness and a threat to food safety. Lack of funds appears to be the cause attributed to almost every weak link in the regulatory activities. Perhaps, this ought to be critically looked at and addressed appropriately.

However, Food and Drugs Authority as an agency in conjunction with other research bodies and donor partners on regular basis conduct studies into food safety. The regulator from the Food and drugs Authority intimated that:

Research is as important to us as any other activity. It is out of research that we are able to come out with emerging diseasecausing organisms and provide solutions to their prevention.

As a result, Ghana Tourism Authority and Environmental Health and Sanitation Unit rely on Food and Drugs Authority to meet their research needs.

Communication

With respect to communication, food safety regulators were found to communicate food safety risk to both food service operators and consumers. As part of their communication process one Technical Officer indicated that:

We communicate to both food handlers and consumers because they are both important stakeholders in the food safety regulation and risk management. We tell vendors the potential hazards associated with their business and the need to handle food hygienically. For consumers, we use the medium of television, radio and the newspapers to communicate to them their potential exposure to foodborne diseases if they buy food from unhygienic places (Regulator Nathan).

Such comment from regulators have been noted by Houghton, Rowe, Frewer, Van Kleef, Chryssochoidis, Kehagia, Korzen-Bohr, Lassen, Pfenning, and Strada (2008) to be of uttermost importance because effective communication has the

potential of creating effective food handler awareness and consumer confidence. Indeed, consumer gaining trust and confidence in the regulatory agencies has been found to be dependent on the assurance that regulatory agencies are there to protect consumer interest (Henson and Caswell, 1999).

There were two main forms in which communication with food service operators and consumers was described; pre-emptive and reactive. Pre-emptive communication refers to communication about food safety all the time (without waiting for any food safety incidence to occur) through the medium of the radio, internet and the print media. The reactive communication denotes the communication about food safety in response to particular events or outbreaks such as cholera and typhoid at particular points in time:

From time to time and at the slightest opportunity, messages are given to food service providers and consumers. However, the number and times of communication is intensified when there is a detection of foodborne outbreak. We buy time slots from the local radio and television stations to communicate such important information (Regulator James).

These examples demonstrate the varied forms in which regulators communicate food safety issues to both food service providers and consumers. However, one would have rather thought that the number and times of communication would have intensified during periods when there are no foodborne outbreaks to avoid its occurrence altogether.

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Regulators Perspective of the Food Safety Regulation

The views of regulators have been presented around four main themes: views on food safety laws; personal interpretation of the laws on the field; views on compliance; and views on license acquisition.

Food safety laws/codes/bye-laws

The study attempted to explore whether food safety regulatory agencies had the mandate to develop codes of practice, guidelines and bye-laws aside the usual food safety laws. Findings of the study indicated that aside the various laws that guide the activities of enforcers, enforcers' also have the power to develop additional codes of practice, guidelines and bye-laws deemed fit to ensure safety. Regulator Gloria intimated that:

The laws allow for the development of additional code of practice/guidelines and bye-laws for implementation and these ought to be interpreted and re-interpreted in our daily activities

Another explanation given by one of the male regulators also suggests that: Developed codes, guidelines and bye-laws becomes binding when they are approved. For instance, we have approved codes on hygienic practices and good manufacturing processes that enforcers rely on to ensure the prohibition of unwholesome and substandard food offered for sale in the country (Regulator James). Nonetheless, the laws, codes/ guidelines and bye-laws developed apply generally to all food producing establishments both formal (food processing companies, hotels and restaurants) and informal (wayside food vendors, food hawkers and chop bars). As reported by regulator James:

The additional regulations apply generally to all aspects of food production operations. It does not have aspects that exempt peculiar food handlers. Once an individual or group of persons agree to prepare and sell any food product, the stipulation of the regulations become binding.

Thus, regulators rely on the general laws, codes, guidelines and bye-laws to regulate the activities of the different categories of the food production sector. These have been found out by other studies (Draper, 1996; FAO, 2009; Nicolo & Bendech, 2012) to be a normal practice by some West African countries. On the contrary, FAO and WHO (2003) argue that it would have been essential if West African countries developed regulatory policies that takes into consideration the varying needs, abilities and constraints of the various food producing sectors. Laws have to be context specific and be based on an informed understanding of that particular sector (Chen, 2004). This is because the culture and geographical context of a place determines the types of foods sold, the ingredients used, the mode of preparation and how the foods are sold (Forkuor, 2017). Indeed, taking into consideration the varying needs of the categorised food producing sector (formal and informal), it would have been appropriate if different laws specific to the contextual needs of the various food producing sectors are made available.

In ascertaining the adequate nature of the laws to effectively ensure safety, some of the regulators indicated that in the past, food safety laws appeared out-dated and insufficient in handling emerging food safety issues. However, the laws have currently been amended and are adequate to handle cases on food safety. Two of the regulators explained that:

In some years past, laws on food safety seemed a bit out-dated and unreflective of issues that emerged on the field. For instance, the Public Health Act of 1960 was used for regulation until 2012 when it was amended into Public Health Act 2012, Act 851. The amendment clearly spelt out duties or areas of responsibility for public health officers in general and defined sanctions (Regulator Mike).

The laws on food safety are currently adequate in the sense that each department or agency that handles issues on food safety has its own operative laws that governs its activities. These laws are relatively current and have components that help in resolving emerging issues (Regulator James).

By extension of these comments, the notion of Caswell (2003) that existing legislation in many countries are out-dated, incomplete and fails to adequately address current and emerging food safety issues may not apply to the situation of Ghana as attempts have been made to amend some of the laws. For instance, the amendment of the Food and Drugs Law of 1992 (PNDCL 305B) to the Public Health Act, 2012 is a significant current legal document being used for food

safety regulation. It contains pertinent information on the duties of officers, prohibitions relating to food in general and definitions of sanctions for specific offences.

Although attempts have been made to amend the laws to reflect current situations, there were however, some expressions of the uncertainty of some of the laws achieving its purpose as there seemed to be a lack of political will and commitment on the part of government to some extent in implementing and enforcing the laws in the field. An officer for instance comments that:

... For instance, we are sometimes asked to drop certain cases on non-compliance at some points in the year especially, during campaign periods for an election. There are times that you will also go and take action on very bad and destructive things that food vendors are doing but you only get a call from a higher authority to withdraw those charges (Regulator Gloria)

Another regulator shared similar sentiment:

The problem has always been with enforcement. Though there are sanctions that could be applied to deter offenders, some of the big people do not allow us to implement them. Even if someone is caught with a breach of the food safety law, an authority higher than you could intervene and the person is set free on humanitarian grounds (Regulator Mike).

This could be an indication that although there are efficient and deterrent food safety laws, the inability or unwillingness of officials to enforce such laws has contributed to a failure of the system and made nonsense of governance.

Regulators personal interpretation and enforcement of the law

This aspect of the study sought to find out how regulators interpret and apply the law in the field and additionally assessed their perception on the level of law enforcement. It was found out that generally there are three categories of reulators; regulators who use the legal approach (stern enforcers); empathetic/considerate approach regulators (regulators who gave human face to situations) and regulators who combined both the legal and empathetic approach (mixed bag regulators). These categories of regulators contextualise, interpret and apply the laws to determine how the food service industry is regulated. In relation to the interpretation and application of the laws, one seemingly stern regulator points out that:

I have personally seized and destroyed suspected substandard food ingredients such as rotten tomatoes, pepper and weevil infested beans that were going to be used for food preparation. Though the vendor begged I applied the sanctions and she paid the penalty (Regulator Mike).

The legal approach regulator tendered to use the legal approach to penalise the operator and as well confiscated and destroyed the food items. It could be said in this situation that, the law was completely enforced without fear or favour and this process could serve as a deterrent to the operator involved and a warning to other

operators. Another type of regulator, who will be named the empathetic enforcer, employed the human face approach to situations as shown.

We are human beings and sometimes certain things happen under certain circumstances that even though it is an offence, looking at the other side of it, you cannot take action. You would have to put yourself in the persons shoe and allow the person to go but advice against its repetition (Regulator Nathan).

The regulator narrates a scenario to explain how his approach will be towards to a given situation.

Assuming you are on your rounds and you come across a nursing mother with a crawling child who has just defecated and messed him/herself up and is crying. And at that time maybe the vendor had just opened the stew to dish out before the incident happened. What happens is that the food is exposed and the baby is also in a mess crying and forgetfulness set in. On the one hand she wanted to cover the food and on the other, she forgot being mindful of the baby. So, if you come across this, as a law enforcer it is a crime or offence to expose food but the baby also needs attention. In this case, I cannot take action against her taken the circumstance into consideration.

The scenario from this regulator suggests that in spite of the available rules and regulations, personal discretion and interpretation could be employed in certain situations they may find themselves. Thus, in circumstances such as the one

narrated above, the personal discretion of the regulator superseded the legal regulatory action that could have been taken. By assuming that the child had to be taken care of, this regulator reinterpreted the law to mean that for such an operator it is 'okay' to overlook some of the offences.

Regulators who subscribed to the "mixed bag" approach tendered to view enforcement as giving advice upon the detection of a misconduct but applying the sanctions when the attempt to offer advice fail to achieve compliance. It was explained that:

First of all, we will approach you and advise that you come under the regulation to regularize your operation. That is the first approach. If you fail then we may resort to enforcement and for the enforcement, we do it with the Ghana Police Service. Yes, we solicit their services and then we come to your place to lock it up. In that case before you open, we will charge you. You pay a penalty and then you also start the whole process again before you will be allowed to open (Regulator Gloria).

Another regulator also remarked that:

Because we have been giving education on air and it's everywhere in the metropolis, we expect that every food vendor for instance should undergo medical screening and obtain the necessary permits. So, when we come around and you don't have it and you claim you don't know, then we advise you, we educate you, if you fail, then court is the final decision. In any case, the court is there for ... should I borrow the word notorious and recalcitrant people. We just pick you and send you to court, that is what is done" [sic] (Regulator Gloria).

In most cases where regulators personal interpretation and discretions were used, the actions and inactions of the food service provider was also put into consideration. The regulator explained that:

When we come across a non- compliant action, we first of all read around you and actually ascertain the person's intent for that behaviour and come out with our own discretion on whether the person is telling the truth or not. If the person begs, appears calm and shows regret, we may decide not take further actions. However, if the person aggressiveness and want to challenge our authority, then we show him/her what we can do (Regulator Gloria).

The findings suggest that the approach is flexible or left to the discretion of the regulator and would normally be primarily determined by the demeanour of the food service provider.

Under certain circumstances, different interpretation and actions are given to similar situation. Those who show remorse and regret or appear calm, submissive and beg often receive caution and verbal warnings while those who display disrespect and aggressiveness often receive stiffer actions such as fines and court actions (Regulator Naomi).

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Arguments put up by regulators go to support the school of thought that the degree of enforcement of the law to an extent depends on the reactions (actions and inactions) of food service operators towards the detection of misconduct. However, by noticing that begging, appearing unaggressive and remorseful reduces the level of punitive actions; operators may adapt this strategy and always skip enforcement sanctions.

It appears that the "mixed bag" regulator usually give offending operators the opportunity to correct regulatory misconduct and be in compliance. They resort to the legal approach (giving warnings, fines and prosecute) when efforts to bring operators to compliance fail. Taking the stance of most regulators into consideration, it appears that food safety officials within the Metropolis adopts a mixture of the two enforcement approaches; legal and empathetic/considerate towards a non-compliant behaviour. Legal actions such as prosecution and closure of the business (Yapp & Fairman, 2004) were resorted to only when all attempts to educate and advise by regulators had failed to get the cooperation of operators. Perhaps, empathetic/considerate approach was preferred to the legal approach due to the continued rapport regulators wanted to have with food service operators and also to reduce the security threat (as discussed in chapter seven) often encountered during fieldwork.

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Regulators views on compliance

The study revealed that a food service provider is said to be in compliance when the person practices environmental cleanliness, observes personal hygiene, maintains good food handling practices and has acquired licenses from the respective agencies concurrently. An enforcer expounded that:

Operators' compliance to regulation entails satisfying various aspects of the regulation; environmental and personal hygiene, proper food handling practices and license acquisition from each of our agencies. If the vendor fulfils all these aspects, the person is said to be in full compliance (Regulator James)

Regulator Mike also narrated that:

Compliance is partially complete when operators observe good personal hygiene including being medically screened, keeping their place of work clean and handling food safely. These are the fundamentals of the law.

Analyses of the two regulators explanation to compliance suggest a strict adherence to all aspects of the regulation. Thus, if an operator is unable to comply with all the aforementioned areas, partial or incomplete compliance result. However, from the perspective of another regulator, issuance of a license to a food service provider in it-self presupposes compliance in the first place. The regulator indicated that: Issuance of permit is subject to every food service provider putting in measures to ensure compliance before the license acquisition. The operator should have conformed and complied with the laws related to personal and environmental sanitation, appropriate food handling practices that ensures public health and safety before a license can be issued (Regulator Gloria).

The regulator's comment implies that the issuance of their agency's license is subject to an operator's attempt to be in compliance with the regulation. Thus, the agency may fail to offer an operator the license if it is detected that stipulations of the regulations have not been complied with. It may be safe to suggest that although this method of securing compliance may have its own advantages, the difficulty may also be that compliance may not be sustained after the license acquisition (though renewable annually). This therefore calls for regulators' regular contact with the food service industry to ensure that rules and regulations are always followed.

Notwithstanding the efforts of enforcers to ensure compliance, some of the food service operators were still described as non-compliant to regulation. One of the officials narrated his frustration as:

While a good number of operators try to comply, other operators are also not bothered at all. Where they even prepare the food, where they sell it, they are not of standard (Regulator Gloria). The comment go to suggest that though total compliance is the ultimate goal of regulators, there exist other operators who regulators identify as non-compliant. Subsequently, two of the regulators gave 60% and 80% rating to food service providers' compliance with rules and regulation in the Metropolis. The officer with the 60% rating reported that:

There is great number of non-compliant vendors in the system. In fact, there are some operators, no matter what you do to them, they will always have problem adhering to the laws. In instances like that we (enforcers) try to advice and point out to them the reasons why they (operators) need to comply with the laws (Regulator Gloria).

The regulator with the 80% rating also indicated that:

I will give 80% because during our unannounced follow-up inspections, we find out that some of the recalcitrant change their behaviour and try to do what is expected of them. A relatively small section of vendors are recalcitrant and are seen in the same mess without any attempt to correct an anomaly (Officer James).

Recalcitrant operators to the enforcers are those operators who intentionally or unintentionally do not abide by the rules and regulation governing the food service industry. Three of the officers declined to give a rating but had some form of reaction towards operators' compliance. One of them remarked that: Compliance is both encouraging and discouraging. Yes, in the case of their willingness to regularly undergo medical screening, that one is encouraging. I will say is a plus. But conditions under which the food is prepared and sold is where I will say no to some extent" [sic] (Regulator Mike).

The second officer commented that:

Personally, I wouldn't say I am satisfied but sometimes when it comes to the cleanliness of the facilities [mmn], the facility might be clean, but does not have a license. So when it comes to the cleanliness, I think ... so far so good (Regulator Nathan).

The third officer maintained that:

I am not satisfied with the level of compliance, vendors can do better than what we are seeing. I think non-compliance by most operators is not as a result of not understanding the laws per se but sometimes it is due to the operational cost difficulties [sic] (Regulator Naomi).

Generally, there seems to be an acknowledgement by regulators that there exists some level of non-compliance to food safety regulation though there are equally compliant operators in the Metropolis. Continued attempts should therefore be made by officers to sustain and improve operators' compliance to rules and regulations.

Regulators view of the license acquisition process

Regulators views on license acquisition relates to how officers perceive the procedure food service operators have to follow in order to get licensed. It was found out that regulators perceived the process as simple, straight forward and less time consuming. The procedure according to Officer James, was that:

The process is very simple. If I compare it with what manufacturers go through, the food service licensing is simple. Vendors do not need to take food samples to the lab as compared to manufacturers. For this you just write an application, fill the form, we come for inspection, if everything is okay, we issue the certificate. So the procedure or processes are not so cumbersome.

A comment from another officer also revealed that:

Even in less than a week, an operator can go through this process and start the business. Medical screening will take a day, coming around to inspect the preparation and service area also takes a day. If the two are done, you just go ahead and sell the food" (Regulator Gloria).

Narrations of the regulators suggest a less complex and hustle-free procedure. However, officers reported that though the process is simple, most food service providers within the Metropolitan area operate without licenses. Regulators were of the view that the perceptions of food service operators about the licensing procedures were that; it is time consuming, complex, expensive and cumbersome. Similar findings have been made by Food Safety Unit (1996) and Nicolo &

Bendech (2012). Their findings indicated that license acquisition procedures were seen by most food service providers as tedious, frustrating, time consuming and therefore some food handlers were less motivated to go through it. Horn (2014) also found out that although licensing may protect food service operators from harassment and confiscation of their wares, the time and cost involved in obtaining the license was the main impediment. Regulators within the Metropolis indicated that the process for license acquisition was of importance to regulators because it offers the opportunity to keep track of the number of people engaged in the business, make projections and raise revenue through taxes, provide food safety training and most essentially, less difficult in tracing foodborne outbreak.

Probing for duplication of permits, regulators respectively maintained that they do not see any kind of duplication since what they require from operators are not the same but different.

Since we issue different certificates, in that same vein, documents demanded from them are also different. No two agencies ask for the same document from food service operators (Regulator Naomi).

Officers held a firm believe that the different licenses issued by the regulatory agencies do not constitute permit duplication but rather an evidence to indicate that an operator has satisfied the criteria for operating a food service business. This notwithstanding, one agency could have been given the power to issue a common license if an operator meets all the standard set. One agency issuing a

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common license could have been an encouraging factor for more operators to get licensed.

Presently, the stipulations of the Acts require regulators to ensure that the set processes are complied with before food service operators are issued license. Officer James stated that:

In conformity with the regulations, an assessment would have to be made before operators can start their business.

Regulator Gloria was also of the view that:

Public education especially through mass media such as the radio, television and cars mounted with public address system are used to educate potential food vendors and those already in the business on what needs to be done.

Although public education could be one of the ways of informing food operators on the requirements needed before and during their operations, it may also come with its own challenges. Funds for the public education ought to be provided in order for it to be successful. Regulator Naomi intimated that:

It is rather unfortunate that most of the food service operators we see around do not have licenses despite the effort being put in by the various agencies.

This comment from the officer could be as result that the dissemination of information with regard to the license acquisition does not get to all operators or operators are just unwilling to secure licenses. On the other hand, some of the operators may still not know that there are some regulations to be followed before they set up their businesses. Intensified public education may seem to be the way forward in making sure food service operators get licensed.

Summary

This study found out that three main government institutions are responsible for the regulation of street food service operation in the Cape Coast Metropolis although four institutions were originally considered in the literature as having the legal mandate for food safety regulation. A look at the discussion of this chapter reveals that nothing was said about Ghana Standard Authority. Indeed, nothing was said about them because upon the researcher's contact with the agency, it was explained that the core mandate of the agency is to establish and promulgate standards, provide quality assurance through inspection, testing and metrology. They also assist operators in both the manufacturing and service sectors to improve their competitiveness by establishing effective Quality Management Systems along ISO/IEC 9001: 2008 and 22000: 2005 and promote standards in public and industrial welfare, health and safety but not necessarily on regulating the activities of the food service sector.

The Cape Coast Metropolis was seen to operate within the multiple agency system where food safety control was seen as a shared responsibility among various government institutions. Aligning to this multiple agency phenomenon therefore goes to corroborate the assertion of WHO and FAO (2014) which indicates that multiple agency system is a common practice among a number of countries in the world. This system, WHO and FAO (2014) believe can lead to challenges such as fragmentation, increased bureaucracy, increased cost of

doing business, duplication of functions and lack of coordination between the various bodies.

However, in this study there was fragmentation rather than duplication. The fragmentation of activities was seen in the issuance of license by every agency involved on different aspect of the service operation. Ghana Tourism Authority for instance, requires that operators get business registration certificate, which is a permit that allows the operator to set up such business. For Food and Drugs Authority, the service provider is expected to obtain a hygiene permit. This hygiene permit looks at the overall sanitation issues in the immediate environment, that is the food production area (kitchen) and the service area (dining room) including the personal hygiene of the food service provider. Lastly, Environmental Health and Sanitation Unit then requests all operators to acquire a medical health certificate declaring them medically fit from any communicable disease that could be transferred from the operator to other consumers through the food handling process. When operators have to access several agencies in order to comply with regulations from these agencies, then they get fatigued, thus, leading to incomplete compliance of the regulations. These agencies are located in different parts of the metropolis, thus operators are disinclined to move about the metropolis in order to access these services.

Due to some of the reasons mentioned above, Khalid's (2016) recommendation that a single food control agency is the most effective way to deliver transparent, consistent inspections based on food safety and consumer protection appears to be appropriate. With this kind of system, the relevant bodies

responsible for food control along the value chain will be located in one agency and under the same management. This consolidation of resource ensures that the system will be well coordinated and harmonised, making way for quicker and effective response from the clients for whom services are rendered. Adopting this kind of system can also indicate that government places high priority on food safety and the reduction of foodborne illnesses.

CHAPTER SIX

FOOD SAFETY REGULATION: FOOD OPERATORS' PERSPECTIVE Introduction

The previous chapter addressed and discussed one part of the research objective which analysed enforcers' perspective of the food safety regulation. This chapter sought to address the other part of the same research objective from the food service operators' perspective. In particular, it assesses food safety regulation from food service operators' point of view. Issues covered include the profile of food service operators, food service operators' awareness of rules and regulations, sources of knowledge on rules and regulation, compliance with rules and regulations and the dimensions of compliance.

Food Service Operators' Profile

Table 4 presents the profile of the food service operators sampled for the study. It can be observed from Table 4 that almost the entire population (96%) engaged in the food service businesses were women. Women engaged more in the food service business within the Metropolis than their male counterparts. It appears women preferred to stay in the culturally socialized activities such as cooking while men engaged in other more physical activities. As argued by WHO (1996) and FAO (2012), the food service operation is still considered a female dominated business in most part of West Africa. In relation to age, about a quarter of the respondents were less than 30 years while a little above half (58%) were in the age bracket of 31-49. Less than a quarter (14%) of the respondents were 50+ years. Relatively, the youth were more represented in the food service business.

Demographic Characteristics	Frequencies	%	_
Gender			
Male	12	4	
Female	286	96	
Age (Years)			
< 30	81	27.2	
31-49	174	58.4	
50+	43	14.4	
Educational Attainment			
Tertiary	1	0.3	
Secondary	57	19.1	
Middle/JSS	135	45.3	
Primary	76	25.5	
Apprenticeship	16	5.4	
None	13	4.4	

Table 4: Socio-demographic profile of food service operators

Source: Fieldwork, 2017.

More than half of the food service operators had education beyond the primary school level. Forty-five percent were middle/ JSS/JHS leavers and about 19% were secondary school certificate holders. It could be adduced that majority of the respondents had some education. Yapp and Fairman (2004) contend that as people become educated, they tend to appreciate the problems of unsafe food and hence are more willing to put into measures that will ensure the safety of food they produce or consume. Hence, an association could be drawn to the school of

thought that holds the belief that some form of education has a positive influence on people's perception and attitude towards handling food safely (Yapp & Fairman, 2004). Thus, the evidence available suggests some form of relationship between the education level and safe food handling practices. The perception therefore is that the higher the education level, the more likely food safety would be practiced.

Awareness and Sources of Food Safety Regulation Information

Fournies (1999) indicates that food service operators may comply with regulations if they are aware of what is required of them. In effect, rules and regulations may not be adhered to if operators are unaware of its existence. To this end, food service operators' awareness of food safety rules and regulation was assessed. Food service operators were asked to indicate their awareness and source of their awareness/knowledge of the regulation. It emerged from the study that vast difference between the number of respondents who were aware of the regulations and those who were unaware existed. From Table 5, about 91% of the respondents were aware that there are rules and regulation governing their business. Invariably, nearly 9% of the respondents did not know that there are laws to be complied with. This implies that majority of the respondents being aware of the existence of food safety regulation could enhance compliance (Table 5). Further to the food operators' awareness of regulations, diverse sources for the awareness were identified. From Table 5, the sources ranged from Environmental Health and Sanitation officials to family members.

Awareness	Frequency	%
Yes	272	91.3
No	26	8.7
Sources		
EHSU	138	46.3
Media	58	19.5
Personal experience	48	16.1
Other enforcers	30	10.1
Family members	24	7.1

 Table 5: Awareness and sources of food safety laws

Source: Fieldwork, 2017

Close to a half (46%) of the respondents identified the Environmental Health and Sanitation Unit as their main source for knowledge on rules and regulation. The identification of Environmental Health and Sanitation Unit by some operators as the main agency known for the provision of knowledge on rules and regulations seems to suggest that officials from the Unit were the people operators encountered most and relied on for advice, identification and interpretation of the regulation. With reference from the conceptual framework, it appeared that the Environmental Health and Sanitation Unit was the main agency that assisted operators to become aware of the existence of the regulation (identify regulation), helped operators to understand the meaning of the regulations in relation to their business (interpret regulation) before operators could decide whether they wish to take steps to comply (compliance decision).

There was however mention of the other enforcement agencies by some of the food service operators. About 10% of the respondents made reference to Food and Drugs Authority and Ghana Tourist Authority. Comparing the percentages of operators who identified Environmental Health and Sanitation Unit on one hand and Food and Drugs Authority and Ghana Tourist Authority on the other, the assumption is that very little is known about the existence of Food and Drugs Authority and Ghana Tourist Authority. In addition, the media as a source of awareness was identified by 19.5% respondents. The media represented the presentations on the radio, television and the internet. Approximately 7% specified family members and about 16% of respondents indicated their personal experience as sources for their awareness.

Food Service Operators Known Regulations

The results revealed that food service operators could not state categorically the stipulations of the regulations. Specific stipulations of the Public Health Act, the Tourism Act, the Local Government Acts and bye-laws of the Metropolis were not much known. For instance, operators were not able to state categorically that Part 7, section 100 (subsection 6) of the Public Health Act states that:

"Food shall be stored and conveyed in a manner that preserves its safety, composition, quality and purity and minimizes the dissipation of its nutritive properties from climatic and any other deteriorating conditions".

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Rather, respondents were able to mention only aspects of the regulations known to them. Key among the regulations the operators were conversant with included keeping the surroundings clean, covering of food, observance of personal hygiene and keeping food warm. The rest were, keeping utensils clean, obtaining medical report and acquisition and renewal of license. The responses revealed that operators had hazy ideas of what the rules and regulations were but not necessarily what ought to be the specific rules and regulations. This in their opinion constituted the laws governing food safety. Multiple responses which touched on some aspects of the regulations were described. This could be considered as an indication of the fact that operators knew the laws covered a range of issues but were not specific to the full stipulation. Table 6 gives a detailed description to the known rules and regulations by the operators.

Food Laws Known to Operators	Frequency	%
Keeping surroundings clean	178	31.6
Observing Personal Hygiene	141	25.0
Covering Food	110	19.5
Keeping food warm	60	10.7
Keeping utensils clean	43	7.7
Obtain medical report	16	2.8
Acquisition and renewal of license	7	1.2
No idea on rules and regulation	8	1.4

Table 6: Areas of	knowledge abou	it food laws and	d regulation

Source: Field work, 2017

From Table 6, 31.6% respondents indicated that keeping ones area of cooking and service clean was the most known law in relation to their business. Personal hygiene relating to food safety was the next law in succession that about 25% of the respondents alluded to. About 20% of respondents identified covering of food to avoid contamination from flies and dust as the third known law. In relation to keeping food warm, it appeared to have been given a relatively low response rate. This known regulation was identified by 10.7% of the respondents. These responses may have come from stationary operators who had coal pots or gas stoves at their disposal for heating and reheating when necessary. It must be noted that maintaining potentially hazardous foods such as cooked meat, poultry, eggs, seafood, rice and beans within or below room temperature (20 - 25 degrees Celsius) for relatively a long time could be considered as a potential factor for bacteria growth and so this seems prudent if some of the respondents engaged in such activity. This might have been known by some of the operators and therefore made an attempt to avoid its occurrence although heating and reheating could also lead to the loss of some heat sensitive nutrients such as the B-group of vitamins (thiamine, riboflavin and niacin).

Acquisition and renewal of license was identified by 2.8% food service operators. Although obtaining a medical report and the acquisition and renewal of license from the appropriate agencies were prerequisite to starting a food service operation, a lot of the respondents seemed not to have attached importance to this regulation. There were 1.4% respondents who declared no idea of what the rules

of engagement were with regards to their business. These operators appeared not to have had any knowledge about the rules and regulations.

From the results discussed above, three levels of argument could be advanced. First, it could be argued that food service operators did not have adequate knowledge of the stipulation of the food safety laws and therefore interpreted it differently. Second, it is possible that even though the operators had knowledge about some aspects of the law, each operator stated what he/she applied more in attracting customers to his/her business. Third, it could be deduced that what they stated is what most enforcers look out for during their visit or inspection. To a large extent, operators' knowing only what has been stated above was seen not to be enough with reference to the stipulations of the law. From what has been explained earlier in this chapter, a combination of these and more constitutes the laws on food safety.

Popularity of Regulators among Food Service Operators

Popularity of regulators relates to how well the existence and presence of regulators are known by food service operators. It has been argued that awareness about the existence or non-existence of regulators is one of the more visible signs of successful or unsuccessful food safety management systems (Yapp & Fairman 2004). As a consequence, if enforcers are well-known and their presence felt, the result is likely to be effective enforcement and compliance leading to the production of healthy and hygienic food. On the other hand if enforcers are unknown and their presence not felt, non-compliance and less hygienic food may continue to be offered for sale.

Thus, operators' fore knowledge about regulators play a pivotal role in the entire cycle of food safety management. This is in view of the fact that some operators rely heavily on regulators through their inspection and advisory visit for information about the regulations. Furthermore, the underlying assumption of the conceptual framework suggests a reliance on regulators by food operators for the interpretation and ways to improve compliance (Yapp & Fairman, 2004). Consequently, the demonstration of poor knowledge of regulators could create challenges for both food service operators themselves and regulators in general. The implication may be poor predisposition to the adherence of regulations. Table 7 gives a description of the popularity of enforcers to food service operators in the metropolis. From Table 7, Environmental Health and Sanitation Unit emerged as the main regulatory agency known to the respondents (80%).

Agency	Frequency	%
EHSU	238	79.9
FDA	42	14.1
GTA	13	4.4
FDA/EHSU	2	0.6
No idea	3	1.0
Total	298	100

 Table 7: Popularity of regulators among food service operators

Source: Fieldwork, 2017

This could be an indication that enforcers from this agency were most often encountered by operators' in their day to day activities. Fourteen percent of the respondents also knew of the existence of Food and Drugs Authority. With approximately 4%, Ghana Tourist Authority was the least known agency.

Two (0.6%) respondents however made mention of knowing Food and Drugs Authority and Environmental Health and Sanitation Unit simultaneously. Apart from the two respondents who indicated knowledge about both Food and Drugs Authority and Environmental Health and Sanitation Unit, the rest were not able to demonstrate their knowledge on more than an agency concurrently.

Relatively, the low-level popularity of the Food and Drugs Authority and Ghana Tourism Authority, suggests that these agencies presence are not much felt and their activities less visible to food service operators in the Metropolis. Subsequently, the basic school of thought is that food service operators could have been in a position to acquaint themselves with the specific mandates and activities of each regulatory agency if the regulatory agencies were well known. In the same vein it was an anticipation that being informed of the activities of the regulatory agencies through educational programmes would have helped operators with the requisite knowledge about which agency is responsible for what and what each agency requires of them (in terms of permit acquisition). Given the extent of problems encountered in the metropolis in relation to food almost every year, it would have been prudent if efforts are made by enforcers to have regular encounter with operators.

Regulators Performance Assessment

In an attempt to assess the performance of the food safety regulators, respondents were asked how often enforcers paid visit to their operation and vending site. The results suggest that regulators visits were of varying frequencies. Table 8 presents food service operators view about the number of time regulators visited their sites. The results suggest that out of the 298 respondents, 36.6% indicated that regulators paid yearly visits to their work and vending site while 35.2% indicated that enforcers paid visits three times in a year. Approximately 17% of the respondents had never received any form of visit from any of the enforcement agencies (Table 8).

Number of times	Frequencies	%
Yearly	109	36.6
Twice a year	30	10.1
	105	25.2
Thrice a year	105	35.2
Everyday	3	1.0
Never	51	17.1
Total	298	100
101a1	290	100

 Table 8: Frequency of visit by regulators

Source: Field data, 2017

Generally, the number of visit by regulators appeared to be insufficient to enable the detection of non-compliance and a chance for correction. It may be right to suggest enforcers' regular encounter with operators for the detection, correction and possible eradication of the annual food safety incidence.

Activities of regulators

Food service operators' view of regulators activities at their premises was sought. It was found out that environmental cleanliness appeared to be the major focus of the inspectors. Table 9 presents a multiple response from the respondents on the activities of regulators. From Table 9, 52% of the respondents indicated that officers' conduct inspection on their immediate surroundings. With a vast difference, about 17% of the operators specified that their kitchens and cooking equipment were checked. About 17% of the respondents revealed that the cleanliness and adequate nature of their cooking equipment in terms of utensils, chopping boards, knives and stoves were often checked. Only 7.7% of the respondents specified that regulators checked on license and other documents. About 16% of the operators pointed out that officers observed the food preparation process to see whether proper food handling practices were observed and sometimes collected food samples for laboratory analysis.

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Areas	Frequency	%
Inspect the surroundings and dustbins	207	69.5
Inspect the kitchen and cooking equipment	52	17.4
Observe the food preparation process and collect	47	15.8
some for lab analysis		
Inspect the license and other documents	23	7.7
Never been inspected	21	7.0

Source: Fieldwork, 2017

The study further ascertained whether operators received feedback on inspection. More than half (68%) of the respondents revealed that feedback was given. However, a quarter (25%) of the respondents were of the view that that no feedback was given after inspection. Lastly, with respect to inspection activities causing hindrance to the food service operation, more than half (68%) of the respondents affirmed in the negative. They were of the view that enforcers' inspection activities did not distract their business at all. In contrast, about 16% had a firm believe that their business activities were hindered by enforcers' inspection activities.

Satisfaction with Regulators Activities

The extent of satisfaction of food service operators' with the activities (inspection and enforcement) of the food safety regulatory agencies was explored. It was found out that over 60% of the respondents in the Metropolis were satisfied with the activities of regulators while about 38% of the respondents showed dissatisfaction with officers' activities. Table 10 presents operators reasons for the satisfaction or non-satisfaction of regulators activities. Table 10 shows that 42% of the respondents were satisfied with activities of enforcers because regulators were perceived to be good and friendly. Though the context within which operators perceived the good and friendly nature of officers was not known, Munasinghe (1992) cautions researchers to interpret such results with great care because there could be a tendency of biasness. An assumption could however be made that enforcers appeared good and friendly because operators complied with the regulation and therefore had no problems with enforcers.

Reasons	Frequency	%	
Satisfaction			
Good and friendly	86	46.2	
Friendly but strict on the job	34	18.3	
Educate and help us follow the laws	39	21.0	
Warn or fine non-compliant behaviour	27	14.5	
Total	186	100	
Non-Satisfaction			
Concerned with license than the quality of food	49	43.7	
Harassment and extortion of money from operators	32	28.6	
Impolite and disrespectful	16	14.3	
Less time to explain what they want from	15	13.4	
operators			
Total	112	100	
Source: Field date 2017			

Table 10: Reasons for satisfaction or non-satisfaction of regulators activities

Source: Field data, 2017

Another reason could have been that operators willingly accepted their wrong behaviour when approached. Enforcers could also appear good and friendly because they did not want to incur the wrath and assault (verbally or physically) from operators. Though the latter reason has the potential of significantly reducing the security threat (as has been expressed by enforcers in the ensuing chapter) it can as well undermine the effectiveness of their activities. Thus, on the one hand being good and friendly can negatively affect enforcers'

performance and on the other hand being unkind and unfriendly could induce hostile response from operators.

Additionally, Table 10 reveals that 21% of the respondents related their satisfaction to enforcers issuing warnings and fines only when there was non-compliance. Implication of this is that operators preferred and agreed to receive warnings and fines than being arranged before court for non-compliant actions. Enforcers were reported to be friendly but strict on the job by 18% of the respondents while 15% were satisfied because enforcers educated them on general hygiene.

In relation to the reasons for non-satisfaction of enforcers' activities, 44% of the operators indicated that regulators were more concerned with license issues than the quality of the food because food samples were not collected for lab analysis. Again, enforcers' approach towards ensuring the acquisition of license was seen to be a bother to some of the food service operators. Apart from issues on the license and food samples, 29% of the respondents also pointed out that they were often harassed and monies extorted illegally from them. Concurring with and borrowing the words of Draper (1996) "food service operators are often a target for harassment and extortion by government authorities and organized crime because they often occupy public space and lack any form of legal recognition and protection".

The issue of harassment and extortion is very critical especially within the circles of enforcing the food safety laws. Taking money illegally from food service operators could bring about the impression that an operator could escape

punishment by offering money. This can prevent operators from taking food safety issues seriously since the extent of their punishment could be determined by their ability to "pay". Furthermore, the notion of harassment and extortion by some of the respondents could serve as a breeding ground for distrust between the food service operators and enforcers and hence the aggressive approach towards some regulators. This study's finding confirms similar findings (Groenenberg, 2002; Thilde, 2008; Forkuor, Samuelsen, Yeboah, Rheinlander & Akuoko, 2017) that the relationship between regulators and street food service operators in most African countries is marked by distrust and hostility. Similarly, in a study of Forkuor et al., (2017), issues of bribery and corruption were recorded to have hindered effective food safety regulation in the Kumasi Metropolis.

Fourteen percent of the respondents also specified that some enforcers in the metropolis were impolite and disrespectful. Indeed food service operators also felt the need to be respected by the law enforcement agencies. Respondents being satisfied or dissatisfied with the activities of enforcers' calls for concern as this could have implications for the enforcement and compliance of the food safety regulations.

Compliance with Regulations

Findings of the study suggest that food service operators' understanding of compliance connotes carrying out an instruction from an enforcer. Per this understanding, food service operators had a firm conviction that they were in compliance with the rules and regulation. This logical deduction was made out of the 95% response rate from operators

indicating their compliance to the rules and regulation. For example, respondents remarked that:

The town council people once told me to always cover my food with sieve or a glass show case. I have done that so I believe I have complied" (Rice and Stew seller).

A Ga kenkey seller also indicated that:

I was cautioned by one enforcer to change the water I used for cleaning my bowls on regular basis, I have been doing it ever since I was warned.

The narratives above appear to suggest that compliance does not necessarily mean that the individual operator may identify and adhere to food safety rules and regulation but rather food operators depend on enforcers for the identification of rules and regulations and possible directives on how to comply. Comments from the operators suggest that for compliance to be achieved there is the need for the emphasis on the presence and directives of enforcers. Thus, regular enforcement visit should be made by officials for identification and correction of misconducts to achieve continuous compliance to rules and regulation. This confirms findings made by Yapp and Fairman (2004) and Hutter and Amodu (2008) that food service providers implement food safety standards based on enforcers' presence, detailed instructions and advice. Aalders and Wilthagen (1997) also made similar findings that without the laws being externally forced on food

service providers, matters of food safety and health may not be taken seriously.

On the other hand, approximately 5% of the respondents were also of the view that it was not always they complied with rules and regulations. One respondent however indicated that s/he did not abide by the regulations. Thus, compliance was not always complete. The pie chart (Figure 7) illustrates the information.

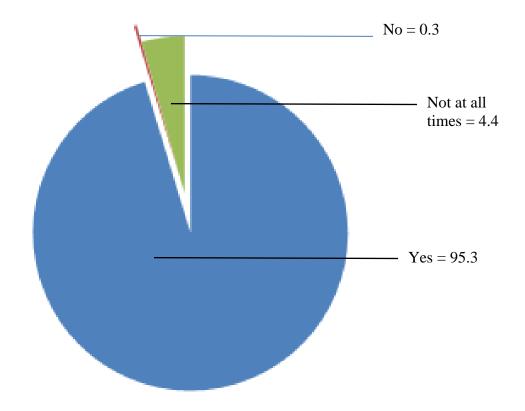


Figure 7: Compliance with rules and regulation

Source: Fieldwork, 2017

Critical examination of the responses from the respondents who believed they complied because they did whatever they were told is observed to be incomplete compliance as enforcers are not present at every stage of the food preparation and service period. It can be inferred that enforcers may only correct or ask the operator to put in measures that ensures food safety only when they are privileged to witness the anomaly first-hand. Non-compliance could result when enforcers are not present to correct food safety misconduct. As already stated this calls for regular enforcer-operator contact to ensure continuous compliance.

Motives Underlying Compliance among Food Service Operators

In this section the reasons behind food service operators' compliance to rules and regulations were examined. As Gunninhham, Thornton and Kagan (2005) suggest, food service operators may comply with regulation and invest in enhanced food safety system, technologies and processes for reasons such as protecting the business, safeguarding the reputation and meeting consumers' demand. Food operators in the Cape Coast Metropolis identified many reasons that motivate them to comply with food safety rules and regulation. These were categorised under three main headings; moral, legal and business. The moral reasons entailed: preventing food contamination and disease and the fact that family members consume the same food sold. Legal reason explains operators respect for the law and business reason relates to attracting and maintaining customers. Table 11 depicts operators' reasons for compliance.

Reasons	Frequency	%
Moral		
Prevent food contamination and diseases	126	42.3
Family members eat the same food sold	23	7.7
Legal		
Respect for the law	25	8.4
Business		
Attract and maintain customers	124	41.6
Total	298	100

Table 11: Reasons for compliance

Source: Fieldwork, 2017

Under moral reasons for compliance, Table 11 indicates that about 42% of the respondents complied mainly because they wanted to avoid food contamination and the spread of diseases. The use of the word "contamination" by some operators is noteworthy. Its significance is that some food operators had fore knowledge that appropriate food handling and preparation practice could help avoid contamination and possibly, lessen the outbreak of foodborne related diseases. However, about 8% of them were also of the view that compliance was necessary because other family members relied on and enjoyed the same food sold. Though a relatively small number of respondents cited this factor as a reason for their compliance, it goes to reveal that operators may not intentionally sell food that is unsafe for public consumption. It again emphasises the dual advantage of the business to women as indicated in the literature; women have access to income as well as regular meals for their families. Comments such as: ...*I and my children eat some of the food I sell so I prepare it well* [sic] (Beans and Fried Plantain Seller).

I sometimes serve my whole family with the food I sell, especially if I am not able to prepare food after work (Banku and Okro Seller). ...I don't have money to buy other foods so we often eat what I sell, because of that I make sure that I do what is right" (rice and Stew seller)

These comments reveal some of the operators' intent to prepare food safely. However, it can also be argued that what they say they do to make the food safe may not be the actual things they practice. This is because past research has shown that there is a high tendency for people to report greater levels of socially acceptable behaviour than they actually engage in or to report their good behaviour rather than their typical behaviour (Redmond & Griffith, 2003; Howells et al., 2008; Abbot et al., 2009).

In relation to the respect for the law, about 8% of the respondents were motivated to comply with requirements for legal reasons. These operators were motivated simply because issues had legal backing. Some of the comments made include:

... If I don't cover my food well and expose it to flies and dust, the CCMA (Cape Coast Metropolitan Assembly) people will come and worry me (Waakye Seller).

One kenkey and fish seller also indicated:

... If they come and your surrounding is dirty, they will give you a paper and tell you to see them in their office. I want to avoid that. Another operator also narrated that:

When the town council people come and the water you are using to wash your plates and bowls is dirty, they will tell you that they have summoned you. You will have to go to their office and pay money, if you don't pay they will take you to court (Fufu seller).

For this group of operators, it can be said that the fear of being caught up with the laws for not meeting the standard set and the sanctions that go along with it served as a motivation to comply. Taken into consideration the number of respondents (less than a quarter) who indicated the law as their motivating reason, it could be safe to state that most of the operators had some form of disregard for the law. Thus, compliance with the law was the least of their priority.

Finally, the study revealed that 41.6% of the operators were motivated to do what they considered right in order to maintain their customers. The respondents emphasised attracting and maintaining customers as the reason which motivated them to comply. For this group of operators, environmental sanitation of the place, personal hygiene of the operator as well as the taste and quality of the food were of great concern. Operators believed that the aforementioned were some of the things customers look out for when engaging their services.

This calculated attempt by operators to attract and maintain customers suggest that consumers were considered as the pivot around which their business revolved. Findings from Omari and Frempong (2015) study suggest that consumers provide perhaps the strongest motivation to modify food handling practices. It is the consumer who makes the choice of what to purchase, consumed and is likely to suffer the consequence if the food is unsafe. Hence, consumers are considered as possessing the powers to play a more active role to seek the provision of better quality services and shaping the attitude of food service operators. Due to the power consumers possess in shaping attitudes of food service operators, some countries such as South Africa have developed campaigns to raise awareness of consumers about the importance of their participation in improving the quality of street food (FAO, 1997; Costarrica & Moron, 1996). As consumers are used as a "yard stick" by food service operators to comply with regulations, they become major allies to the enforcement agencies and an essential agent for change in operators' attitude (Arambulo et al. 1994). It is therefore imperative to raise the awareness of consumers through intensified educational programmes.

License Acquisition Experiences

As observed earlier in this study, the acquisition of licenses has been one of the major issues emphasised. In view of that, operators were asked to state whether they had licenses from all the regulatory agencies and indicate the stage of the business at which they had acquired it. It was realised that about three quarter (77%) of the respondents had licenses which offered them the permission to operate a business. However, licenses acquired were mainly health certificates

from the Environmental Health and Sanitation Unit. None of the respondents had license from the other regulatory agencies. Of the 77% respondents who had licenses, 43% had it before the commencement of their business while 34% of them had acquired it in the process of doing business.

Close to a quarter (23%) of the operators had no form of license. Varied reasons were given by respondents for not possessing a license. Table 12 depicts some of the reasons why some food service operators did not have licenses from any of the regulatory agencies. From Table 12, almost half of the total number of operators believed they could operate their business without licenses from any of the agencies. Almost an equal proportions of operators together also indicated "*I just started the business*", "*I don't have money*" and "*I am not aware of any permit acquisition*" as their response for operating without licenses. This indicates that compliance to the regulation, to a large extent, depends on the individual operator's understanding of the law, attitude and conviction as opined by Hutter and Amodu (2008).

Reasons	Frequency	(%)	
I can operate without it	30	47.6	
I just started the business	9	14.3	
I don't have money	9	14.3	
I am not aware	9	14.3	
The process is difficult	6	9.5	
Total	63	100	

Table 12: Reasons why operators did not have licenses

Source: Field data, 2017

These negative attitudes toward license acquisition may suggest some form of weak and ineffective regulatory enforcement on the part of enforcers as these operators continue to prepare and sell food to the general public without proper record on their health status and other areas they are to comply with. The enforcement ineffectiveness is also seen in areas where those who had even acquired the licenses, had it from only one source of the regulatory body without any effort of the other agencies ensuring that their permits are acquired. The ineffectiveness in ensuring some of these anomalies have been alluded to by the enforcement agencies and were attributed to lack of personnel, lack of financial support and other logistics (this will be discussed in detail in the next chapter).

Describing the process generally, licensed operators indicated that they had bought forms from the environmental health and sanitation unit. Some of their description included:

I bought forms from the municipal then I went to the hospital for a lab test and I sent back the results to the municipal people for a license.

I bought forms from health office, do lab test and go for certificate from municipal [sic].

I bought forms, they told me I can go for lab test anywhere, I do and they give me license" [sic].

They came round to announce that there would be mass screening, I went, bought my forms, fill it, had my lab test and was given my license" [sic].

From all indication, operators were free to have their medical examination at any accredited hospital or laboratory facility within the Metropolis except in cases where mass screening was conducted by the agency. In cases of mass screening, a particular health facility is chosen by the agency and brought to the premise of the agency for the food service operators to have their medical screening (personal communication with an enforcer). Apart from the mass screening that was occasionally conducted by a particular chosen health facility, there were no specified health facilities in relation to where food service operators could have their medical tests.

Contrary to this practice in the Metropolis, countries such as England recommend specific health facilities due to the possibility of food service providers bringing in fake medical reports (Hutter & Amodu, 2008). As the medical screening is requested on an annual basis, Forkuo et al. (2017) noted that the perceived danger is likely to be that as operators continue to visit health facility of their choice repeatedly, there is the tendency of establishing informal relationships which can compromise the process. Laboratory officials could see operators as friends whom they would want to protect. Emphasizing on specific health facilities underscores the importance attached to the credibility of the license issued to food service operators.

Probing for the cost and the complexity or simplicity of the process, varied responses were provided by the respondents. Respondents indicated that the cost ranged between Gh¢ 35-100 (depending on which hospital you visit for the laboratory analysis). For this reason, operators' perception about the cost ranged

from very less expensive, moderate to expensive. Expressing the cost implication of the process, 80% of the respondents indicated that it was very expensive, while 8% and 12% indicated moderate and less expensive respectively. Generally, it could be said that majority of the respondent perceived the process to be very expensive. With regards to the complexity or simplicity nature of the process, over three quarters (86%) of the respondents saw the process of health certificate acquisition as simple. This notwithstanding, about 12% of the operators perceived the process to be complex whereas 2% of them felt indifferent about the process. The simplicity of the process was attributed to the publicity of the process and the support given at each stage. The support operators received referred to:

...they explained the process to me verbally in the language I understood since I could not read or write.

"they assisted me in filling the forms and educated me on the process,

they assisted me in filling the form and the lab process. they explained the need to do the lab test. the process was explained at each stage and directions to various

lab facilities were also given.

Publicity was presumed to be good as a greater proportion (96%) of the respondents pointed out to the fact that the process was well publicized.

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Self-Regulation

Dwelling on Reid's (1996) submission on self-regulation as a desirable quality and its positive effects on behaviour, food service operators' organizing themselves into associations to self-regulate to achieve the common goal was sought. Associations are usually non-profit organization seeking to further a particular trade, the interests of individuals engaged in that trade and the public interest. It was realised that only 3.1% of the respondents belonged to an association of one kind or the other. As much as 96.9% of the respondents did not belong to any association at all. The 3.1% respondents belonged to associations such as Aduane Pa Association (Good Food Association), Traditional Caterers Association and Cape Coast Fast Food Association. These associations respectively meet once in a month, every quarter and once in every two months. Respondents intimate that the leadership of the association ensure that food safety rules and regulations are adhered to by encouraging members to work or cook in a clean environment and also seek clarification when its members do not understand something about the set rules and regulations. They further explained that executives sometimes move around to check whether members actually keep their food and area of food preparation clean. Those found not to adhere to the standard set by the association are then fined and advised to desist from such practice. This aspect of the executives' role goes hand in hand with the activities of the Environmental Health and Sanitation Unit of the Metropolitan Assembly.

The reasons of those respondents who did not belong to any association at all are represented in the Table 13. From Table 13 approximately half (44%) of the respondents were entirely ignorant about the existence of any association in relation to their business. Associations were not well organised and advertised for members within the food service business to get the opportunity to decide whether to join one or not. However 16.1% of the respondents who are presumed to have knowledge about the existence of an association also intentionally decided not to become members simply because they firmly believe that people in such associations are gossips and do not mind their own business. Some of the respondents (15.8%) saw themselves as non-natives of the town, other operators (15.1%) attributed their disassociation to lack of time. About 6% also maintained that they had no funds to pay the association dues and other commitments.

Reason	Frequency	%
Lack of funds	17	5.7
Time constraints	45	15.1
Not a native of the town	47	15.8
People in such associations are gossips	48	16.1
Ignorant about the existence of an	132	44.2
association		
TOTAL	289	96.9

Table 13: Reasons for not belonging to any food business association

Source: Fieldwork, 2017

This implies that unless food service operators are educated to appreciate the essence of vendor associations, the contribution of such associations to regulations may not be fully realised. As was revealed in the literature, through self-monitoring, self-evaluation and the implementation of sanctions, associations

could play crucial regulatory roles (Solomon-Ayeh et al. 2011). Educating and urging vendors to join associations is therefore one way of improving hygiene and safety of the food service sector. As a result, education on the importance of associations should be an important part of the content of food vendor education.

A deduction can be made that probably food service operators within the Cape Coast Metropolis have not come to terms with what they stand to benefit from forming a vibrant and well-functioning trade association. In the works of Hutter and Amodu (2008) emphasis was made on how trade associations lobbied on behalf of its members for fair policies, reduction and removal of unfair taxes and also had a representation at both the local and national levels on relevant issues such as policy development.

Summary

This chapter has addressed food safety regulation from food service operators' perspective. It has among other details discussed food operators' knowledge of the regulation, their compliance to the rules and regulation as well as their view on regulators performance. The study notes that food service operators' source of awareness was mainly through Environmental Health and Sanitation Unit of the Cape Coast Metropolitan Assembly (CCMA). Not much respondents identified the other regulatory agencies as sources for their awareness of the rules and regulation, indicating agencies partial visibility in the Metropolis. Another key observation is seen in the situation where respondents indicated insufficient number of regulatory visits. Food service operators may have been seen to comply fully provided regulators paid regular inspection visit to identify food safety misconduct and to give directions as to how rules and regulations

could be complied with. This confirms the assertions of both power and social control theories.

Motivations to comply with rules and regulations were based on moral, legal and business reasons. However, legal reason appeared to be the least reason for compliance, indicating a weak enforcement of the rules and regulation. Finally, the license acquisition process was identified by most food service operators as expensive, time consuming and frustrating. For these reasons operators felt less motivated to acquire the licenses.

CHAPTER SEVEN

BARRIERS TO FOOD SAFETY GOVERNANCE

Introduction

This study sought to explore the barriers or limitations to food safety governance in the Cape Coast Metropolis. Barriers to food safety governance are considered as challenges which hinder effective implementation, enforcement and compliance to rules and regulations (Khalid, 2016). Within the Cape Coast Metropolis several elements were identified by regulators as challenges which posed a threat and hindrance to effective food safety regulation. These were classified into five areas; financial and resource limitations, lack of personnel, lack of security, lack of transportation and operators insufficient food safety knowledge. Issues covered include the barriers and its effect and how regulators manage their way through.

Financial and Resource Limitations

Financial and resource limitation refers to the inadequate money to run the day to day activities of the regulatory agencies. Evidence indicate that the yearly budget allocation to these regulatory agencies were inadequate to cater for the day to day activities relating to inspection and enforcement. One of the regulators reported that:

What we are given on yearly basis is not adequate enough to cater for regular inspection, enforcement and other responsibilities of the agency. Last year's budget allocation for instance, was woefully inadequate to the extent that by the end of the second quarter we had almost nothing to run the agency with. However, what we normally do is to try and manage so that at least all the areas under our jurisdiction get inspected once or twice in a year (Regulator Naomi).

A female Technical officer also narrated that:

...If you want to go and do enforcement at say Diasso, a town in the Central Region, you need to fuel the car maybe twice and that will run into maybe 500 Ghana Cedis, meanwhile in the whole month the amount you are given for fuel for office operation is not up to one thousand (1000) Ghana Cedis (Regulator Gloria).

Another officer further explained that:

Even though we are stationed in Cape Coast, the other districts within the Central Region also fall under our jurisdiction. We are therefore expected to have regular contacts with the food service operators within these districts but the fact of the matter is that we are not financially resourced to make this happen within short intervals (Regulator James).

Furthermore, lack of funds resulted in the inability of some of the regulatory agencies to purchase office equipment such as computers and accessories and stationeries.

Because we do not have computers, we write our reports on pieces of papers and also keep information on food service operators in books which can get torn or missing. These pieces of papers and books are filed or kept in cabinets for future references (Officer Mike).

Sometimes, money to even buy A4 sheets to write our reports on becomes a problem (Regulator Gloria).

Record keeping of information of the day to day activities on computers as soft copies helps in easy identification and location of documents. It could also aid in the smooth running and continuation during change-over of officers. One of the officers, Nathan explains that:

Since regulators are rotated yearly, a poor recording system may mean that successive regulators may not be kept sufficiently updated on events in their new offices.

However, for these regulators, funds were not readily available for the purchase of these office items. The lack of funds posed a significant challenge to the regulators. This could have a substantial effect on enforcers' efficiency to discharge their responsibilities appropriately.

In managing the financial resource constraint situation, some of the enforcers used their personal financial resources to either fuel their personal cars or to purchase stationeries for their office. Some of the regulators shared their personal experiences.

If I want to be active, I would have to fuel my own car and drive to units just to make sure that they are in full compliance. But I cannot travel outside Cape Coast because my car is not that robust and also can't fuel the car for a long journey (Regulator Naomi). Sometimes I use my personal money to buy stationeries such as A4 sheets, staplers and stapling pins for the office. I most often don't get my money back but I am not worried because I want the job to go on (Officer Mike).

With this mind set, enforcers demonstrated some level of commitment and resourcefulness to the work they do. Such resourcefulness has been found out to be of great importance because it has positive impact on job performance and heightens the growth and survival of organizations (Chalofsky & Krishna as cited in Forkuor, 2017). Invariably, Forkuor (2017) also found out that enforcers' use of personal resources was a dangerous phenomenon, as it increased the probability for corruption. He points out to the fact that since regulators were most often not given a refund on the monies they spend, they found a way of taking their monies back from those they regulate. Indeed, some enforcers could use this means to exploit operators by negotiating illegally upon the detection of non-compliance which under normal circumstance could have been settled using the appropriate legal means.

Lack of Personnel

Insufficient number of personnel was one of the main challenges encountered by regulators in the Metropolis. Enforcers unanimously reiterated that the human resource element was pivotal to ensuring the success of the food safety regulatory implementation and enforcement. Enforcers successively revealed that the number of personnel manning the affairs on food safety within the metropolis and the region as a whole was inadequate and as result hindered

the pace at which they paid advisory visit, conduct inspection and enforced the regulation. One enforcer explained that:

The number of staff responsible for enforcement and ensuring compliance is woefully inadequate. For instance, there are only four officers who are in charge of monitoring spot check for the whole Central Region. This number of staff cannot adequately cover a wide range of outlets within a particular time (Regulator Naomi).

Capturing other comments, James, one of the male officers indicated that: Food vendors are not the only people we regulate, there are other job specification allocated to us as well but we do not have enough officers. It becomes increasingly difficult to reach out to as many operators as possible with a particular time frame.

Limited number of personnel as indicated by enforcers suggests that regulators were not able to be at different locations at the same time. Regulators had to choose a particular location at a time for inspection and enforcement. This constrained regulators ability to devote enough time toward food safety regulation. This implies that in situations where enforcers are unable to visit and inspect operators regularly, non-compliant operators always escaped being noticed by regulators.

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Subsequently, to gain access to more food service operators, one regulator explained that:

Sometimes too if we realise that the work is more than the personnel available, we deploy staff from other departments for food safety inspection and enforcement (Regulator Gloria).

Thus, people who were not originally trained as food safety inspectors and enforcers were sometimes used for regulatory activities. Literature generally suggests that the use of people not originally trained in food safety inspection and enforcement creates a favourable means for ineffective food safety management and control. Nago (2005) in his study for example found out that the use of inappropriate personnel due to lack of adequately trained professionals actually prevented most of the institutions to carry out their control and enforcement tasks efficiently. They may lack the skill and knowledge to effectively evaluate and inspect food operations. It is suggested that if non- enforcer officers must be used, then they should be carefully trained and supervised (Nago, 2005; FAO, 2010).

Lack of Infrastructure

The study revealed that laboratories and storerooms for cooked food sample analysis were also not available. Equipped laboratory infrastructure with trained analysts to support the monitoring, surveillance and enforcement activities were also noted to be inadequate.

We need laboratories and then store rooms. If I say store room, we should have a store room with a refrigerator and then laboratories where we will be doing some food analysis. For instance, if we come around and we suspect that what you are selling might not be fit for consumption, we pick it and go to the laboratory and analyse it and come out with the findings. Since we do not have such a facility, we only look at how the food was prepared and presented for sale (Officer Gloria).

It must be emphasized that the need for a laboratory was not a general challenge to all the enforcement agencies. One of the regulatory agencies indicated that they had a reliable laboratory where processed and packaged food samples were tested and analysed for their chemical composition, safe limits and acceptance. Nonetheless, this laboratory services were not extended to the analysis of street food samples. Food samples (if taken) were normally analysed organoleptically (using aroma, taste, texture and appearance) for their safety. This contravenes the scientific basis upon which the safety of the food is to be determined.

Transportation

Given that enforcers' work involves frequent movements, the need for transportation was well emphasised. Recounting their challenges, some enforcers indicated that, access to transportation was one of their major hindrances to effective regulatory enforcement. Narrating their difficulty, Regulator Naomi said that:

Cars are not available. They are not. You know, for this unit whatever we do, we do it out of our pocket. Looking at our duties, at least we need if not one, two, or three vehicles. Because you will be here and they will tell you to check this complaint and even decide to check on other food vendors. Some of them are on medication and you want to find out and see if they have finished their medication before selling the food but because there is no car and no allowance for you to take car, sometimes following up on these is always a problem.

Another officer also remarked:

Our work demands that we cover a number of areas to ensure compliance, yet we don't have access to transportation and this makes our job difficult. Sometimes we have to use our own monies for transport to a particular area and later get a refund.

Pursuing further to ascertain whether the refunds were paid promptly, Regulator Nathan lamented that:

It takes a very long time before we get our monies back and this sometimes discourages us to continue doing that.

Comments from regulators coupled with the responses of some food service operators (in the previous chapter) as never received any form of inspection from enforcers demonstrates the extent to which the unavailability of vehicles limits the scope of regulatory activities. Moreover, the relative long length of time enforcers' use in redeeming their monies serves as a disincentive to visit and conduct inspections in outlying communities. Thus, operators who were regularly visited and inspected were those within and around the communities where these agencies are located. At best, the heavily concentrated areas such as

Kotokuraba and Abura got the attention of enforcers as moving from one place to the other on foot was not as difficult as areas where food operators were scattered. This was well encapsulated in this comment:

I mean we can't walk from here to Efutu, you can't go by public transport too; the public transport will put you at the car station but you need another car to move around to visit the units... but inspection and enforcement in areas such as Abura and Kotokuraba are easy because of the large number of food vendors there (Regulator Naomi).

This implies that food operators within these less concentrated areas are left on their own if vehicles are not available or enforcers are not motivated enough to do their spot checks on foot. For some of the agencies that had vehicles at their disposal, indications were that some of the vehicles were old and could not travel to remote and far reached areas. This has been captured in a comment made by an enforcer that:

We have two cars but one is dilapidated, old and it cannot withstand every terrain. We rely mostly on the good one... but even that it becomes difficult to use it not because it is broken down but sometime money to buy fuel is the problem (Regulator Naomi)

Other comments included:

How do we do detail work with two vehicles with one very old to be working in the whole Central Region? Meanwhile there are areas within the region that when we go we can't come back, we have to sleep over. So when we take the vehicle to that place it means that Cape Coast will be handicapped. Provide us with six more officers in addition to the four and three more vehicles and I can assure you that in the next six months food safety enforcement will be intensified (Regulator Naomi).

The concerns raised reveal that, transportation challenges faced by some regulators can limit the scope and slow down enforcement activities. It reduces the number of inspections, advisory visits and enforcement tasks that are likely to be conducted. This contributes to create a less personal contact and a weak bond between most operators and enforcers and is suggestive to encourage deviant behaviour among operators. This may confirm Hirschi (1969) social control theory which indicates that disconformity emerges in the absence of an external means of control (to enforce and threaten sanctions). It would be safe therefore to suggest that enforcers could have been able to do regular and effective inspection and enforcement if adequate vehicles or other means of transport such as the provision of allowances were available at their disposal.

Security

The need for security was well articulated by all the regulators interviewed. Security as explained by regulators means engaging security forces such as the police to offer protection during their encounter with food service operators. Enforcers argued that the need for security cannot be underestimated as some operators can be violent in their dealings with them. However, the degree to which security and protection was needed varied from one agency to the other. On

one hand, regulators from one agency intimated that the category of operators they regulate do not pose much of a problem though there have been a few operators who sometimes challenge their authority. The regulator arguably explained that the operators found in their "defined" category (hotels, restaurants and chopbar operators) are people who are most often trained and have over the years proved less aggressive and defensive. Their relative educational background, they further explained, predisposed them to have a better understanding and put into practice the requirements of the law. "*Most of these operators try to effect corrective measures pointed out to them*" (Regulator James). For these reasons, though they sometimes call for police escort, its use is minimal in their day to day activities.

Regulators from the other agencies on the other hand contended that attitudes of violence were sometimes demonstrated by some operators who did not seem to agree with enforcers on some corrective measures. "*These violent operators mainly see us as enemies and can therefore do anything possible*", an enforcer lamented. Sharing their ordeal, an enforcer described how tomato sauce (stew) was poured on him for telling an operator not to repeat a non-compliant behaviour.

The woman poured her stew on me, and told me that I always find fault with her even if she does nothing wrong. For this particular woman, she most often exposed her food to flies and other contaminants and when we try to correct her, she would say we are harassing her. All these serve as demotivation to us. It doesn't motivate us at all, because if you don't gather courage, you may not be able to go there again (Regulator Mike).

Another enforcer further explained their security threat as:

Yes, physical (chuckles) and verbal abuse are sometimes meted on us. Sometimes they even struggle with you if you suspect the food to be exposed such that it will be unsafe for human consumption and you try to cease it, they engage in physical scuffle with you. Sometimes they even pour the food on you (Officer Nathan).

There were also instances where regulators failed to enforce the law mainly because they felt unsecured. They had a belief that their safety was not legally guaranteed at certain times of the day (especially during the evenings). Some regulators indicated that as government officials, they were supposed to work within eight hours with an hour break.

As government officials, we work from 8 o'clock am to 5 o'clock pm. We are not covered thereafter. But unfortunately, it is in the night that you see some of these nasty things; fried fish exposed, bread exposed and a whole lot of things (Mike, Technical Officer). If we had the support of government to work in the night and some form of police assistance, we would have been able to regulate the activities of food vendors in the night. Those who sell in the evenings neither pay tax nor get inspected. They do everything at their own convenience (Nathan, male regulator).

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Thus, some regulators demonstrated the fear of being attacked by some violent food service operators since they lacked protection and the legal backing of the government. Consequently, lack of security transcends beyond regulators personal attacks and threats to their inability to effectively perform their responsibilities at certain times of the day. It is argued that legal assurance from the government for security and access to police assistance for protection could enhance regulators ability to effectively and courageously perform their duties and even extend their enforcement activities beyond the 'normal' work hours.

However, in the absence of police assistance, three of the regulators revealed that they managed to perform their responsibilities and overcame their security threats by being tactful and moving in groups of three or more. Being tactful as explained by two of the enforcers included:

You know these vendors are also human beings who would want to be respected and spoken to in a nice way even though they sometimes flout the laws. And so if you visit them and they are not complying, you don't have to be harsh on them. You will have to approach them nicely so that they will listen to you (Regulator Gloria).

You don't have to be always harsh on vendors, sometimes you would have to be friendly and also make them feel important small by explaining things to them the way they will understand. Some vendors may attack you if they think you want to undermine them (Regulator Mike).

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Moving in groups on the other hand was explained as:

When the vendors see that we are three or more, they realise that they cannot do anything at all and go scot free. With that they listen to you and try to do what you expect from them (Regulator Nathan).

This appeared to suggest an assault of an enforcer is most often dependent on the approach towards the operator. Therefore being tactful and moving in teams were some of the effective ways enforcers used to overcome their security challenges. Although this strategy is one way of turning operators' confrontation into cooperation in urban governance, it could also lead to other challenges such as ineffective regulation. This is because even though being nice and tactical as discussed earlier could possibly lessen the threats, it can at the same time weaken the main regulatory task that ought to be done.

Lack of Operators' Knowledge on Food Safety Issues

Insufficient food safety knowledge was also identified as one of the main challenges regulators faced. Regulators explained that food service operators' lack of knowledge in food safety issues trace back to how they acquired their education and training in food service production. In relation to this, three of the enforcers were of the view that most of the food service operators had acquired their food production skill through varied sources and therefore exhibited mainly how food safety knowledge was imparted.

Most of these vendors had their training from family members, an employer or through personal experience. Very few really demonstrate that they have been formally trained. These diverse ways of training demonstrates how knowledge in food safety was communicated. For instance, with the form of training through apprenticeship, apprentices only demonstrate what was observed and practiced without necessarily understanding why things are done in a particular way (Regulator Mike).

The culture of the work place may be absorbed without proper understanding. And so in situations where a 'master' did not see the need to wash hands after switching activities, this is also carried out by the apprentice who only observed and practiced. Likewise, if a master practiced appropriate behaviours, such would be carried out by the apprentices (Regulator James).

I am startled to see most operators handling food the wrong way. It looks like some of the vendors do not understand the kind of job they are in. You sometimes wonder where they received their food preparation training. They lack the knowledge to understand that improper food handling can cause diseases (Naomi, Technical Officer).

Despite the various ways of training received as indicated, attempts also made by regulators to educate and train operators through workshops, seminars and capacity building sessions in a bid to change the inappropriate mindset of some of

the operators, were most often not fruitful. Two of the enforcers revealed their frustrations.

Even when you call for a seminar or a workshop to educate or offer training, they don't come. They don't come because they think attending such programmes is time consuming and does not allow them to get their daily bread... they continue to do things their own way (Technical Officer, Naomi).

When you look at the number of the registered vendors and compare with the number of vendors that actually come for training, it is not encouraging at all. When you ask them too, they will tell you that, where they sell their food is far from where the programme is being organized and so leaving their food to employees to sell for them becomes a problem (Regulator Gloria).

Operators' unwillingness to participate in training sessions may be due to proximity to the training grounds. This could serve as a barrier. It is therefore suggested that education and training could be organised and broken down into independent sessions where operators could attend and leave at different times of the day. At best it could also be organised at areas where food operators concentrate most so that it becomes more convenient for operators to attend.

Further, three of the regulators offered reasons why operators' inadequate knowledge on food safety posed a problem and therefore a barrier to food safety regulation.

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Food safety knowledge is a prerequisite and therefore demonstration of poor knowledge on food safety is a potential obstacle for achieving the goal of consumer health protection. It is worrying to see most vendors do exactly the opposite of what they are expected to do (Regulator James).

We are worried to see some of the food vendors portray insufficient knowledge in food safety because food is one of the very few substances we consume directly into the human system which can either nourish the body or give you illness. If an operator is unaware of this, it poses a great danger to consumer health (Regulator Naomi)

Since maximum education and training is given to areas such as food handling practices during our visits and inspection, it was anticipated that most, if not all operators, will abide by these basic requirements but unfortunately, the reverse is the case in most operation sites (Gloria, Female Food Safety Regulator).

Despite the efforts of regulators through education and training, majority of the operators continued to exhibit ignorance in food safety issues. In fact, the issue of education and most especially training of food service operators had cost implication. It was found out that training sessions enforcers claimed to organise were not for free. An amount is always charged before an operator could participate. This was reiterated by an enforcer who said that "our training is not for free, it comes with a cost. The money we collect caters for the hand-outs,

posters, refreshment and other things" (Regulator James). In relation to this, another regulator conceded and was of the opinion that:

May be we the enforcement agencies are probably a contributing factor and part to blame for the unwillingness of vendors to participate in our education and training sessions. Training in food safety is not for free... and so some vendors find it difficult paying to participate in those sessions. Education however is free because we sometimes move around with our mobile van with the public address system to inform vendors to observe hygienic practices to forestall outbreaks. This is mostly done in the rainy seasons when the likelihood of foodborne disease outbreak is inevitable (Regulator Nathan).

Hence, the cost implication coupled with the voluntary nature of the training posed as a preventive criterion for operators not to engage themselves in such activities. In spite of these challenges, the officer concluded that:

We will not allow vendors non-compliant and insufficient food safety knowledge to discourage us from doing what is right. We will continue and even intensify our education and training to get their participation to achieving the common goal of public health

Other Challenges

Other challenges refer to the limitations that were not unanimously expressed by the enforcers. They were challenges that were not unanimously expressed by enforcers but were seen to be of importance to the study. These

limitations included lack of appropriate medical screening, political interference and lack of commitment from the judiciary. In relation to the issue on medical screening, an enforcer noted that the permission granted to food service operators to have their medical test at any health facility they deem fit was envisaged to create avenues for the presentation of fake medical health certificates. There was no avenue to check the authenticity of the medical health certificate because the agency did not have a link with most of the health facilities food service operators visited.

I personally do not agree that food vendors go to any hospital or laboratory at all to take the medical examination. Some of the vendors are bad and can arrange with some people to give fake result. A result could have the stamp of a particular clinic but may not be from the place indicated. The agency responsible for checking the laboratory results should arrange with and request food vendors to visit particular health facilities (Regulator James).

With regards to political interference, a concern was expressed that:

There are times that you will go and take action on very bad and destructive things that food vendors are doing but you only get a call to withdraw those things and that is number one and very key... Sometimes too, we are asked to drop cases just because it is an election year and government in power is soliciting for the votes of its citizenry. Because the government in power does not

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want to be seen in the bad light, non-complaint vendors are made to escape the rigors of the laws (Regulator Gloria).

Lastly, lack of commitment from the judiciary was expressed as:

We are trying so that all of us will eat wholesome and healthy food. In as much as we are trying to do this, we do not receive the needed support from the judiciary. The fines that are sometimes given do not deter offenders. If it is an amount that they can easily pull out and pay, then it will not deter any body, but if it is so heavy and very punitive enough, then that one you will be afraid to commit another offence. The lawyers too, when cases go to them, a case of a sort that borders on public health, they should not easily come in, they should allow people to face the laws and learn lessons... So you see we need assistance in that regard (Regulator Mike)

Summary

Barriers to regulatory enforcement cited include financial resource limitation, lack of personnel, lack of transportation, lack of security and lack of food service operators' knowledge on food safety issues. Studies from other parts of the world have shown similar results (Hutter & Amodu, 2008; Yapp & Fairman, 2004, Forkuor et al., 2017). These identified barriers to the implementation and enforcement of the laws could impede enforcers' ability to commit fully to the regulation of the food service operation. Enforcers' motivation to enhance effective food safety regulation could be achieved through

the allocation of adequate financial resources to the various regulatory agencies and adequate provision of means of transportation. Others include the provision of security at all times to safeguard the protection of enforcers in their day to day duties and regularly offering training to food operators to raise their awareness and knowledge on food safety issues.

CHAPTER EIGHT

COLLABORATION IN FOOD SAFETY REGULATION: EXPERIENCES AND CHALLENGES

Introduction

The strength of food safety governance as noted by Khalid (2016) is characterized by the effective partnership among the major stakeholders for the achievement of the common goal. The stakeholders are people who directly or indirectly interact and together are involved in ensuring the safety of the food consumed within the country. Their partnership is important to ensure consultation that builds a broad-based commitment and make the end result as achievable and effective as possible.

This chapter therefore explores the kind of partnership that exists among regulators. In addition, it assesses the kind of collaboration that occurs between regulators and food service operators. Finally, it examines the power relations that exist between the various stakeholders.

Existence and Nature of Collaboration Among Regulators

Collaboration in food safety regulation generally refers to two or more stakeholders working together to achieve the common goal of public health. In chapter five of the study, it was established that inspection, registration, licensing and enforcement among other duties were common and general to the regulatory agencies. In executing these common mandates, interactions and relationships both formal and informal are formed and contribute to and affect food safety regulation in several dimensions. As a result, there is an existence of a general interconnection and interdependency network of relations among the enforcement agencies. This interconnection and interdependence mostly manifests in information and resource flow. Thus, enforcers collaborate under certain circumstances, share information and combine resources to perform activities such as inspection, enforcement, education and training. These are further discussed.

Collaboration for Inspection and Enforcement

In dealing with the high incidence of foodborne outbreaks within the Metropolis and Central Region in general, especially during rainy seasons, interagency collaboration became crucial.

We try to make room for a joint inspection and enforcement of the regulation on yearly basis. We normally do this in the rainy season where the least unhygienic practice of a vendor could cause people to become either ill or to lose their lives (Regulator Naomi).

One of the enforcers narrated that during foodborne outbreaks such as cholera, the number of joint inspection and enforcement increases:

...like recently, when there was cholera outbreak, every day we were going to the field together (Regulator Nathan).

To curtail the occurrence of foodborne outbreaks on an annual basis, resources both human and material in the form of equipment and personnel expertise are pooled together by the various agencies and regulators collaborate directly or indirectly to ensure proper enforcement of the law during such times. During

such joint field work, regulators divide themselves into groups and cover different areas of the Metropolis, ensuring that food is warm and well covered, food is raised above the ground level (preferably on a table) and more especially, prevent food service operation close to open drains, refuse dumps and public toilets and emphasized on the use of potable water for food preparation. Enforcers believed that those are the breeding grounds for most disease-causing organisms.

Collaboration For Education And Training

Usually, collaboration for the training and education are in the form of workshops and seminars for food service operators within the Metropolis. This happens at least once or at best twice in a year. During this collaborative education and training period, announcement is usually made through the various media for operators to converge at a particular location, usually at the premise of the substantive agency organizing the training. Officials from Food and Drugs Authority, Ghana Tourist Authority and Environmental Health and Sanitation Unit take turns to address food service operators on the importance of observing personal and environmental hygiene, safe food handling practices and permit acquisition from the various agencies. Operators are also taught on the dangers that can possibly result when the laws governing their business are not properly adhered to.

Apart from the convergence at a particular location, periods are chosen from the beginning of the year where food service operators receive education at their vending sites. With detail elaboration, the official narrated that:

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During those periods chosen, we go round in teams to conduct education and training for food vendors at where they sell their food. Though it comes with a little hesitation from some of the vendors that they are busy, majority of them try to make time and listen to us. Depending on the number of days set aside for this kind of education, most food vendors are reached with the information (Regulator Nathan).

Probing to ascertain why the minimal number of times collaborative education and training occurred, an officer explained that:

...it happens once or twice because all the regulatory departments have a tight schedule. We all have to look at when we have less busy schedules to fix an appropriate day and time for the training. At times it so happens that when our agency is less busy, that will be when another agency is very busy with the day to day activities (Regulator Naomi).

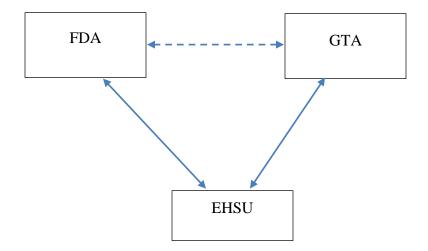
Another officer said that:

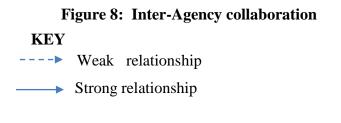
... Every agency is on its own. They have their budget and itinerary and we also have our budget and itinerary. We cannot put pressure on any agency for a collaborative activity. You know, for effective collaboration to occur, there should be the availability of certain resources and so where an agency is not ready in terms of resources, we cannot collaborate. However, in emergency situations where we need to converge and discharge our duties, we do that (Regulator James). Narratives from regulators depicts that there were no specific periods set aside for collaborative activity. Collaboration for education and training was mainly marked by the availability of resources and during emergencies (food safety incidences).

Collaborative Relationships

It was found out from the study that collaborative relationship among regulators on the one hand and between regulators and food service operators on the other hand ranged between strong and weak. Among the regulators, some of the agencies had strong collaborative relationships while others also had a weak or no collaborative relationship at all. Amid the strong and weak collaborative relationships, the study revealed that Environmental Health and Sanitation Unit played the pivotal role. The unit appeared to be the agency around which the other agencies revolved for collaboration. Both Food and Drugs Authority and Ghana Tourism Authority made reference to the Environmental Health and Sanitation Unit as their major collaborator. That is, there were major collaborations between Food and Drugs Authority and the Environmental Health and Sanitation Unit and between the Ghana Tourism Authority and Environmental Health and Sanitation Unit. Indications were that there was weak or no collaboration between Food and Drugs Authority and Ghana Tourism Authority. This is depicted in Figure 8. Figure 8 describes the extent of relationships agencies have with each other. The broken lines depict the weak or no collaboration that exist while the straight continuous line indicates the strong relationships that exist. Both enforcement

agencies depended on Environmental Health and Sanitation Unit in respect of their personnel.





The two regulatory agencies were of the view that Environmental Health and Sanitation Unit had the personnel who could in conjunction with their staff help facilitate the enforcement of the regulation. They indicated respectively that:

In terms of the human resource aspect, they relatively have the numbers, we are just a few.... so we fall on them because they have the men and we don't.

If there is the need for joint inspection and enforcement, we rather have discussion with Environmental Health and Sanitation Officers and then we get on with the inspection, they have the numbers in terms of personnel or human resource. In addition to the dependence on Environmental Health and Sanitation Unit for its personnel, one of the regulators further clarified that the unit was depended on for the provision of a suitability report. Suitability report is a document which indicates whether a food service operator satisfactorily meets the requirement for food service production. The regulator intimated that:

The Environmental Health and Sanitation Officers are the people we rely on for suitability report. They furnish us with detailed report, then we will go there and see the physical things available before we issue our license. So they are the people we mainly collaborate with.

There was no collaborative activity between the two regulatory agencies as none of them referred to each other in terms of doing something in common. This lack of collaboration among the two stakeholders had the potential to lead to challenges such as fragmentation, increased bureaucracy, increased cost of doing business and duplication of functions among them (FAO & WHO, 2003). While the two other agencies relied on Environmental Health and Sanitation Officers, the Unit also in turn relied on both Food and Drugs Authority and Ghana Tourism Authority for support in terms of resource materials and expertise for the education and training of food service operators:

We collaborate with both FDA and Tourism Authority for educational resource materials such as charts, fliers and handouts and also tap into their expertise for our education and training, seminars and workshop for food vendors. They are able to provide all these because they are national authorities and therefore have access to produce such resource materials.

The other people the three major stakeholders had to collaborate with from time to time were the police and Ghana Health Services (GHS) (see Figure 9). The assistance of police was normally sought when:

...there is the need for us to push for enforcement, especially during foodborne disease outbreaks. The assistance of the police is not an everyday practice (Officer James).

From the comment above, it appears that the services of the security agencies such as the police were only sought after when there was the need to correct an anomaly. The police officials are used to offer protection against violent operators as well as to enforce and ensure compliance. With the exception of Environmental Health and Sanitation Unit who relied on Ghana Health Services for the blood sample analysis of food operators, the other agencies had minimal or no collaboration with them. The Environmental Health and Sanitation Unit Official declared that: "…Ghana Health Service provides the unit with report on the health status of operators before we can issue a health permit to any food vendor".

Though the security services (the police) and the Ghana Health Services seemed to have major roles to play in the activities of food safety regulation, the regulatory agencies had weak or irregular collaboration with them.

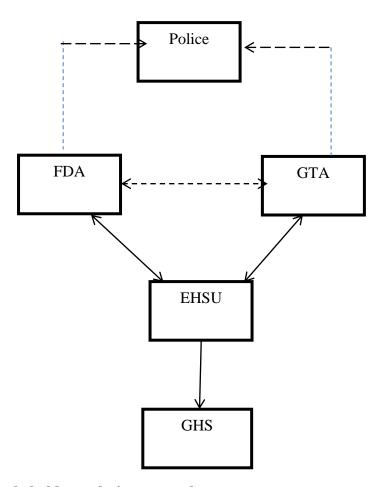


Figure 9: Stakeholders relation network

From the data collected for the study, there was no collaboration between regulators and food service operators. Regulators indicated that food service operators lacked vibrant associations that could represent all food service operators that regulators could collaborate with. Associations existed by name but defunct in nature. For this reason, food service operators mainly remained recipients of information and instruction. This concurs with the significant number of operators (of this study) who did not belong to any association. Thus, very few food service operators as part of this research belonged to an association.

Power Dynamics Among Regulators

The power dynamics among the enforcement agencies in this study appeared to be unilateral or horizontal. Unilateral in the sense that, all agencies operated independently and not necessarily, working under one another. Consistently, each of the regulators perceived each other as partners who had equal right and power to carry out its mandate. In soliciting their views on power play, an official from the Environmental Health and Sanitation Unit intimated that:

... in some time past, the other agencies thought they had power over us, but along the way, we all became aware of what our mandates were so that stopped. There were times that they thought this is what we have to do and we also thought ...ooh we also have to do this because we have the law. But there are some clear distinctions now. You may go to a hotel now and meet personnel from their place doing some kind of inspection, the same way you may also see us in the same hotel doing similar things. So sometimes when we go round for these food premise inspections, they say aah these people just came and you're also coming, and we are seen to be doing the same thing, but their mandate there is different from our mandate there.

Another regulator also retorted that:

... I don't know if there is anything like that, you see, we all have our role to play. They have their work to do and we also have our work to do, when it is time for us to come together, or even share ideas, we do, no agency subordinates another agency (Regulator James).

Emphatically, there was no evidence that points to the superiority of one agency over the other. This was attributed to the separate ministries under which the various agencies functioned. The individual regulatory officials maintained that: "our mandates come from different ministries with different legal backings and this is where our individual powers for food safety regulation are derived". This implied that agencies shared equal power right as that of the ministries they are attached to. Thus, since all ministries were autonomous, so were the food safety regulatory agencies.

The autonomous structure of the regulatory system however appeared to have some effect on how collaboration was organised and the extent to which agencies focused their regulatory activities on the various categories of the food related businesses. By their autonomous nature, collaboration for inspection, enforcement and education and training had no time specification on the calendars of agencies except in cases of foodborne outbreaks where the need for joint enforcement was apparent. No agency appeared to spearhead and coordinate the regulatory activities. Suggestively, spontaneous collaboration was a normal practice because each agency had plans and schedules devoid of a common consensus on collaboration due to their right and power to do so. In addition, the major regulatory emphases of some agencies on some categories of the food industry at the expense of others such as food hawkers and table-top operators'

were evident. One of the Environmental Health officials for instance opinionated that:

We share equal power right and common mandate to ensure the safety of food yet the focus of some of the agencies are mostly on processed foods, drugs, hotels and restaurants leaving out most of the regulatory activities of table-tops and food hawker to our outfit. Since we don't have the power to tell them what to do, government as the overall boss should advise them on their limited involvement in the regulation of street food because the number of people who eat on the street far out-number those who eat in the restaurants and hotels.

Thus, the focus and major regulatory concentration of some of the stakeholders on the formal food industry was suggested to hamper the effective food safety regulation especially the regulation of the informal food service operation.

Power Dynamics between Regulators and Food Service Operators

It has been observed by Khalid (2016) that food service operators are important stakeholders who have and share in the responsibility of ensuring the achievement of the common goal of public health through food safety regulation. Subsequently, their participation in food safety regulation has the potential to create better food safety governance. With regards to this, their involvement and extent of power possession in the food safety regulation process was sought.

It was revealed that despite the involvement of food service operators theoretically as stakeholders who share in the common goal of public health, they did not seem to share equal right in the food safety regulation. Relationship between regulators and food service operators was mainly marked by the payment for permit acquisition, taking directives and instruction and compliance. Food service operators possessed the least power and largely remained recipients of instructions and directives. Thus, the relationship between operators and regulators was mainly marked by a top-to-bottom relationship, with regulators assuming the ultimate power in the food safety regulation. Power relationship in inspection for instance was one that left operators with little or no room for exchange of ideas. Regulators appeared to assume an all knowing attitude in their interaction with operators.

Again, the possession of the laws coupled with the ability of regulators to rely on one another for joint inspection and enforcement over food safety incidence evidently demonstrates the typical example of the power flow between regulators and operators. Under these settings, the obvious power of enforcers over operators becomes manifest. As suggested by Edling, Farkas, and Rydgren (2013) the possession of the laws by regulators and the ability to reach out to and connect to one another strengthens the basis of the unequal power relationship rendering operators powerless. This powerlessness as intimated by Forkuor (2017) often leads to the arrest and prosecution of vendors. Forkuor (2017) in his findings describes how the voices of food operators were not heard during court hearing upon an arrest for a breach in food safety law. Similar to other study

findings, court cases often went in favour of the national regulatory agencies (Osei-Boateng, 2012). In such circumstances, food service operators were frequently frustrated and constrained to concede guilty of the offence charged against them by enforcers (Trade Union Congress, 2013). Consequently, court hearings are used as a frightening mechanism which accentuates the power variance between regulators and food service operators. This evidently displays the existence of the unequal power structure.

Nonetheless, food service operators as a whole have no influence or power in the food safety management system in the metropolis. They are not consulted with regards to issues that concern them. Food safety regulators do not see food service operators as effective partners in the food safety governance. This can partly be attributed to most food service operators taking little or no interest in the food safety regulatory affairs, that is, insufficiently interacting with enforcers and taking them to task.

Food service operators in the metropolis have largely remained recipient of directives and instructions instead of being regarded as equal partners. Because food service operators are not involved in the food safety decision making process, understanding the magnitude of food safety related issues has always been a problem (Ntiforo, 2000) thus, the attitude to always wait for enforcers to tell them what to do. Conscious efforts should therefore be made to consult and involve all stakeholders along the food value chain (from farm to table) in the development, implementation and evaluation of food safety regulation.

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Challenges of Collaboration

From the study, several challenges were also identified to have had an effect on the level of collaboration among regulators and between regulators and food service operators and hence had implication for food safety regulation. Firstly, the lack of collaboration among some of the major stakeholders appeared to pose a problem to effective food safety regulation in the Metropolis. Analysis of the previous sections of this chapter revealed a non-collaborative effort between two major stakeholders. The non-collaborative effort coupled with the acknowledgement of one of the stakeholders (Technical Officer James) that: "we have our separate mandate and therefore we normally do not rely on each other" was suggestive of an attitude that could obstruct the achievement of the common goal. Regulators are major and important governmental stakeholders who could play key roles and whose effective interconnection and interdependence could bring about a phase lift in the implementation, enforcement and compliance of the regulation and curtail the upsurge of the annual food safety incidences in the Metropolis.

Secondly, insufficient number of times allotted by regulators for collaborative activities appeared insufficient and therefore paved way for ineffective joint inspection, education and enforcement activities. The declaration and explanation of Enforcer Naomi that: *collaborative activities such as education and training happen once or twice in a year. This is because, all the regulatory departments have a tight schedule*" is one of the significant comments that indicates that food service operators did not receive enough training from

combined efforts of experts (though there were individual agency education and training) which could cause a change in food safety practices and attitudes. Just as collaboration for education happened on a few number of times in the year, collaborating for the other aspects of the food safety regulation activities were not forth coming or suffered similar setbacks. Frequent collaboration as well as combined resource and joint expertise for inspection, enforcement and education and training could enhance food safety regulation in the Metropolis.

The third challenge is related to the non-involvement of food service operators in the collaborative activities. Noteworthy is the fact that food service operators are themselves important stakeholders whose contribution cannot be easily ignored. As one of the relevant stakeholders therefore, their exclusion in deciding for instance the content of educational programmes, medical screening exercises and other regulatory activities is a major barrier to achieving effective food safety regulation. It is only prudent that their association leaderships (however insignificant they may be) form part of the decision making bodies and also participate in collaborative activities.

CHAPTER NINE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS Introduction

This final chapter focuses on the main issues that have been analysed and discussed. It presents the summary of the major findings of the study and describes the main conclusions drawn. Furthermore, it emphasizes the contributions of the study to both knowledge and practice and finally, highlights some recommendations which are relevant to the improvement of the regulatory practices in the Metropolis. With regards to this, the following objectives guided the study. The specific objectives were to:

- Assess regulators food safety regulatory activities
- Examine stakeholders' views on food safety regulation
- Explore the barriers to food safety regulation within the Metropolis
- Analyse the relational dynamics among stakeholders
- Explore the experiences of food service providers in their engagement with law enforcers'.

Multiple theoretical perspectives were synthesised to broaden the outlook of the study and this resulted in the use of both positivist and interpretive research philosophies where quantitative and qualitative techniques were legitimately combined in this single study. The techniques employed culminated into multimethod analysis, which helped to enhance the breadth and depth of the study.

Summary of Key Findings

The study revealed that food safety laws, codes and guidelines were not specific to the food service operation but were general and applicable to food processing and manufacturing firms and other food related operations. The generic context of the laws suggested a limitation to the dynamic nature of the food service operation.

Further, three main regulatory agencies are legally mandated to regulate the activities of food service operation in the Metropolis. This finding corroborates the multiple agency phenomenon practiced in most part of the world. However, challenges identified with the multiple agency system were fragmentation, duplication and increased cost of doing business.

The fragmentation of activities was seen in the issuance of license by every agency involved to the same food service operation. On duplication of functions, the regulatory agencies were noted to inspect and enforce the regulation on similar (if not the same) aspects of the food service operation. Increased cost of doing business resulted from the amount of monies food service operators had to pay in order to access the licenses from the various agencies before and during the food service operation.

Specific requirement of the food safety laws such as the Public Health Act, the Tourism Act and the local Government Acts were not known by food service operators. Rather operators had hazy ideas on some aspects of these Acts which in their opinion constituted the laws governing food safety. Knowledge about the specific laws was not sufficient to result in total compliance.

With regard to compliance of the food safety regulations, food service operators engaged in "limited compliance". They mainly complied by carrying out instructions from food safety enforcers. Complying only when instructed may not lead to and is insufficient for full compliance as enforcers may not be available at every stage of the food preparation and handling process to correct food safety anomalies.

Varied motivational reasons accounted for food service operators' perceived compliance to rules and regulations. Moral, legal and business reasons were cited. Moral reason relates to the prevention of food contamination and diseases and family members eating the same food sold. Legal reason pertains to the requirement of the law while attracting and maintaining customers defines the business reasons.

Although it is difficult to ascertain the truth as to whether these motivational reasons translated into appropriate food handling practices, it may be safe to suggest that some food service operators may not have held true to these motivational reasons as often as possible since the effect of food safety incidence is felt on an annual basis.

The study further identified some barriers which hindered effective implementation, enforcement and compliance to rules and regulations. Barriers cited included financial resource limitation, lack of personnel, lack of transportation, lack of security and lack of food service operators' knowledge on food safety issues. These identified barriers impeded enforcers' ability to commit fully and effectively to the enforcement of the regulation.

The study finally, found out that collaborative relationship among regulators on the one hand and between regulators and food service operators on the other hand ranged between strong and weak. Among the regulators, some of the agencies had strong collaborative relationships while others also had a weak or no collaborative relationship at all.

Amid the strong and weak collaborative relationships, the study revealed that Environmental Health and Sanitation Unit played the pivotal role. The unit appeared to be the agency around which the other agencies revolved for collaboration.

Food and Drugs Authority and Ghana Tourism Authority made reference to the Environmental Health and Sanitation Unit as their major collaborator. That is, there were major collaborations between Food and Drugs Authority and the Environmental Health and Sanitation Unit and between the Ghana Tourism Authority and Environmental Health and Sanitation Unit. Indications were that there was weak or no collaboration between Food and Drugs Authority and Ghana Tourism Authority.

Conclusions

Food safety issue has been and is still one of the major public health concerns nationally and more specifically, the Cape Coast Metropolis. This study confirms the involvement of major stakeholders such as the regulatory agencies and the food service operators who are mandated by law to ensure the safety of the food consumed. However, these laws were found to be general and applicable to the street food service operation and the other food producing firms. Thus, the laws do not address the dynamics, nor capture the varying ways and modes of the food service operation in the metropolis.

Though Food and Drugs Authority, Ghana Tourist Authority and Environmental Health and Sanitation Unit had a common responsibility in food safety regulation, Environmental Health and Sanitation Unit played the central role and was identified by most food service operators as the main regulators known to them. This indicated the non-visibility of the regulatory activities of the other agencies in the Metropolis. Though Environmental Health and Sanitation Unit played the lead role, the day to day food safety inspection and enforcement was only a portion of their main activities. Thus, they performed other duties that are not related to the regulation of the food service operation. In effect multitasking has an effect on specific task completion which in turn has an effect on the overall organizational productivity.

Most food service operators had a firm conviction that they were in compliance because they carried out instructions and directives from regulators who came round to inspect, advice and enforce the law. Motivations to comply

were based on three main reasons; moral, legal and business reasons. Amongst these, the legal motivation appeared the least reason for compliance. This to an extent implied a disregard or inadequate awareness about the laws and their sanctions.

Barriers to regulatory enforcement cited include financial resource limitation, lack of personnel, lack of transportation, lack of security and lack of food service operators' knowledge on food safety issues. These identified barriers to the implementation and enforcement of the laws impede enforcers' ability to effectively commit to the regulation of the food service operation. Effective food safety regulation could therefore be achieved through the allocation of adequate financial resources, adequate means of transportation, provision of security at all times to safeguard the protection of enforcers and regularly offering training to food service operators to raise their awareness and knowledge on food safety regulations and other related issues.

Recommendations

From the study it is recommended that:

Government, ministries and regulatory agencies should undertake

 a detailed review of the existing laws and possibly develop an
 appropriate and realistic laws to meet the dynamics and contextual
 requirements of the food service operation and to ensure its fitness
 of purpose in line with the principles of 'good regulation'

- Government adopts the single agency phenomenon as the more appropriate system where the relevant bodies responsible for food control along the value chain will be located in one agency and under the same management, making way for quicker and effective response.
- To maintain the multiple agency system on the other hand, roles and responsibilities should be clearly defined and well-coordinated to avoid fragmentation, duplication of activities and increased cost of doing business.
- Government should ensure effective collaboration among the major stakeholders on all aspects of inspection, enforcement and education and training of food service operators.
- Government provides the regulatory agencies with the appropriate and efficient resource materials needed to effectively carry out their mandate as required. Appropriately resourcing these agencies can serve as a source of motivation and also help to reduce cases of perceived extortion and harassment of food service operators.
- Since environmental health officers are used for food safety regulatory enforcement, they should be properly trained in food safety issues and equipped with the expertise to identify critical areas of possible contamination. This in turn will enable them educate food service operators on how to control those critical

points and eventually provide food that is safe, hygienic and healthy enough for public consumption.

- Regulatory officials from Food and Drugs Authority, Ghana Tourism and Environmental Health and Sanitation Unit should provide effective education on the specific requirements of the laws before food service operators are given the permit to operate their business. The specific legal requirements can be made in a brochure form and distributed to operators during the permit acquisition and education and training periods. This can help curb the attitude of waiting to be instructed before complying with rules and regulations.
 - Specific health care facilities should be chosen to cater for the health certification of the food service operators. The Metropolitan Health Directorate could be employed in the selection of qualified laboratories and also serve as resource persons and partners whose expertise and knowledge could be tapped for the education and training of food service providers. The Environmental Health and Sanitation officials should seek to establish partnership relationship with Metropolitan Health Directorate and the chosen laboratories so that they can serve as the mouth piece in communicating the health implications and hazards of noncompliance to food safety.

- Food vendors in Cape Coast should be encouraged by the regulatory agencies to form trade association so that such associations can serve as intermediaries to assist their fellow vendors in understanding the requirements that they need to comply with in order to curb the high incidence of foodborne related diseases.
- Finally, food service operators' should be taken on by the regulatory agencies as partners whose inputs will be considered in the review/development, implementation and evaluation of food safety laws.

Contribution to Knowledge

In general, the data collected in this study, largely confirmed earlier findings on the subject matter. Nevertheless, some previously unknown information has been generated and has been discussed in this section under empirical findings.

Empirical Findings

The findings of this study showed similarity with the known literature and these similarities have been highlighted earlier in the text where those findings were made. There were, however, a few issues which had not been addressed by the literature for which no information is available and these constitute this study's contribution to what is known about the topic. The limitations placed upon generalisations from the study notwithstanding, its findings have contributed modestly to the literature or existing knowledge and methods in few areas.

First, though there is a plethora of studies on the topic, the available literature has been focused on a generic definition and issues on food safety often from one perspective (most especially from food handlers' point of view). In this study, an attempt was made to identify the regulatory framework and explore the different types of stakeholders and their views on food safety regulation.

Another contribution this work has made is in the area of identifying some of the barriers that hinder effective food safety regulation in the Metropolis. It was found out that the annual upsurge of food safety incidence in the Metropolis was not only as a result of food service operators' lack of knowledge and noncompliance to rules and regulations but also from the ineffective inspection and enforcement of the food safety regulations by the regulatory agencies as a result of resource challenges they face. Though this might have sounded straightforward, the identified challenges represent perhaps, the only of its kind which shows the degree of limitations to food safety regulation. Thus, the findings lend at least, the first empirical basis for any statements about the limitations to food safety governance in the Metropolis.

Finally, this work has contributed to the identification of both the strong and weak network relations that exist among governmental stakeholders and between governmental stakeholders and food service operators. The most significant is the disjointed collaborative effort that exists among regulators. Only one regulatory agency served as the pivotal point around which the other agencies preferred to revolve because of the firm believe that it is only that agency that had the adequate human resource factor necessary for a collaborative task. Collaboration between food service operators was weak and at best, non-existent because food service operators lacked the representation of significant and unified associations by whom regulatory agencies could collaborate with.

Suggestions for Future Research

Research is conducted partly so that new problems are discovered (Shillinglaw & Thomas, 1998). Consequently, the following avenues have been identified for further exploration.

The study suggests that a longitudinal and comprehensive study is conducted to gather data on the activities of both enforcers and food service operators using observation as part of its data collection techniques. This will enable the effective analysis and comparison between self-reported data and the actual practices of both the regulators and food service operators.

It is recommended that a comparative study is conducted to ascertain whether there exists a significant difference between the perception and experiences of the formal and informal food service operation towards food safety regulation.

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APPENDIX 1

UNIVERSITY OF CAPE COAST

DEPARTMENT OF HOSPITALITY AND TOURISM MANAGEMENT

QUESTIONNAIRE FOR FOOD SERVICE OPERATORS

Dear Sir/Madam,

This information is being solicited in connection with a post-graduate degree study on the topic Food Safety Governance in Ghana in the Cape Coast Metropolis, Ghana. The study seeks to find out the level of interaction and experiences of food service establishments in their engagement with the enforcement agencies. You are therefore being invited to share your views on the issues under investigation. The responses will be used for purely academic purposes. Your confidentiality is greatly assured.

Thank You

SECTION A: EXPERIENCE WITH THE PROCESS OF LICENSE ACQUISITION

1. Do you have license to operate the food service business? Yes [] No []

(If no, skip to item 8)

2. Did you acquire the license before the commencement of your business?

3. What steps must a food vendor go through to acquire a license?

	ow would	i you des	ende die prov		or the	4. a. How would you describe the process in terms of the					
b. cost											
c. com	plexity of	r simplici	ty								
4. Was	there sup	pport at e	very stage of	the process?	Yes []] No []					
b. I	f yes,	what	support	did you	u get f	rom enfo	orcers?				
c.	If	no,	indicate	the	stage	you	had				
					0	•					
5. In ye	our opini	on, is the	process well	publicized?							
6.	Is	th	e rec	quirement	well						
6. 7. On	Is a scale	th of 1-5	e rec how would	luirement	well he publicity	publi of the pre-	cized?				
6. 7. On 8.	Is a scale If	th of 1-5 	e rec how would why do	juirement you rate t n't you	well he publicity have	publi of the pr	cized? ocess?				
6. 7. On 8.	Is a scale If	th of 1-5 	e rec how would why do	quirement you rate t	well he publicity have	publi of the pr	cized? ocess?				
6. 7. On 8.	Is a scale If	th of 1-5 	e rec how would why do	juirement you rate t n't you	well he publicity have	publi of the pr	cized? ocess?				
6. 7. On 8. 	Is a scale If	th of 1-5 no,	e rec how would why do	juirement you rate t n't you	well he publicity have	publi of the pro a lio	cized? ocess? cense?				
6. 7. On 8. SECT ENFO	Is a scale If ION B: I RCERS	th of 1-5 no, F OOD SI	e red how would why do ERVICE OP	juirement you rate t n't you	well he publicity have ENGAGEM	publi of the pro a lic ENT WITH	cized? ocess? cense?				
6. 7. On 8. SECT ENFO	Is a scale If ION B: I RCERS	th of 1-5 no, F OOD SI	e red how would why do ERVICE OP	juirement you rate t n't you ERATORS I	well he publicity have ENGAGEM	publi of the pro a lic ENT WITH	cized? ocess? cense?				
6. 7. On 8. SECT ENFO	Is a scale If ION B: I RCERS	th of 1-5 no, F OOD SI	e red how would why do ERVICE OP	juirement you rate t n't you ERATORS I	well he publicity have ENGAGEM	publi of the pro a lic ENT WITH	cized? ocess? cense?				

10. How did you come to know of these rules and regulations?

.....

.....

11. Do you comply with these rules and regulation?

12. How do you comply with the rules and regulation?

14. What factors motivate you to abide by these rules and regulation?

15. Mention the entire regulatory agency(ies) you know that ensure food safety in Ghana?

.....

SECTION C: ACTIVITIES OF FOOD SAFETY ENFORCERS

16. How many times do you come into contact with the enforcer(s) per year?

17.

Items	Response		
	Yes	No	
Do enforcers conduct inspection of the food preparation and			
service area?			
Do enforcers conduct inspection on personal hygiene?			
Do enforcers collect food samples for lab analysis?			
Do enforcers provide feedback on inspection of food preparation			
and service area?			
Do enforcers provide feedback on personal hygiene?			
Do enforcers provide feedback on food samples collected for lab			
analysis?			
Do enforcers do a follow up on advice and negotiations made?			
Does their visit distract your food vending business?			

18. Briefly describe how the inspection of the food preparation and service area is done

19. How is the inspection on personal hygiene done? 20. Have you ever been cautioned (verbally or written) by any of the enforcement agencies for not meeting the food safety measures? Yes [] No [1 21. If yes, what misconduct cautioned on? on were you 22. Did you make the necessary arrangement to put in place measures that could encourage food safety? Yes [] No [] 23. What measures did you specifically put in place? 24. Have you ever been fined? Yes [] No [] 25. If yes, which of the enforcement agencies fined you? 26. Why were you fined? 27. fine? How much was your 28. Has your outlet ever been closed down? Yes [] No [] 29. If yes, why was the place closed down? 30. What processes did you go through before you were reinstated?

31. Generally, how do you perceive your encounter with food safety enforcers?	
32. Are you satisfied with their encounter? Yes [] No []	
33. If no, what do you recommend?	
SECTION C: Self-Regulation	

34. Do you belong to any Trade Association in relation to your food service business?

1. Yes []			2. No []							
			asso				-		-	
			why		-			-		
	•		iy times d	•	-					
adhe	red to?		ssociation							
39. V	What is	the cod	e of pract	ice gove	rning the	e assoc	ciation?			
40. V	Who en	sures th	e adheren	ce to the	code of	practi	ce?			
41. V	What ha	appens t	o a vendo	r who vi	olates th	e code	e of prac	tice?		
			ou satisfi							

43. If no, what should be done						
44. Generally, what is your im enforcement in Ghana?	pression about food safet	y regulation and				
SECTION D: PERSONAL F	PROFILE OF RESPON	DENTS				
45. What is your age?						
46. What is your sex?	Male []	Female []				
47. What is your highest educational level?						
1. Primary school []	3. Secondary School /T	ech/Vocational []				
2. Middle school/ JSS []	4. Tertiary []	5. Others, specify []				
48. At what level did you have professional training in food production?						
49. How long have you been o						
50. How many times do you u your work per year?	ndergo medical examinat	ion in connection with				

Thank you for your cooperation.

APPENDIX 2

UNIVERSITY OF CAPE COAST

DEPARTMENT OF HOSPITALITY AND TOURISM MANAGEMENT

INTERVIEW GUIDE FOR FOOD SAFETY ENFORCERS

Dear Sir/ Madam

This information is being solicited in connection with a post-graduate degree study on the topic: Food Safety Governance in Ghana: A Study of Cape Coast. The study seeks to find out the role of enforcement agencies in ensuring the safety of street food, the interaction among enforcers and between enforcers and food vendors. You are therefore being invited to share your views on the issues under investigation. The responses will be used for purely academic purposes. Your confidentiality is greatly assured.

Thank you.

Questions

1. What are the laws/regulations on food safety in Ghana?

2. What operative law do you use the most?

3. What does the law say about safe food management with regards to food service establishments? Can I have a copy?

4. Could you please tell me the main activities you engage in to ensure safe food management?

5. How regularly do you carry out these activities?

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6. In your view, is the legislation on food safety adequate to protect public health?If not adequate, what do you suggest?

7. On a scale of 1-10 what is your assessment on the level of enforcement of the

law? (Probe for explanation)

8. What do you consider to be the key factor(s) influencing consistent and appropriate food law enforcement?

Enforcers View on Food Safety Compliance

9. What are the requirements and processes needed to operate as a food service provider?

10. How do you view the processes? Probe for complexity and simplicity, duplication of process and degree of freedom to complete the process.

11. How do you ensure that all operators fulfill those requirements and processes before starting their trade?

12. How do you address situations in which you come across vendors who are unlicensed?

13. Are you satisfied with the level of compliance to food safety regulation among food vendors?

14. On a scale of 1-10 how would you rate compliance with food safety measures among food service operators?

Challenges of Food Safety Regulation

15. What resources do you need to be effective?

16. To what extent are they available?

17. What areas do you require more resources in order to enforce food law more effectively?

18. What challenges do you encounter in carrying out your regulatory activities?

19. How do these challenges affect you as an individual and as a food safety regulator?

Collaboration among Food Safety Agencies

20. Apart from your agency, who are the other stakeholders in the food safety

management in this country?

21. Who are the other enforcers?

22. Have there been instances where your agency has had to interact with other enforcers? (Probe for)

a. Frequency of engagement

b. Cordiality

c. Competition

23. How does power and power influence come to play in the interaction among the agencies? Which agency has the major and final say?

24. Are there instances of overlapping mandate among enforcers? How are they resolved?

25. Are there conflicts between you and the other agencies? If yes, how are they resolved?

26. Are you satisfied with the kind of coordination that exists between your agency and the other stakeholders? If no, what do you think should be done?

27. What role do other stake holders such as trade associations and private institutions play to help regulate the activities of food service establishments?

Relational Dynamics between Enforcers and Food Service Operators

28. How do vendors perceive your encounter? Probe for hostility, cordiality, fault finding.

29. How do you also perceive your encounter?

30. How does your agency motivate vendors to abide by rules and regulation?

31. Do the operators pose any challenge? If yes, what kind of challenges do you

face from interacting with the operators?

32. Do you have special ways of dealing with vendors?

Exiting Questions

Per your estimation, where would you place the effectiveness of Ghana's food safety regulation?

Anything relevant to the study which the researcher should know?

Thank you for your co-operation.