

**THE PERCEPTION OF PURCHASING CLERKS IN QUALITY CONTROL
MANAGEMENT PRACTICES IN THE COCOA INDUSTRY IN GHANA: THE
CASE OF JUABOSO DISTRICT**

by

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DECLARATION

I hereby declare that this submission is my own work towards the Executive Masters of Business Administration and that, to the best of my knowledge, it contains no material Previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

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ABSTRACT

Ghana is one of the major producers of cocoa in the world. The crop contributes to about 22% of Ghana's Gross Domestic Product. Quality determines the value placed on a product. Therefore the value that will be placed on Ghana's cocoa will be determined by its quality. However there are instance where Ghana cocoa is rejected for reasons of not meeting quality standards. The study therefore seeks to assess the perception of purchasing clerks toward quality control management practices in the Juaboso District of western region. The significance of the study is to help policy makers of the industry to involve purchasing clerks in quality management practices. Related literature was reviewed in connection with the topic. The study was a descriptive study and the population was purchasing clerks. The sampling technique used was a non-probability sampling and specifically purposive sampling was used. The sample size for the study was 54. Data was collected using both primary and secondary approach. Questionnaire and interview were the main research instruments. The data was analyzed using SPSS and the main findings were that. Majority of the purchasing clerks do not have knowledge about operational guidelines. Most of the purchasing clerks have not been given any effective training when they were employed. The recommendations made were that there should be effective training of purchasing clerks in relation to quality control issues. Also, purchasing clerks should be given operational guidelines to help them function effectively.

DEDICATION

This work is dedicated to the Almighty God, who is my source of inspiration. My dear parents, wife and children for their love and support.

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My most sincere gratitude goes to the almighty God for the gift of life and divine wisdom without which this project would not have been complete.

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I am however singularly, responsible for any weakness or limitations in this work.

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ACRONYMS

CMB – Cocoa Marketing Board

COCOBOD – Ghana Cocoa Board

CMC – Cocoa Marketing Company

ICCO- International Cocoa Organisation

QCD – Quality Control Division

PC – Purchasing Clerks

LBCs – Licensed Buying Companies

CRIG – Cocoa Research Institute of Ghana

CSSVDCU – Cocoa Swollen Shoot Virus Disease Control Unit

SPU – Seed Production Unit

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The popular saying cocoa is Ghana and Ghana is cocoa illuminates the importance of cocoa production in Ghana (Ministry of Finance and Economic Planning, 2009). Ghana is one of the major producers of cocoa in the world and the sector employs millions of people. It is not only small scale farmers that depend on the earnings from cocoa but the entire Ghanaian state (ICCO, 2006). The crop contributes about 3.4% of the Gross Domestic Product annually and average of 29% of the revenue between 1990 and 1999 and 22% between 2000 and 2002 (Ministry of Finance and Economic Planning, 2009).

Quality determines the value placed on product. Thus, market determined premiums in commodity markets are based among other factors on quality perceptions. In cocoa, it is not just a perception; it is the reality (Quality Control Handbook, 2007).

Total quality management (TQM) is a “commitment to continuous improvement of quality” not just in industry but also totally in society (Gana, 2008). He stated the fact that, this idea can be further divided into three basic concepts, they are:

- Customer satisfaction
- Defect prevention
- Employee participation

The development of information technology has also turned the world into a global village. The expectations of customers all over the world keep changing to the extent that organizations and industries now face a kind of competition that was not envisaged a few years ago.

For organizations and industries to survive in today's competitive environment, there will be an urgent need to improve upon the quality of product and services they offer. Recent studies on the subject of Total Quality Management and some other contributions on related subjects have indicated that there exist considerable potential benefits in implementing TQM. It seems however that the awareness of the concept and its principles is still very low and therefore not much has been done to actualise the benefits. For organisations that have attempted to implement TQM, the results do not seem to support the effort.

Quality can be thought of as “providing customers with high quality goods and services that go beyond the expected” (William et al, 1999). Quality control on the other hand is concern with defect detection by using post production inspection procedures. Statistical quality control techniques such as acceptance sampling are used by quality control inspectors to control quality of product. Quality experts have further tried to define the quality problem as dissatisfaction with a service or product or failure to achieve the expected standard (Gana, 2008).

Even though customers are the driving force behind the process, without total employee involvement the total quality management effort will become futile. Methods need to be

adopted to stimulate total involvement and move toward the common goals of systematic and continuous improvement in the quality of goods and services with the ultimate aim of satisfying customers, employees and stakeholders.

It is a well known fact that cocoa is the bed rock on which the economy of Ghana rest. No other country comes to mind more than Ghana when one speaks of cocoa. And Ghana cannot be thought of without reference to its cocoa sector, which offers livelihoods for over 700,000 farmers in the southern tropical belt of the country. Cocoa continues to be one of Ghana's main exports and has been central to its debate on developments reforms and poverty alleviation strategies since independence in 1957. Having emerged the leading producer in the world, Ghana experienced a major decline in production in the 1960s to 70s, with a near collapse of the sector partly due to issues concerning quality of the beans (Shashi et al, 1978). Consequently, the quality control division now Quality Control Company limited of Ghana COCOBOD has been set up in 1991 to see to the quality check of cocoa beans at the farm gates, depots and the ports by staff of the division (QCD Handbook, 2007).

A presentation at the African cocoa summit under the team 'challenges of quality standards in the cocoa industries', the then Chief Executive of Ghana COCOBOD Mr. Isaac Osei in his introductory remarks stated 'quality determines the value placed on a product. Thus market determined premiums in commodity markets are based among other factors on quality perception. He argued that, it is not just the perception; it is the reality. The different marketing systems we have today have often produced differential effects at assuring quality of produce. It is important that, Ghana maintains the confidence and trust of its external and

local buyers. The biggest challenge is to ensure consistency in the quality of cocoa that is supplied. This implies that cocoa farmers must continue not only to adhere to and adopt good agronomic practices but improve upon whatever good cultural practices they are currently applying.

However, the success of all quality control practices depends on a large extent on the involvement of purchasing clerks who deal directly with the cocoa farmers to examine cocoa beans to ensure that they are of the required quality; the beans must be thoroughly dried, devoid of foreign matter, not germinated, not mould, not slate, not weevil infested and not smoky. The purchasing clerk must also ensure that jute sacks are labeled with appropriate inscription. Thus, Ghana Cocoa Board, Produce of Ghana and Station Marks, segregate the beans into uniform bean sizes, bulk all cocoa one lot and re-bag into labeled sacks, sew as recommended and evacuate to district depots for grading and sealing.

1.2 STATEMENT OF THE PROBLEM

In 1991, the Quality Control Division (QCD) came into existence as a result of the revitalization exercise in the cocoa industry. Based on the out-turn reports for buyers on quality of produce, the activity of the division was intensified. The international cocoa standards required cocoa beans of merchantable quality to be fermented, thoroughly dried, free from smoky beans, free from abnormal or foreign odour and free from any evidence of adulteration. In fact, it must be reasonably free from living insects, broken beans, fragments and pieces must be seasonably uniform in size.

Throughout the world, the standard against which all cocoa is measured is that of Ghana's Cocoa. Cocoa from Ghana continues to enjoy high premium on the world's commodities markets because of its high quality. The status has been diligently maintained, over the years through the effective quality control practices of the Quality Control Division of the COCOBOD (ICCO, 2006).

The Quality Control Division is responsible for maintaining the quality of cocoa and to achieve its objective of ensuring the maintenance of the high quality of produce, various activities are carried out by the division. The success of which depends to a very large extent on the farmer and the purchasing clerks who purchase the cocoa beans from the farm gates. It is therefore important that the purchasing clerks accept the concept of quality management practices as best for the quality of cocoa. The purchasing clerks must have the requisite knowledge of the operations of the cocoa industry. They must have training in recognition of defective beans, analyses and determining grade of cocoa, and storage hygiene of cocoa.

However, in most cases, there are instances of rejection of cocoa beans both at the Tema and Takoradi ports and even the world market by virtue of the fact that the beans are not of acceptable quality. For instance, in 2002/2003 crop year, purple coloration in prepared cocoa beans became a national threat to the quality of Ghana's cocoa (QCD Newsletter, 2006) . Also, a report by the International Monetary Fund (IMF) indicated that the premium paid for Ghana's cocoa on the international market had declined because chocolate manufacturing companies have developed new technology to compensate for quality difference in cocoa beans (IMF, 2000). It is for this reason that, the researcher seeks to find out whether purchasing clerks are really co-partners in quality issues in the cocoa industry in Ghana.

1.3 OBJECTIVE OF THE STUDY

1.3.1 General Objectives

The main objective of this study is to assess;

The perception of purchasing clerks of Juaboso District towards quality control management practices.

1.3.2 Specific objectives

- i. To examine the extent to which purchasing clerks are being offered some training in quality control issues;
- ii. To determine the extent to which purchasing clerks are involved in quality control practices;
- iii. To find out the perception of purchasing clerks on quality control activities.

1.4 RESEARCH QUESTION

From the forgoing analysis, the research seeks to investigate the following questions.

- a. Are purchasing clerks given any training in quality control practices in the industry?
- b. To what extent are purchasing clerks' involved in quality control practices in the cocoa industry?
- c. What is the perception of purchasing clerks on quality control activities?

1.5 SIGNIFICANCE OF THE STUDY.

This study would be of benefit to the Quality Control Division of Ghana COCOBOD, Ghana COCOBOD, Cocoa Marketing Company limited, license buying companies in Ghana, future researchers in quality control in the cocoa industry and nongovernmental organizations. The finding of this search would enable the management committee of Quality Control Division to have insight into the activities of the purchasing clerks in license buying companies and to enable them plan proper instruction and programmes related to the theory and practices of quality control management in the industry and to periodically organize educational programmes for farmers and purchasing clerks on the preparation and marketing of good quality produce.

Cocoa marketing companies that receive cocoa on behalf of COCOBOD based on the findings of this study would in conjunction with the Quality Control Division put in place appropriate measures to ensure that the right quality cocoa is received at the port. In this vain it would ensure that proper and thorough instruction in the concept of quality control would continue to be given to purchasing clerks and farmers who handle cocoa at the farm gates. Based on the finding of this research, Ghana COCOBOD through the Quality Control Division would be able to put in place programmes in the practices of Quality Control in cocoa in all license cocoa buying centers nationwide. This would go a long way to renew commitment in supervision, control and even certification of Licensed Cocoa Buying companies. The Licensed Cocoa Buying companies will also benefit from this research. They will have information as to the kind of training to give its purchasing clerks which will go a long way to reduce discrepant cocoa at the various ports.

Finally, the result of this research study would add up to existing literature on quality control practices in the cocoa industry in Ghana.

1.6 DELIMITATIONS

The study is delimited to the perception and attitude of purchasing clerks of the Juaboso District in the Western North. It is also delimited to the knowledge of purchasing clerks in Quality Control Activities and also to the training given to the purchasing clerks in Quality Control Management practices.

1.7 LIMITATIONS

Time and financial constraints are major limitations to the study. With regard to time, the volume of academic work and the limited time at the researcher's disposal to carry out the study was not enough for the study.

1.8 ORGANIZATION OF THE STUDY

Chapter one includes the background to the study, statement of the problem, objectives of the study, significance of the study among others. Chapter two contains a detailed review of the existing literature on quality of cocoa. The third chapter dealt with the methodology, research design, population, sampling technique data collection procedures and the analysis of data collecting procedures. The fourth chapter introduces the research findings and results based on the feedback from the research instrument. Finally, chapter five includes the summary, conclusion and recommendations appropriate for policy direction and future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 THE CONCEPT OF PERCEPTION.

Davidoff (1987) saw perception ‘as the process of organizing and interpreting incoming sensory data (sensations) to develop an awareness of surroundings and self’. ‘Perception involves interpretation’.

Sternberg (1998) also defined perception as ‘the set of psychological processes by which we recognize, organize and receive environmental stimuli’. Sternberg (1998) further observed that “‘ perceiving is a three stage process consisting of a sensory stage in which sensory information is coded and analysed, a perceptual stage and classification stage in which identification and categorization takes place”.

Davidoff (1987) asserted that perception is a cognitive process, a way of knowing about the world’. Perception is a point where cognition and reality meet and perhaps, the most basic cognitive activity out of which all others emerge. Thus perception is a complex process that depends on both the surrounding world and the perceiver (Davidoff, 1987). Wortman, et al (1992) has observed that psychologist have traditionally differentiated between sensation and perception. Sensation is the process whereby stimulation of receptor cells (in the eyes, ears, nose, mouth and surface of the skin) send nerve impulses to the brain, where they register as a touch, sound, taste and splash of color and so forth. “Perception in contrast is the process whereby the brain interprets sensation giving them order and meaning.”

Currently two major theories of perception exist: constructive perception and direct perception. Few theories rarely deal with an entire phenomenon and differing theories may actually complement each other.

Hernan Von Helmholtz (2005) promulgated the traditionally view of perception which he believed should focus on basic sensations. In constructive perception the perceiver builds up (or constructs) the perceived stimulus using sensory information as the foundation for the structure. This is also referred to as intelligent perception because this view point holds that higher order thinking plays an important role in perception Sternberg, (1998).

The theory of direct perception was championed by Gibson et al (1998) observed that direct perception perspective holds that ‘the array of information in our sensory receptors including the sensory context is all we need to perceive anything’. From the aforementioned, it can be realized that, perception can be formed by the extent of familiarity one has in connection with an issue. We must take information into our minds before we can do anything else with it. The amount of information one has on quality management could possibly determine the extent of one’s degree of perception on quality control practices in the cocoa industry.

2.2 MEANING OF QUALITY

Quality experts have tried to define the quality problem as ‘dissatisfaction with the service provided or failure to achieve the expected standard’ (Gana, 2008). William et al, (1999) also see quality as providing customers with high quality goods and services that go beyond the expected.

Lawton (1989), Schneider et al, (2004) lamented that, although at first glance, it may seem simple to define quality; it is difficult to establish a single, universal definition for the term. However, it is of limited value to contemplate measuring service quality without defining what service quality is. According to Gaster et al (2003) efforts to define and measure quality originated in the goods sector of the private sector. According to the Japanese philosophy that prevailed in the mid-1980s, quality is "zero defects – doing it right the first time" Parasuraman et al., (1985). Lawton (1989) partly agrees with this philosophy in that, although he does not define quality, he argues that once problems have been eliminated, what is left is excellence or quality. Because of the unique characteristics of services, it is often difficult to adopt a “zero-defect” or “elimination of problems” approach, as services are intangible and defects or problems subjective. Several researchers from the early 1980s onwards such as Garvin, (1984); Grönroos, (1988); Gummesson, (1992); Juran, (1988); Lawton, (1989); Schneider et al, (2004) have realised that there is a need to refine the definition of quality within the service environment. Various approaches to defining quality have emerged. These approaches, namely the philosophical, the technical, the user-based and value-based approaches have been reviewed in detailed below.

2.3 THE PHILOSOPHICAL APPROACH

According to the philosophical approach, also called the transcendent approach of philosophy, quality is both absolute and universally recognisable, a mark of uncompromising standards of high achievement (Garvin, 1984). Proponents of this view claim that quality cannot be defined precisely; instead, it is a simple, un-analysable property that people learn

to recognise only through experience (Garvin, 1984). This approach borrows heavily from Plato's explanation of beauty. Like other terms that philosophers consider to be "logically primitive", beauty (and perhaps quality as well) can only be understood after one is exposed to a succession of objects that display that characteristic. (Garvin, 1984). The drawback of transcendent or philosophical definitions is that they leave quality open to loose statements and dishonest manipulations (Gummesson, 1992). Schneider et al (2004) are of the opinion that, because quality, as viewed from a philosophical perspective, is unknowable and immeasurable, this approach is useless from a research perspective.

2.4 THE TECHNICAL APPROACH

A technical specification of a service is frequently considered to be the quality of the service or at least the most important feature of its perceived quality (Grönroos, 1988). The technical approach views quality objectively. The approach could be divided further into the product attribute approach and the manufacturing approach. The product attribute approach regards differences in quality as a reflection of differences in the quality of some ingredient or attribute possessed by a product or service Garvin, (1984). Because quality reflects the presence or absence of measurable product or service attributes, it can be assessed objectively, and it is based on more than preference (Garvin, 1984). There are various problems with this approach. Firstly, improved quality can only be obtained at higher cost. Secondly, quality is regarded as an inherent characteristic of the services (goods), rather than as something ascribed to them Garvin, (1984). Klaus (1985) is of the opinion that this approach is not suitable in a service encounter environment. Garvin (1984) regards the primary focus of this approach as internal. A slight variation of the previous approach is

found in the manufacturing approach, which regards quality as a precise and measurable variable (Garvin, 1984). This approach is also called objective quality and conformance quality. In this approach, services are regarded as special types of goods.

The product-based and manufacturing-based quality notions may appear to be similar, but they are in fact quite distinct. Product-based definitions are linked to design (concept design), whereas manufacturing-based definitions are related to the delivered service (Gummesson, 1992). This fairly objective approach to measuring quality still has a place in measuring the technical outcomes of service experiences (Schneider et al, 2004). For services, time can also be used as an example. In reality, customers often perceive quality as a much broader concept, and non-technical aspects may dominate the quality experience (Grönroos, 1988). It is thus clear that a broader definition of quality is required to be able to measure the full quality phenomenon.

2.5 THE USER-BASED APPROACH

The user-based approach starts from the premise that quality is “in the eyes of the beholder” Garvin, (1984). It is therefore subjective, hinging on the individual perceptions of customers. The goods or services that best satisfy their preferences are then those which they regard as having the highest quality Garvin, (1984); Gummesson, (1992); Schneider et al, (2004). The quality of a service is therefore judged to be high when customers say it is (fitness for use) and this does not always mean that the service conforms to technical criteria Schneider et al, (2004). According to Gummesson (1992) this approach is the closest to the definition that is

now universally accepted. Because of the nature of service delivery, it is particularly appealing as an approach to defining quality in the realm of services Schneider et al, (2004).

In the marketing literature the user-based approach has led to the notion of “ideal points” that is precise combinations of product attributes that provide the greatest satisfaction to a specified consumer (Garvin, 1984). Each of these concepts, however, creates two problems. The first is practical, namely how to aggregate widely varying individual preferences so that they lead to meaningful definitions of quality at the market level (Garvin, 1984). The second is more fundamental, namely how to distinguish those product attributes that connote quality from those that simply maximise consumer satisfaction (Garvin, 1984). The aggregation problem is usually resolved by assuming that high-quality products are those that best meet the needs of the majority of consumers (Garvin, 1984).

Unfortunately, this approach ignores the different weights that individuals normally attach to quality characteristics. This makes devising an unbiased statistical procedure for aggregating such widely varying preferences difficult (Garvin, 1984). A more basic problem with the user-based approach is its equation of quality with maximum satisfaction (Garvin, 1984). While the two are related, they are by no means identical. A product or service that maximises satisfaction is certainly preferable to one that meets fewer needs, but it is not necessarily also a better service Garvin, (1984). It is widely recognised that quality is not an objective thing, but rather a concept construed by the service user (Stewart et al, 1999). Despite all the shortcomings of this approach, Boothe (1990) summarises the importance of

this approach in the following statement: “In the uncertain world of providing services, one thing is certain: the customer defines quality”.

2.6 THE VALUE-BASED APPROACH

According to Garvin (1984) the value-based approach defines quality in terms of costs and prices. It is a question of the consumers’ own personal assessments of what they get in relation to the price they are able and willing to pay. The difficulty in employing this approach lies in the blending of two related, but distinct concepts. Quality, which is a measure of excellence, is equated with value, which is a measure of worth.

2.7 THE CONCEPT OF QUALITY CONTROL

Quality control is a process employed to ensure a certain level of quality in a product or service. It may include whatever actions a business deems necessary to provide for the control and verification of certain characteristics of a product or service. The basic goal of quality control is to ensure that the products, services, or processes provided meet specific requirements and are dependable, satisfactory, and physically sound. According to Brookhaven National Laboratory (BNL) report, (1999), quality control is maintained through daily instrument calibration, efficiency and background checks, and testing for precision and accuracy.

Essentially, quality control involves the examination of a product, service, or process for certain minimum levels of quality. The goal of a quality control team is to identify products or services that do not meet a company’s specified standards of quality. If a problem is

identified, the job of a quality control team or professional may involve stopping production temporarily. Depending on the particular service or product, as well as the type of problem identified, production or implementation may not cease entirely.

Usually, it is not the job of a quality control team or professional to correct quality issues. Typically, other individuals are involved in the process of discovering the cause of quality issues and fixing them. Once such problems are overcome, the product, service, or process continues production or implementation as usual.

The term quality control could also mean simply screening out defective goods from the production process at the end of the production line (Gana, 2000). This has now developed into a more sophisticated concept known as total quality management. Management on the other hand could simply mean making decisions or getting things done. According to Fayol (1916) to manage is to focus and plan, to organize, to command, to coordinate and to control. Slocum et al, (1992) have also defined management as planning, organizing, leading and controlling the people working in an organization and the ongoing set of tasks and the activities they perform.

2.8 THE CONCEPT OF TOTAL QUALITY MANAGEMENT.

Total quality management (TQM) is a systems approach to ensuring quality in an organization. Total quality management is not just quality control or quality assurance nor is it limited to the boundaries of a total quality control system. It is a dynamic process with a strong philosophical base which incorporates many of the concepts upon which total quality

systems are based. The emphasis is on involving everyone in the organization in activities which provide for continuous never ending improvement. Quality activities are planned and managed into the system and are oriented towards the achievement of complete customer satisfaction.

Gana (2000) sees total quality management as commitment to continuous improvement of quality which can further be divided into three basic concepts as;

- Customer satisfaction
- Defect prevention
- Employee participation

Organizations have been forced to focus on quality to meet the increasing demand and sophistication of customers. Today, what underlines competitive advantage is the ability to provide goods and services that meet or exceed the needs of customers. Quality is vital for most organizations but need to be defined in the context of the expectations of its customers. Total quality management is the modern approach to quality delivery. It involves the whole organization and emphasizes the role of quality in meeting the needs and expectations of its customers.

2.9 THE CONCEPT OF SERVICE QUALITY

It is widely agreed that service quality depends on two variables: expected (desired) service and perceived service. Perceived service quality is the outcome of an evaluation process where the expected service is compared with the service received. Parasuraman et al. (1985)

identified four “gaps” within the organisation, namely the consumer expectation and management perception gap, the management perception and service quality specification gap, the service quality specifications and service delivery gap and the service delivery and external communications gap. Speller et al (2003) identified two additional internal gaps that might be relevant to the public sector, that is, the internal communication gap (the lack of empowerment and training of staff in delivering the service) and the contact staff perceptions gap (the failure to listen to contact staff about what the customers think of the service that has been delivered).

Service quality was defined mainly by means of service quality models. Two schools of thought emerged in the definition of service quality, namely the Scandinavian and American schools. In comparing service quality models, it was found that several of the models are equally suitable for different service settings, both in the private and public sectors. The Scandinavian school defined service quality using categorical terms and divided the construct into different dimensions. Originally Grönroos (2004) identified three dimensions: the technical dimension (“what”), the functional dimension (“how”) and the corporate image (who).

Gummesson (2002) listed software as a separate dimension, but for Grönroos (1984) software forms part of the technical, or even the functional dimension, depending on whether the software assists in performing the service (the technical dimension), or whether the software assists in delivering the service (the functional dimension). The importance of the use of software should not be ignored in defining or measuring service quality, but the user

of a service who evaluates the technical dimension may not always be familiar with the methods used in deriving the end product of a service, whether these methods are manual or whether they involve the use of software applied in performing such a service – the result of the service is all that is visible to the user. With regard to the functional dimension, the importance of software should be acknowledged in measuring this dimension, particularly when electronic service quality is measured.

Rust et al, (1994) split the functional dimension into the service delivery (the sequence of events) and the service environment (the physical ambience of the service setting or tangibles). Brady et al, (2001) found empirical evidence in support of Rust et al (1994) service quality dimensions. Kang et al, (2004) found empirical evidence for Grönroos's (1988) service quality dimensions. Hazlett et al, (1997) split the functional dimension into the core and peripheral attributes, where the peripheral attributes are the extras designed to make the whole experience a delight for the consumer. Gaster et al, (2003) defined service quality within the public sector, and added a democratic dimension to Rust and Olivier's (1994) three-dimensional model.

The American school defined service quality using more descriptive terms and divided the construct into different determinant Parasuraman et al., (1991a). The determinants identified by Parasuraman et al. (1991a) are tangibility, reliability, responsiveness, assurance and empathy. Reliability emerged as the most important and tangibility as the least important of these determinants. Haywood-Farmer (1988) found that the relevance of the various determinants differs, depending on the degree of service contact, interaction and labour

intensity. Physical facilities (tangibles) are far more important with services that are low in labour intensity and service contact. Where the labour intensity (thus the service contact) increases, it is more important for the staff to behave appropriately and tangibility thus becomes less important.

A more recent development is the hierarchical approach to service quality. This approach integrates the previous two schools of thought in that it acknowledges that these schools do not only define service quality differently, but that these two schools in fact define different levels of the service quality construct. Grönroos (1988) first classified six service determinants into his three-dimensional service quality model. Gummesson (1992) then listed service quality determinants for each of his service quality dimensions. He concluded that one determinant is valid for more than one dimension, but that the definition of a specific determinant might differ, depending on which dimension it is defined for. Brady et al, (2001) found both qualitative and empirical evidence that service quality is a multidimensional, hierarchical construct, as customers form their service quality perceptions on the basis of an evaluation of performance at multiple levels, and ultimately combine these evaluations to arrive at the overall service quality perception. Kang et al, (2004) empirically tested Grönroos's (1988) service quality model and they agreed with Gummesson (1992) that all the SERVQUAL determinants are represented by a second-order latent (that is functional) quality. They therefore also acknowledge the hierarchical approach.

It was also found that the quality dimensions are interrelated. Grönroos (1984) argues that a bare minimum technical quality is always required, but that functional quality is the most

important. He claimed that it could even compensate for temporary problems with the technical quality. According to Klaus (1985), congruence (initial social interaction) is the first condition of good service quality. Technical quality (which he refers to as task achievement) is the second condition to be met for achieving service quality. The final level is the psychological aspects (functional quality, excluding initial social interaction). The service quality model (SERVQUAL) of Parasuraman et al. (1988) and Parasuraman et al. (1991) suggests that when they evaluate service quality consumers rely on experience properties – that is, all the determinants (excluding tangibles) that can be classified as part of the functional quality. The SERVQUAL model is based on the assumption that reliability (the most important determinant they identified) depends largely on human performance.

Stewart et al, (1999) found that the technical quality (referred to as the pivotal attribute or output of the service) is as important (or even more important) than the functional quality of the service. Kang et al, (2004) are of the opinion that the importance of functional quality varies depending on the type of service. It was also found that the SERVQUAL dimensions do not measure the technical quality of a service, but only its functional quality Kang et al, (2004); Stewart et al, (1999). Stewart et al, (1999) found that both the technical and the functional quality should be measured to be able to fully capture the service quality construct.

Services can also be divided into traditional services and e-services. The difference between traditional and e-services refers only to the method of service delivery and not to the service itself. This therefore clearly indicates that electronic service quality relates only to functional

quality. Zhu et al. (2002) found that, for e-services, the tangibility determinant does not have a significant effect on overall service quality, and that customer evaluations of electronic service quality are affected by their experiences in using e-services and perceived electronic policies. Santos (2003) developed an electronic service quality model that was never empirically tested. The model may however be relevant in that it acknowledges that electronic service quality is influenced by determinants that differ from traditional service quality. Zeithaml et al. (2002) divided e-services into core services (normal services) and recovery services (non-routine services). They developed and tested two multiple item scales (E-S-QUAL for core services and E-RecS-QUAL for recovery services). They also found the determinants affecting these two types of services to be different.

2.10 HISTORICAL PERSPECTIVE

Quality management systems have evolved through quality control, quality assurance and total assurance systems to total quality management.

One of the earliest forms of quality assurance can be traced back to 221 BC when in china the Chou dynasty required that physicians pass an exam before entry into practice. But today's total assurance concept arose as a separate discipline in the united states around the 1920s. At that time quality control meant controlling or limiting the number of defective items that found in the output of an industrial manufacturing process. In this process the defective product were separated from the others.

From this idea of simply separating the bad products from the good ones a more defective management philosophy has arisen with a focus on action to prevent a defective product from being created rather than simply screening out a defective product once it has been made. Great scholars such as Shewhart, Juran, Feigenbaum, Crosby and several others have made contributions in this direction.

2.11 QUALITY CONTROL DIVISION (COCOBOD)

In recognition of the contribution of cocoa to the development of Ghana, the government in 1947 established the Ghana Cocoa Board (COCOBOD) as the main government agency responsible for the development of the industry.

By Ghana Cocoa Board Law 1984 PNDCL 81, the Ghana Cocoa Board (COCOBOD) is authorized to purchase, market and export cocoa produced in Ghana which is graded as suitable for export, under Cocoa industry (regulation) Consolidated Decree 1968 (NLCD. 278).

Under section 4(1) of the said PNDCL 81, no person shall purchase cocoa except COCOBOD through its wholly – owned subsidiary buying company, or a person or organization in writing by the Board to purchase Cocoa for sale to COCOBOD. The government of Ghana has decided to allow competition in the internal marketing of cocoa. In pursuance of this objective, COCOBOD has by virtue of the powers conferred on it by section 34 of PNDCL 81, come out with the regulations to guide the conduct of participants in the internal marketing of cocoa.

The mission of the Board is to encourage and facilitate the production, processing and marketing of quality cocoa among other crops in all form in the most efficient and cost effective manner and maintain the best mutual industrial relations with its objectives.

The objectives of the Board are to

- Encourage the production of cocoa, coffee and sheanut.
- Initiate programmes aimed at controlling pest and disease of cocoa, coffee and sheanut.
- Undertake and encourage the processing of cocoa, coffee and sheanut with the aim of adding value for export and local consumption.
- Undertake, promote and encourage scientific research aimed at improving the quality and yield of cocoa sheanut and other tropical crops.
- Regulate the marketing of cocoa, coffee and sheanut.
- Secure the most favorable arrangement for the purchase, grading, sealing and certification, sale and export of cocoa, coffee and sheanut.
- Purchase, market and export cocoa products and cocoa produced in Ghana which is graded under the cocoa industry (Regulation) Decree, 1968 NLCD 278, or any other enactment as suitable for export.
- Assist in the development of the cocoa, coffee and sheanut industries in Ghana

2.11.1 Function

The functions of COCOABOD centre on the production, research, extension, internal and external marketing and quality control of cocoa. The function can be classified into two main

sectors: Pre –harvest and post-harvest which are performed by specialized division of the Board.

2.11.1.1 Pre-harvest sector:

The pre-harvest sector functions which are performed by the cocoa Research Institute of Ghana (CRIG) the Seed Production Unit (SPU) and the Cocoa Swollen Shoot Virus Disease Control Unit (CSSVDCU) deal with fundamental issue on actual cocoa production at the farm gate level.

2.11.1.2 Post – harvest sector:

The post-harvest sector functions are undertaken by the Quality Control Division (QCD) and the Cocoa Marketing Company (CMC) limited.

The post-harvest activities of COCOBOD start with Quality Control measures of QCD which farmers must observe to facilitate the acceptance of their produce at the buying centers by the licensed buying companies engaged in internal marketing of cocoa.

For government to control the competition and the internal marking of cocoa that the Quality Control Division (QCD) came into existence in 1991 as a result of a revitalization exercise in the cocoa industry. QCD Handbook (2007) states the mission of the quality control division as “to develop and provide systematic strategies that will ensure the supply of the best grade cocoa, coffee and sheanuts on the local and international markets”.

In pursuance of the above stated mission, the Division has the following as its objectives:

- Prevent the exportation of inferior or infested cocoa, to overseas buyers and local mills.
- Inspect, sample, grade, seal and disinfest cocoa and other produce for Licensed Buying companies.
- Ensure that facilities of licensed Buying companies (storage premises, gratings, tarpaulins, etc) conform to lay down regulations in order to maintain quality of produce in their custody.
- Monitor the operations of Licensed Buying companies with regard to the safety of produce at all times.
- Organize periodic courses to educate famers and personnel of licensed Buying companies on the preparation and storage of good quality cocoa.
- Undertake commercial disinfestations services.

The division performs two main functions:

- Inspection, grading, and sealing of Cocoa.
- Disinfestations services

The division is responsible for the inspection and certification of storage sheds of the Licensed Buying Companies (LBCs). The LBCs are responsible for erecting or locating sheds for the purchase and storage of Cocoa and other produce. However, it is the sole responsibility of QCD to inspect the sheds and issue a 'certificate of registration' for such

premises, which are then designated as ‘Scheduled Grading Centre’s’. No grading and sealing activity is conducted in any shed that has not been certified by QCD.

In compliance with regulation of the Cocoa Industry Regulations, 1968. L1. 598. LBCs shall ensure that;

- The building is free from all leakage.
- The floors are dry and properly constructed of cement, concrete and stone.
- It is provided with sufficient doors and windows to allow adequate ventilation.
- The inside walls are painted or white-washed and repainted or white-washed annually.
- Cocoa is stored on gratings made with seasoned wood which allows at least 3 inches air space above the floor.
- Cocoa is stored in a manner as to allow adequate ventilation and access to all sides of each stock and between the stacks and walls.
- The building is kept free, clear of dust and refuse.
- The premises are kept free from insects and rodents or grain and other food stuffs that harbour these pests.
- Substances which may be injurious to Cocoa in particular cement or kerosene are not kept in the building in which Cocoa is stored.
- Empty used bags are kept away from any building in which Cocoa is stored.
- Doors and windows are kept open during the day to provide adequate ventilation.

After purchase from the farmer by purchasing clerks, Cocoa shall not be stored in bags infested with insects but shall be bagged in clean dry bags of strong unimpaired texture, shall

not be transported or loaded onto, or unloaded from vehicles under conditions which may cause the Cocoa to deteriorate or become contaminated by any substance which might injuriously affect the Cocoa and shall be protected from rain, moisture and dust with waterproof materials.

Inspection, grading and sealing of produce are carried out at Scheduled Grading Centres. Grading is done by the process known as the “Cut test”. Any produce which is graded and sealed is covered by a certificate called “certificate of inspection produce” and the Cocoa is then ready for export.

2.12 PRODUCTION AND QUALITY OF COCOA IN COTE D’IVOIRE

Among the set of regulations governing the international cocoa trade is the quality standard of cocoa. Côte d’Ivoire is the world’s largest producer of cocoa and the crop represents the main source of income for thousands of Ivoirians. Cargill in partnership with ANADER (a national agency for rural development have since been involved in farmer training initiative since 2003 and with this partnership now trains some 17000 farmers in cote d’ivoire All in the effort of improving the quality of cocoa in cote d’ivoire. for instance in Ghana raised bamboo mats are used in the sun drying whereas in cote d’ivoire the beans are often dried on concrete floors and this has the disadvantage of the beans drying quickly and more easily subjected to contamination.(www.cargill.com/today/press.htm) Greg Page, Cargill chairman and chief executive officer once remarked ‘high quality cocoa, grown in a sustainable way, is essentials to the economies and livelihood of family communities in Cote d’Ivoire, as well as to Cargill, and consumers’. Cargill now employs 500 people directly and a further 2,000

indirectly, and the company's plant in Abidjan processes 120,000 metric tonnes of cocoa beans annually into high quality cocoa products including liquor, butter and powder. The products from this plant are shipped worldwide and incorporated by the world's food industry into finished products without any further reprocessing at destination.
(www.cargill.com/today/press.htm)

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

The purpose of the study is to identify the perception of purchasing clerks towards quality control management practice in the Juaboso District. The validity and reliability of every research to a large extent is dependent on the methodology adopted for the study. This chapter therefore presents a detailed, systematic and unbiased process that was used in the study in order to achieve the objective of the study. The chapter further presents the activities and the process for understanding this research work. It presents an account of how data was collected and processed into a dissertation document.

The discussion was centered on the following:

- Research design,
- Population under study
- Sampling techniques,
- Data requirement and source,
- Method of data analysis.

3.2 RESEARCH DESIGN

Research design is ‘the blue print to include experiments, interviews, observations and analysis of records, simulations or some combination of these’. (Donald. Pamela, 2003)

According to Hussey and Hussey (1997) research design is the science (and art) of planning procedures for conducting studies so as to obtain the most valid findings.

Determining the research design will give a detailed plan that can be used to guide and focus the research. Sanunders. M et al (2000) indicates that the general ethical issue is that the research design should not subject the research population to embarrassment or any other material disadvantages. The research design needs to consider the extent to which data should be collected from a research population who is unaware of the fact they are the subject to research and who have thus not consented to it. The study was a descriptive survey. The design helped the researcher to collect information about behaviours, opinions, level of knowledge and perception on quality control management practices of purchasing clerks in the cocoa industry in the Juaboso District.

3.3 THE STUDY POPULATION

According to Mason et al. (1997), the population of a study is the collection of all possible individuals, objects or measurements of interest. ‘It consists of all the individuals whom the measurement is being taken Cooper et al, (2001). For this study the population consisted of operational staff (purchasing clerks), of the various Licensed Cocoa Buying companies in the Juaboso district of the Western Region of Ghana.

3.4 SAMPLING TECHNIQUES

Sampling technique may be broadly classified as non-probability and probability. The non-probability samplings do not use chance selection procedures but rather rely on the personal judgment of the researcher. Whereas, the probability sampling is a procedure in which each element of the population has a fixed probabilistic chance of been selected. In this study since not all the field officers connected with the various companies handle cocoa beans

could not be used in the study, judgmental or purposive sampling was used to choose people that are available that best meet the target groups. With this kind of sampling, the researcher exercised his own judgment to include element that are presumed to be typical of a given population about which he seeks information.

3.5 SAMPLE SIZE

In research the process of sampling makes it possible to limit the study to a relatively small portion of the population called sample. The number of people included in the sample makes it possible to have a representative sample of the entire population which is accepted in any scientific study. A sample refers to a set of people or objects chosen from a larger population in order to represent that population to a greater extent (Mason et al, 1997). Therefore, the size of the study sample and the way in which it is chosen will certainly have implications for the confidence in the result and the extent to which generalization can be made. In selecting the respondents, a sample of 54 purchasing clerks was taken from the population.

3.6 SAMPLING – SAMPLING FRAME

A sample size of 54 was used for the study. The 54 persons selected represented a larger sample that helped to reduce the level of error and increase the level of precision. In selecting the respondents, the researcher used, purposive sampling. In the case of purposive sampling, the researcher chose people that are available and for that matter accessible that best meet the target group.

3.7 RESEARCH APPROACH

There are two main approaches to choose from when conducting a research in social science. These are qualitative and quantitative methods. In this research a combination of qualitative and quantitative approaches were employed. The nature of the research problem demands that the researcher reaches out to the subjects of the research. This actually made the study qualitative. However, quantitative method was engaged especially in the analyses and interpretation of the data.

3.8 DATA COLLECTION

According to Sauders et al (2007), there are two main approaches to data collection namely, primary data and secondary data.

3.9 PRIMARY DATA

Primary data is always originated by the researcher to address the research problem (Malhotra et al, 2007). Barns (2000) as cited in Amissah et al (2008) argued that primary data are first hand information gotten for a research. This could be in the form of interview responses, and responses from questionnaire. There are six available forms of collecting qualitative empirical data. These are documentation, archival records, interviews, direct observation, practical observation, and physical artifacts. For the purpose of this research the researcher employed questionnaires and interviews as the primary data source.

3.9.1 Secondary Data

Secondary data has to do with data that have already been collected for purpose other than the problem at hand. They are existing information made up of publications such as books, journals, articles, internet sources and many other already established facts. In this study the researcher relied on books, journals, articles and internet sources as the basic secondary sources.

3.10 DATA COLLECTION INSTRUMENTS

3.10.1 Questionnaires and Interviews

According to Kruger et al, (2001), in a structured interview, the interviewer asks a respondent a collection of questions from a previously compiled questionnaire (known as an interview schedule), face to face and records his or her responses. The interviewer is restricted to the questions, their wording and their order as they appear on the schedule with relatively little freedom to deviate from it.

A questionnaire consist of a number of questions printed or typed in a definite order on a form or set of forms. The questionnaire is sent to respondent who are expected to read and understand the questions and write down the reply in space meant for the purpose in the questionnaire itself. The questionnaire is the heart of the primary data collection and technique. Hence, its drafting requires utmost skill. The questions must be clear, simple and to the point. They must be well organised from the point of view of the respondent and be formulated in such a manner as to provide the data in so far as possible in the desired form. For this study the questions were administered directly to the purchasing clerk to fill out. The

research was employed because of the following strength: it is possible to administer the instrument to a group of purchasing clerks at the same time and place. Also the period for data collection is relatively shorter than other designs. In addition it has a high rate of response and generally low cost involved. Finally it is possible to explain the study and answer questions respondents may have before responding to the questionnaires. They are simple to administer and relatively inexpensive to analyze Nevertheless, the following weakness associated with this procedure was noted.

3.11 PILOT STUDY/PRE-TESTING OF QUESTIONNAIRE.

The study made use of a questionnaire. Questions (items) to be included in the questionnaire were first of all administered to a group of 20 volunteers. This was to determine the effectiveness of the questionnaire to be used for the data collection. The rationale behind this exercise was to ascertain the level of understanding of the items in the questionnaire from the volunteers. Also it is found out whether the replies provide the type of information needed or whether the respondents are misinterpreting any of the questions. After this exercise some of the items in the questionnaire were deleted and others were improved upon purposefully to suit the level of the purchasing clerks understanding.

A further pretest was done with 25 purchasing clerks at the Nkawie district after which some of the items were reconstructed and further developed. The final questionnaire was made up of forty two (42) close ends and three (3) open ended questions divided into three sections. (Refer to appendix).

Section A sought to find out about training procedures familiar to the purchasing clerks based on quality control practices in cocoa. Section B was based on level of knowledge of purchasing clerks in quality control practices in cocoa and section C was purposely to find out the perception of purchasing clerks in the work of the quality control Division of COCOBOD. Questionnaire items have been constructed based on the likert scale.

3.12 DATA HANDLING

The rationale behind the exercise as well as the items was explained to the purchasing clerks selected to respond to the questionnaire. This was to ensure that the respondent understood the items before responding to them. The study was intended to answer the following questions:

- What form of training did purchasing clerks have in quality control practices? Under section A, the research used a frequency distribution to analyze whether purchasing clerks have had any training in quality control practices. Items 2a and 5 are coded into Yes and No responses. Item 2b elicit information on the training received in quality control practices, the number of times training took place and the area covered. The responses of item 2b (IV), are coded in numerical form. A four point scale was employed.

3.13 PROFILE OF THE STUDY AREA-JUABOSO DISTRICT

3.13.1 Location and Size

Juaboso District being one of the thirteen districts in the Western region of Ghana is located between latitude 6°6N and 7°N, and longitude 2°40 W and 3°15W. the district shares borders

with Bia and Asunafo North districts in the North, Asunafo south and Sefwi Wiaso district to the East, Aowin Suaman District to the south of the south and la Cote d'Ivoire to the west.

The district capital Juaboso is located 360km to the north-west of secondi takoradi, the regional capital and a distance of 225km from Kumasi, the Ashanti regional capital.

The district has a surface area of 1924 square kilometers and serves as entry/exit point between La Cote d'Ivoire and the republic of Ghana.

3.13.2 Settlements

The general settlement pattern of the district is the dispersal type. There are 226 Communities with a total 915 settlements.

In line with national standard of classification where population size of more than 5000 is considered urban, major towns which could be considered as such include Bode, Juaboso, Afere, Amoaya, Bonsu Nkwanta and Proso/kofikrom.

It must however be noted that the district is predominantly rural with about 85% of its popular living in communities of less than 5000 inhabitants.

3.13.3 Population

The district has a population of about 146,194 (2006). The annual growth rate of 3.5% is higher than the regional and national averages of 3.2% and 2.7% respectively.

The district has a population density of 54.5 persons per square kilometers in the year 2000 which was lower than the regional figure of 80.5% and national 79.3 per square kilometers.

3.13.4 Ethnicity and Religion

The Sefwis are classified under the ethnic group of Akans in Ghana. The sefwis who are the indigenes form 52.4% of the districts population whilst settlers form 47.6% (2006). The settlers who play an important role in the districts economy were attracted to the district due to its favourable climate, vegetation and economic conditions. Although the district harbours different shades of religions (with Christianity accounting for 72.0%, Islam 12.4%, traditional religion 16.2% and others 9.3%) there is religious tolerance peaceful co-existence among the various religious groups of the district.

Consequently, the development of the district is not hampered by the religious diversity and differences.

3.13.5 Traditional Administration

Traditional administrative work in the district comes under the Sefwi Wiawso Traditional Council, Queen mothers, chiefs, and elders who fall to under the main traditional council are visible in almost all traditional communities.

The district has two of the seven divisional chiefs under the Sefwi Wiawso paramountcy. They are the chief of Boinzan (Krontihene) and Bodi (Adontehene). Other non divisional

chiefs include the chiefs of Amoaya, Mafia, Kogyina, Agyemandiem, Seyerano and Benehema.

The role of the chiefs and their elders are pivotal since the success or failure of the departmental efforts of the district may depend to a reasonable extent on their support.

3.13.6 Land Tenure

Land holding in the district is entrusted in the hands of the lineages and clans with the sefwi Wiawso Paramouncy holding allodia interest over the entire districts land. Usufructory right holders can make grants of land but such grants only become valid after it has received the consent of the Sefwi Wiawso Paramouncy or its authorized agents.

Land could be obtained through leasehold, renting or outright purchase. Available records peg land holding arrangement at 53% for personal land, family 34%, share cropping (Abunu/ Abusa) 12% and leasehold.

3.13.7 Governance

The Juaboso district Assembly was carved out of the sefwi-Waiwso district in 1988 as an independent administrative authority by legislative instrument(L I). It is the highest administrative and political authority in the district.

Section one (1) of the local government Act 1993 (Act 462) under which it now operates stipulate that the assembly exercises deliberative, legislative and executive functions in the district. It is responsible for the overall development of the district.

The district chief executive is recognized by section 20(2) of act 462 as the political and executive head of the district Assembly.

3.13.8 Area Councils

Current dispensation of grassroot participatory democracy, there are a total of 235 Unit Committees spearheading community development programmes.

3.13.9 Assembly's Mission

The Jaboso District Assembly exist to improve upon the living standards of the people by planning and providing services in collaboration with the private sector organizations for efficient utilization of the districts resources

3.13.10 Motto

The assembly's motto is in the local dialect, sefwi: “YEBONO YESI” which is literally translated in English as “TOGETHER WE BUILD”.

3.14 PHYSICAL FEATURES AND POTENTIALS

3.14.1 Relief and Drainage

The district forms part of the country's dissected plateau. Within the district, there are isolated hills ranging between 300 and 390 meters above sea level. The district is endowed with a number of rivers and streams; the most important of which is the Sui River. The streams and rivers usually flow southward and exhibit a dendritic pattern to form the Bia Basin.

3.14.2 Climate

The district forms part of wet semi equatorial zone with two rainfall peaks(maxima) between May- June and September-October respectively. The annual temperature of the district ranges between 25°C and 26°C.

The area experiences two main seasons namely the wet and dry seasons. The wet seasons are between April and March while the dry seasons are between November and March. The relatively long wet (rainy) season has favored the cultivation of food and cash crops in the district. This trend enables the district to enjoy fresh crops all year.

3.14.3 Vegetation

The vegetation of the district is the equatorial rain forest type with the semi-deciduous forest yielding various tree species including Odum, Wawa, Mahogany, Esa etc.

About 27% of the total land surface in the district has earmarked for forest reserves. They are two major forest reserves in the district namely, Bodi and Krokosue. The forest reserves enhance the districts ecosystem.

3.14.4 Soil Type

The soils in the district are mainly Ochrozols. They are red and dark in colour alkaline in nature. This soil type support a wide variety of crops including cocoa, oil palm, plantain, cassava, and coffee among others.

3.15 FACT ABOUT JUABOSO DISTRICT

3.15.1 The Economy

- a. Agriculture-** Agriculture is the mainstay of the economy employing about 80.9% of the population. The major cash and food crops grown are cocoa, coffee, oil palm, plantain, rice, maize, cassava, vegetable etc. The availability of land, favorable climatic conditions, high soil fertility and flexible land tenure system places the district on an investment destination as far as agriculture is concerned. Economic activities reach its peak during the cocoa season. Massive inflows of cocoa funds bring a lot of economic activities.
- b. Lumbering-** the district has large tract of forested land with different timber species. This gives the district a high capacity for wood harvesting and processing.
- c. Livestock/ Poultry-** different variety of livestock and poultry are raised on commercial and have great potential for interested investors.
- d. Fish farming-** a promising venture typified by the existence of abundant fresh water.

- e. **Raw materials for cottage industries-** Cassava, Bamboo, Cane, Raffia, Clay, Oil, palm.
- f. **Mineral deposits-** Geological surveys undertaken in the district reveal high deposits of gold, even though mining is still at the surface stage. As a result, registered small scale mining operators have taken advantage of situation and mining Gold at Juaboso where the deposit is said to be high. Bauxite deposit identified at Sayerano is yet to be tapped.
- g. **Commerce-** commerce provides employment for 9.3% of the district's working population. The major items of trade are agricultural product, agricultural inputs, orthodox and herbal drugs, auto parts, clothing and petroleum products. Women dominate the traditional population.

There are six major weekly market centers located at Juaboso, Bodi, Amoaya, bonsu Nkwanta, Proso/Pofikrom and Keffass. The market days bring together people from far and near especially from Kumasi, thus making business activities on such days very brisk.

3.15.2 Road Network

The road networks in the district are mainly feeder roads with a few of them being unmemorable during the rainy season

It however, has a bout 20km of tarred road from Benehema barrier to Juaboso including the Juaboso town roads.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

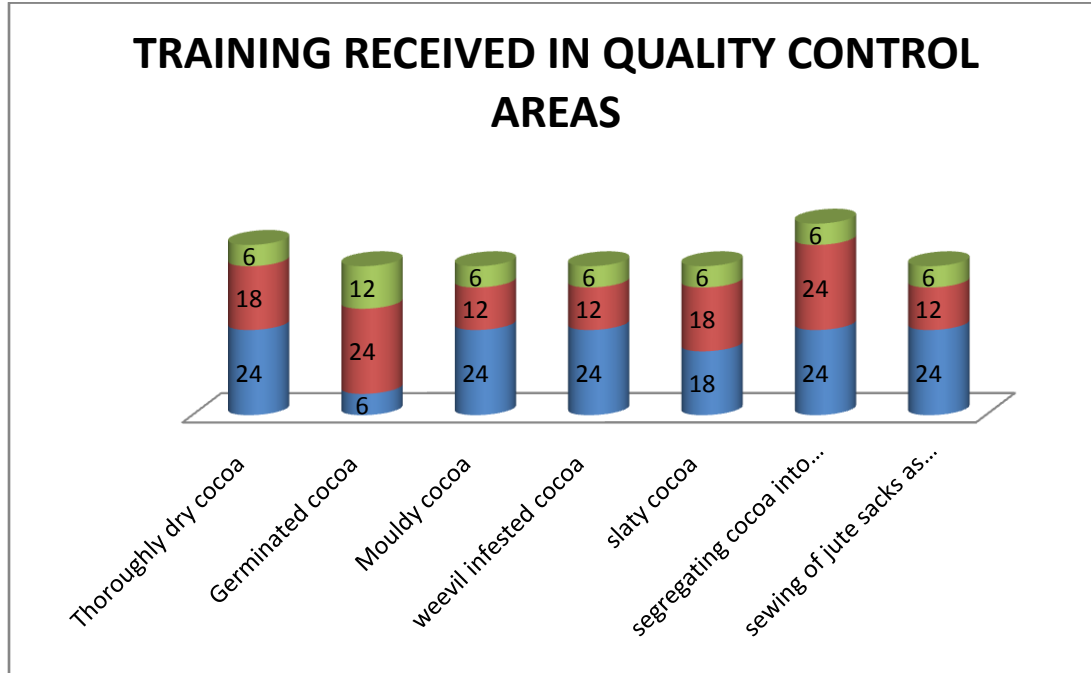
In this chapter, the researcher analysed the responses from the administered questionnaires to answer the research questions posed in the thesis. The study is focused on the societies' quality control management practices; this including purchasing clerks perception on quality control issues, level of knowledge in quality assurance issues. And assessment of the challenges encountered by the company's purchasing clerks in the area of quality control.

4.2 DATA ANALYSIS

Fifty four (54) questionnaires distributed each to the purchasing clerks in the Juaboso district of the western region. Though the overall return response was 54 and some of the sub questions were not answered and may be due to the respondent not been sure of the answer to give or have no idea on the question asked.

The response rate can be described as remarkable with very high reliability statistics. The cronback'sapha for the data was 0.706 which indicate strong reliability.

Fig. 4.1 Training Received in Quality Control



Source: Field Study May, 2011.

Fig 4.1 gives the indication that 63% of the respondents had some training in quality control activities when recruited as purchasing clerks. The training was in areas such as dry cocoa beans, mould cocoa, slat cocoa, segregation of cocoa, germinated cocoa and sowing of jute sacks. This therefore gives the indication that purchasing clerks are given some form of training when recruited.

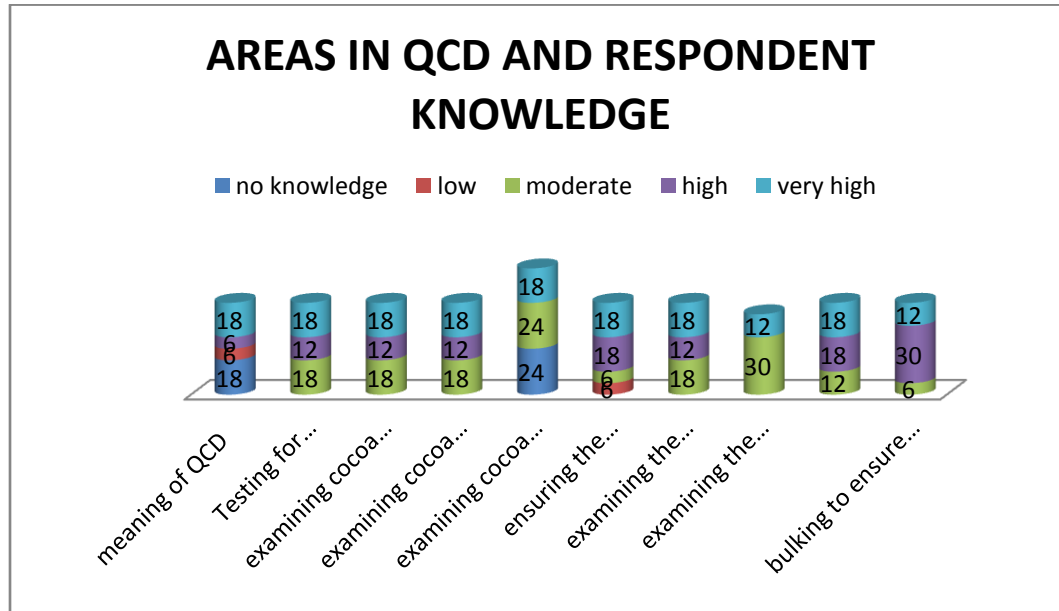
Table 4.1: Adequacy of Training

Adequacy of training					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	VERY ADEQUATE	12	22.2	25.0	25.0
	ADEQUATE	12	22.2	25.0	50.0
	NOT ADEQUATE	24	44.4	50.0	100.0
	Total	48	88.8	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

Analysis of the data revealed that 50% of the respondents agreed that the training given to purchasing clerks was not adequate. Whiles 50% also thinks that the training given to them was adequate. This therefore suggests to the researcher that the respondents have different opinion about the kind of training they receive anytime they are recruited.

Fig 4.2: Areas in quality control knowledge



Source: Field Study May, 2011.

The study revealed that the respondents' level of knowledge in quality control issues was low with majority of the respondents having no knowledge in the areas of quality control at all.

Table 4.2 Quality control is good government policy

quality control is a good government policy					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	24	44.4	50.0	50.0
	disagree	12	22.2	25.0	75.0
	strongly disagree	12	22.2	25.0	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

Analysis of the data revealed that 50% of the respondents agreed that quality control is a good government policy. However, 50% also disagree that quality control is a good government policy since they think that the policy hampers or obstructs their work. This gives the indication that purchasing clerks have not been educated well about the relevance of the role quality control plays.

Table 4.3 Quality control officers are troublesome

quality control officers are troublesome					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	24	44.4	50.0	50.0
	strongly agree	18	33.3	37.5	87.5
	NO opinion	6	11.1	12.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

Analysis of the data in connection with ascertaining whether quality control officers are troublesome revealed that majority of the respondents representing 88% were of the view that quality control officers are troublesome. Whiles 12% were of the view that quality control officers were not troublesome. This explains that majority of the respondents do not

value the work of quality control officers. It can therefore be inferred that education of the role of quality control officers is insufficient.

Table 4.4 Ghana can equally ship cocoa without any quality checks

Ghana can equally ship cocoa without any quality checks					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	18	33.3	37.5	37.5
	Disagree	12	22.2	25.0	62.5
	strongly agree	12	22.2	25.0	87.5
	strongly disagree	6	11.1	12.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

From table 4.4 it was revealed that about 62% of the respondents think that Ghana can ship cocoa without quality checks. Whiles 25% of the respondents were of the view that Ghana cannot ship cocoa without checks. This is a clear indication that those who think that the cocoa beans can be shipped without quality checks are not aware of the international market requirement or standards.

Table 4.5 Quality checks is waste of time and resources

quality checks is waste of time and resources					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	30	55.6	62.5	62.5
	strongly agree	18	33.3	37.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

Analysis of the data in relation to whether quality check is waste of time revealed that all the respondents were of the view that quality checks waste time.

Table 4.6 Should quality control division be blamed for discrepant cocoa at the ports

should quality control division be blamed for discrepant cocoa at the ports					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	18	33.3	37.5	37.5
	strongly agree	18	33.3	37.5	75.0
	NO opinion	6	11.1	12.5	87.5
	Disagree	6	11.1	12.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

It was indicated by 75% of the respondents that quality control officers are to be blamed for discrepant cocoa. Whiles 25% of the respondents were of the view that the quality control officers are not responsible. The quality control officers are to be blamed since it is their responsibility to ensure that cocoa from farm gates meets the required standard prescribed by the international market.

Table 4.7 Quality control division should be abolished

quality control division should be abolished					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	30	55.6	62.5	62.5
	Agree	12	22.2	25.0	87.5
	strongly disagree	6	11.1	12.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

It was indicated by 75% of the respondents that quality control division should not be abolished. Whiles 25% of the respondents were of the view that the quality control division should be abolished.

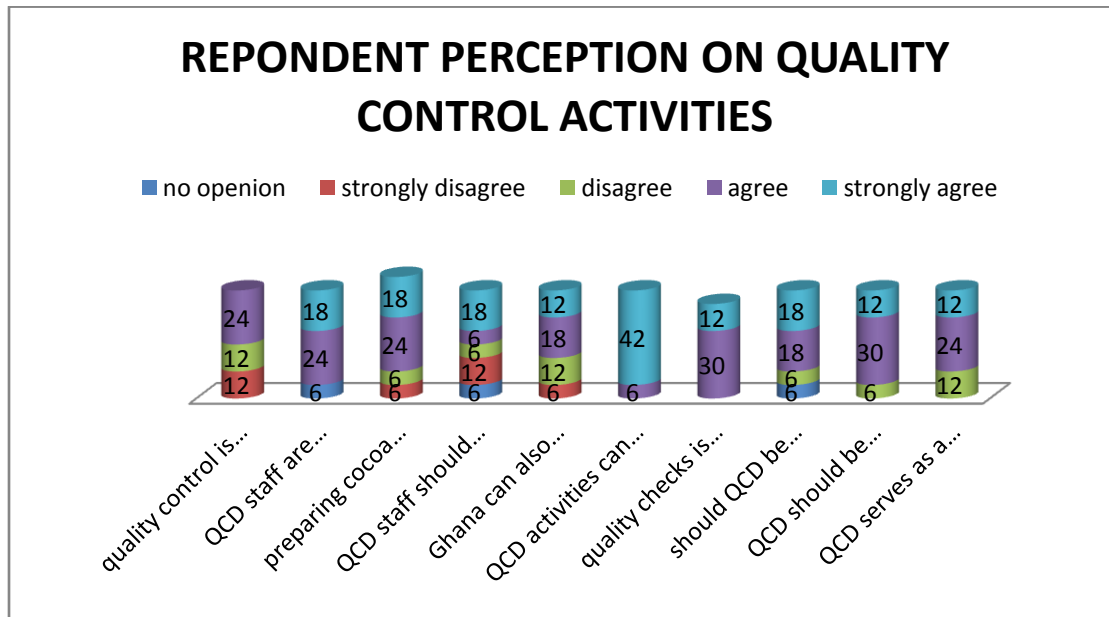
Table 4.8 Quality control divisions’ serves as a check on the activities of purchasing clerks

quality control division serves as a check on the activities of purchasing clerks					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	24	44.4	50.0	50.0
	disagree	12	22.2	25.0	75.0
	strongly agree	12	22.2	25.0	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

Analysis of the data in relation to the quality control division serves as a check on the activities of purchasing clerks gave the indication by majority of the respondents (75%) that the division serves as a check on purchasing clerks. Whiles 25% of the respondents disagree.

Fig 4.3: Respondents perception on quality control activities



Source: Field Study May, 2011.

Analyses of the data revealed that majority of the respondents were found to agree with the fact that quality control activities are very relevant in the cocoa purchases.

Table 4.9 Knowledge about operational guidelines

in your company, have you ever been shown operational guidelines for the purchase of cocoa					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	30	55.6	62.5	62.5
	yes	18	33.3	37.5	100.0
	Total	48	88.9	100.0	
Missing	System	6	11.1		
Total		54	100.0		

Source: Field Study May, 2011.

The research reveals that 62.5% of the respondents have not been shown operational guidelines for the purchase of cocoa. While 37% of the respondents have ever been shown operational guidelines for the purchase of cocoa.

CHAPTER FIVE

SUMMARY OF FINDINGS AND RECOMMENDATIONS

5.1 INTRODUCTION

The study has examined the perception of purchasing clerks of Juaboso District towards quality control management practices.

5.2 SUMMARY OF THE FINDINGS

The study sought to examine the extent to which purchasing clerks are being offered some training in quality control issues. It was also to find out the extent to which purchasing clerks are involved in quality control practices which could improve upon the quality of Ghana's cocoa.

After the analyses of data, the following findings were made:

- i. The studies revealed that majority of the purchasing clerks do not have knowledge about the operational guidelines of the industry.
- ii. The study again revealed some inconsistency in the respondents' responses in connection with training given when they were recruited. Some of them were of the view that the training was adequate, however other held contrary view. This is an indication that there is lack of effective education or training in quality issues.
- iii. It was also found out that how effective a purchasing clerk is to discharge his duty depends very much on the level of training given to the purchasing clerks.
- iv. Furthermore, purchasing clerks' level of knowledge in quality control issues was low.

- v. Finally, the study revealed that purchasing clerks do not see the role played by quality control officers to be important.

5.3 DISCUSSION AND IMPLICATIONS

The problems which quality control field officers will encounter in the discharge of their duties as revealed by the study are not different from those in the literature. Among them are; According to the Japanese philosophy that prevailed in the mid 1980's, "quality is zero defects – doing it right the first time." (Parasuraman *et al.*, 1985). They believe that once problems have been eliminated, what is left is excellence or quality.

It is to achieve this excellence of getting the best quality cocoa beans for export which is graded as suitable under cocoa industry guidelines that the quality control division came into existence in 1991(QCD Handbook, 2007)

The research findings revealed that, majority of the clerks do not have knowledge about their operational guidelines and the fact that respondents responds indicated lack of effective training in quality control issues is an issue of concern. The implications associated with this are:

- i. Purchasing clerks will not be able to handle or prepare cocoa beans to the standard required by the world market due to the fact that, their level of knowledge in relation to operational guidelines is low.

- ii. There is also lack of education or training for purchasing clerks in quality control issues. This will have certain short-term and long-term consequences on the industry some of which are:
- difficulty in creating value for cocoa in Ghana;
 - difficulty in maintaining the confidence and trust of external and local buyers to attract high premium;
 - Not being able to take farmers through proper fermentation process thus fermenting the beans in the prescribed manner and for the recommended duration of the fermentation process, sun-drying the beans, polishing and spreading out the beans during drying and picking out the black/defective and flat beans.

Ensuring that cocoa beans for sale is thoroughly dry, of 7.5% moisture content and kept in clean grade sacks and ensuring proper post-harvest warehousing management and pest control practices, purchasing clerks should regularly be educated on good practices and such practices passed over to succeeding generations. (Gana Kiritharan, 2008)) sees total quality management as commitment to continuous improvement of quality which can further be divided into three basic concepts as customer satisfaction and employee participation.

How adequate the purchasing clerk is to discharge his duty depend on the level of training given to the purchasing clerk. The implications are that; with low level of participation of quality control issues, Ghana will not be able to consistently produce high premium cocoa. This is due to the fact that purchasing clerks will not be dedicated, loyal, motivated and committed as their level of participation is low.

5.4 CONCLUSION

In sum, it was found out that majority of the purchasing clerks do not have knowledge about the operational guidelines of the industry. The study also revealed some inconsistency in the respondent's responses indicating lack of education or training of the purchasing clerks in quality control issues.

As noted earlier, COCOBOD plays a strong role in maintaining quality. In recent times, the greatest challenge however is meeting the various requirements of the various cocoa consuming blocks with respect to quality levels in cocoa beans. The uniqueness of Ghana's high quality cocoa is imputed to its national supply system: not only the careful fermentation and drying process carried on the farm, but also the well- established system of inspections and quality controls, the standardization, grading and sealing maintained by QCD throughout the chain right up to the export collection point.

5.5 RECOMMENDATION

The following recommendations are made based on the research findings.

- The government of Ghana through COCOBOD should initiate programmes that will promote and equip the skills and knowledge of all stakeholders in quality control issues.
- The LBCs especially should ensure that all purchasing clerks recruited should be given adequate training to enhance their skill in the area of producing quality cocoa

beans. This is very important because the study actually revealed that how adequate the purchasing clerks are to work are dependent on the training they received.

- Purchasing clerks should be given operational guidelines to help facilitate their operations/work. If this is not done, it will mean each of the PC's will do what he/she thinks is the best practice which will invariably affect the quality standards requirement negatively.
- The level of involvement of purchasing clerks in the area of quality control issues should be improved since the results of the study indicated that purchasing clerks' level of involvement in quality control issues is moderately low.

5.6 DIRECTION FOR FUTURE RESEARCH

Future researchers should conduct studies into issues in relation to child labour in the cocoa industry.

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APPENDIX

QUESTIONNAIRE:

INSTITUTE OF DISTANCE LEARNING

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

TOPIC: THE PERCEPTION OF PURCHASING CLERKS IN QUALITY CONTROL MANAGEMENT PRACTICES IN THE COCOA INDUSTRY IN GHANA: A CASE STUDY OF JUABOSO DISTRICT.

The purpose of this questionnaire is to obtain information for a project, which is part of the requirement for the award of a degree in Commonwealth Executive Masters in Business Administration at Kwame Nkrumah University of Science and Technology, Kumasi. It is hoped that the result of the study will help in policy decisions concerning the training of purchasing clerks in quality control activities within the cocoa industry in Ghana. Kindly complete it anonymously. Please respond to all items and do it honestly. No attempt will be made to associate your name or company with the completed instrument. All information will be kept confidential.

1. Your gender:

◇ **Male**

◇ **Female**

SECTION A

TRAINING IN QUALITY CONTROL ACTIVITIES:

Directions: Please tick (✓) the box corresponding to your choice(s) or write the requested information concerning each statement below.

2. (a) Have you had any training in quality control activities since recruited by your company?

◇ **Yes**

◇ **No**

(b) If yes,

i) How many times have you had the training?

ii) How many days or weeks did the training take?

.....

iii) What were the main issues treated during the training? (please list them below)

.....

.....

.....

iv) How adequate was the training in preparing you to purchase cocoa for you company?

◇ Very adequate

◇ Adequate

◇ Fairly adequate

◇ Not adequate.

3. In general, how prepared are you to tackle issues concerning the quality of cocoa?

◇ Very well prepared

◇ Well prepared

◇ Quite prepared

◇ Not prepared.

4. Which of the following quality control activities have you been well trained in to be used at your society?

Activities	Very well 4	Well 3	Quite well 2	No education
Thoroughly dry cocoa				
Germinated cocoa				
Mouldy cocoa				
Weevil infested cocoa				
Slaty cocoa				
Segregating cocoa into uniform bean sizes.				
Sewing of jute sacks as recommended.				

5. In your company, have you ever been shown operational guidelines for the purchase of cocoa?

◇Yes

◇No

SECTION B

THE KNOELEDGE OF QUALITY CONTROL ACTIVITIES

Directions: Please tick (√) the box corresponding to your choice or write the requested information concerning each statement below.

1. To ensure proper fermentation, it is recommended that cocoa heaps should not exceed?

◇10 basketfuls

◇ 15 basketfuls

◇ 30 basketfuls

◇ 25 basketfuls

2. After how many days should the heap of beans be turned to allow beans at the periphery to go inside the heap?

◇1

◇3

◇2

◇4

2. The turning of the heap should be done on the?

◇ 5th and 8th day

◇ 3rd and 5th day

◇ 2nd and 3rd day

◇ 1st and 2nd day

3. Arranging cocoa in recommended lots with ample space around each lot is done to facilitate inspection prior to?

◇ **grading and sealing**

◇ **loading**

◇ **Shipment**

◇ **counting**

4. Good cocoa mixed with black beans or foreign matter is termed as?

◇ **foreign cocoa**

◇ **adulterated cocoa**

◇ **black cocoa**

◇ **mixed cocoa**

5. Cocoa which is thoroughly dry, free from foreign matter, smoky beans and any evidence of adulteration and contains not more than three 3% by count of mouldy beans, not more than 3% by count of slaty beans and not more than 3% by count of all other defect is termed as?

◇ **grade 2**

◇ **grade 1**

◇ **Sub standard**

◇ **Small beans.**

6. Thoroughly dry cocoa should not have its moisture content to be more than

◇ **10.5%**

◇ 8.5%

◇ 7.5%

◇ 9.5%

Direction: please tick (✓) the cell that indicates your level of knowledge in each of the following areas of quality control.

Area	Very high 4	High 3	Moderate 2	Low 1	No knowledge
1.The meaning of the term QCD					
2. Testing for thoroughly dry cocoa					
3.Examining cocoa beans to ensure that they are not mouldy					
4. Examining					

cocoa beans to ensure that they are not germinated					
5. Examining the cocoa beans to ensure that they are not smoky					
6. Examining cocoa beans to ensure that they are not slaty					
7. examining cocoa beans to ensure that they are not weevil infested					
8.Sewing of jute sacks as					

recommended					
9.Procedure for proper fermentation of cocoa					
10.Bulking of cocoa to ensure uniformity					

SECTION C

THE PERCEPTION OF QUALITY CONTROL ACTIVITIES

(A) Directions: Please tick (✓) the cell that indicates your degree of agreement with each statement with respect to your views concerning quality control activities.

statement	Strongly agree 4	Agree 3	Disagree 2	Strongly disagree 1	No opinion
1.Quality control is a good government policy					

2.Extra allowances should be given to quality control field officers					
3. Quality control field officers are troublesome					
4. Preparing cocoa for grading and sealing is a waste of time					
5.Ghana can equally ship cocoa without any quality checks					

6. Quality control activities can be subjective.					
7. Quality checks is a good way to ensure that the best beans is shipped to overseas.					
8. Should quality control division be blamed for discrepant cocoa at the ports?					
9. Quality control					

division should be abolished.					
10. Quality control division serves as a check on the activities of purchasing clerks.					

(B) If you have any additional comments concerning the quality control division of COCOBOD, please note them below.

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.....

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