

UNIVERSITY OF EDUCATION, WINNEBA
COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

**CHALLENGES OF THE FUGU (SMOCK) PRODUCTION INDUSTRY IN THE UPPER
EAST REGION OF GHANA**



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DECEMBER, 2021

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EAST REGION OF GHANA**

**A Dissertation in the Department of Fashion Design and Textile Education, Faculty of
Vocational Education, submitted to the School of Graduate Studies, University of
Education, Winneba in partial fulfilment of the requirements for award of the Master of
Technology (Fashion Design and Textile) degree.**

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AMINAH RUTH

(190010388)

DECEMBER, 2021

DECLARATION

STUDENT'S DECLARATION

I, Aminah Ruth, hereby declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole for another degree elsewhere.

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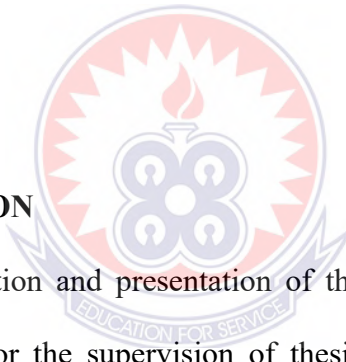
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I hereby declare that the preparation and presentation of this work was supervised by me in accordance with the guidelines for the supervision of thesis laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: DR. DANIEL KWABENA DANSO

SIGNATURE:

DATE:



ACKNOWLEDGEMENTS

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of you.

I thank God for providing me with everything that I required in completing this project.

I am highly indebted to my supervisor Dr. Daniel Kwabena Danso for having the patience and time to guide me through the project.

I would like to express my gratitude to my family for their kind cooperation and encouragement which helped me in the completion of this project. Thank you.



DEDICATION

Dedication to my family; especially my spouse and children. My siblings were also my source of encouragement.



ABSTRACT

In Ghana's Upper East Region, the smock (fugu) industry employs both educated and uneducated people. Despite many announcements by successive governments to help improve the sector, it continues to face several obstacles. As a result, the aim of this paper is to reveal some of the issues and problems encountered by the industry. The study was carried out in the Upper East region of Ghana; Bolgatanga Municipal, Bongo District, and Kassena-Nankana Municipal. Questionnaires and interviews were used to collect information for the survey. A total of 90 producers and 75 marketers were surveyed in this study. The study discovered that the industry of smock weaving and stitching faces several machinery problems. Many fugu production centres lack the necessary facilities to accommodate all apprentices. Additionally, because markets are scarce at places where the fugu fabrics are sewn into smocks, marketing the goods becomes difficult. As a result, the study suggests that the Assemblies offer the necessary help to the producers, and this can take any form, being it festivals and markets, as well as loans to help them display their goods and buy more yarns.

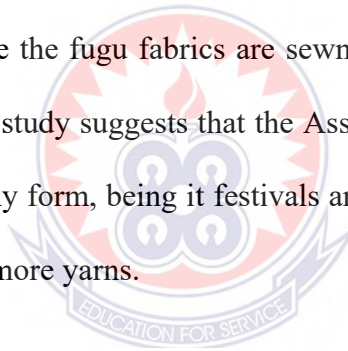


TABLE OF CONTENTS

DECLARATION	i
ACKNOWLEDGEMENTS	ii
DEDICATION	iii
ABSTRACT	iv
TABLE OF CONTENTS	v
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to study	1
1.3 Research Objectives	4
1.3.1 Main Objective	4
1.3.2 Specific objectives	4
1.6 Significance of the study	5
1.7 Organization of the Text	5
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 Theoretical framework of the study	7
2.2 Weaving in Ghana	10
2.3 Indigenous Ghanaian textile	10
2.4.1 Shedding	13
2.4.2 Picking	13
2.4.3 Beating Up	13

2.4.5 Letting Off	14
2.5 The Loom	14
2.7 The Concept behind the Integrated designs	16
2.8 Integrated Cloth Design and Colours	16
2.8.1 White – ‘Fitaa’ or ‘Fufuo’ (Ashanti), ‘Amadedexe’ (Volta) and ‘Zehpeli’ (Northern).....	17
2.8.3 Yellow – ‘Akoko Sradεε’ (Ashanti), ‘Amakpadidi’ (Volta) and ‘Duzem’ (Northern).....	18
2.8.4 Orange – ‘Akutu’ (Ashanti), ‘Akutudidi’ (Volta) and ‘Dagn-kom’ (Northern).....	18
2.8.5 Brown – ‘Ahabandada’ (Ashanti), ‘Amakpafufu’ (Volta) and ‘Zag-Tankpawu’ (Northern)	18
2.9 Challenges associated with the weaving craft industry.....	19
2.10 Marketing	24
CHAPTER THREE	25
METHODOLOGY	25
3.1 Background of Population.....	25
3.2 Research Design.....	26
3.3 Target Population	26
3.4 Sample and Sampling Techniques	27
3.5 Sample Size.....	27
3.6 Data Collection.....	28
3.7 Data Processing and Analysis	28
3.8 Validity and Reliability	29
3.9 Ethical consideration.....	29

CHAPTER FOUR	31
ANALYSIS AND DISCUSSION OF FINDINGS	31
4.0 Introduction.....	31
4.1 Profile of study sitting - <i>Upper East region of Ghana</i>	31
4.2 Bolgatanga Municipal.....	38
4.2.1 Bongo District.....	39
4.2.2 Kassena-Nankana Municipal	39
4.3 Demographic characteristics of respondents – <i>(90 producers and 75 marketers)</i>	40
4.3 Production of Smock (fugu) products	42
4.4.1 Types of Smock (fugu) products in the Upper East Region.....	42
4.4.2 Price range of smock (fugu) products in the Upper East Region	47
4.4.3 Raw materials of Smock (fugu) in the Upper East Region	48
4.4.4 Improving Smock (fugu) production in the Upper East Region	49
4.5 Marketing of smock (fugu) in the Upper East Region.....	50
4.6 Financing.....	52
 CHAPTER FIVE	 54
5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	54
5.1 Introduction.....	54
5.2 Summary of findings.....	54
5.3 Conclusion.....	55
5.4 Recommendation.....	56

REFERENCES..... 57



CHAPTER ONE

INTRODUCTION

1.1 Background to study

Clothing has long played an important role in society. "Fugu" stands for Northern, "Kente" for Ashanti, and "Kete" for Volta. Their distinct characteristics, which are reflected in design elements such as color, motifs, and ideology particular to each field, have the ability to tie these areas together if effectively harnessed. Clothing plays an important part in establishing a person's personality across the African continent. Indigenous African fabrics traditionally represent the ethnic groups' customs, values, and cultures (Patrick, 2005). The Bamanas of Mali, for example, use geometric patterns and designs on their mud cloths (bogolanfini), which male Bamana hunters believe contain protective forces (nyama) (Wayne, 2007).

Local textile prints and weaved ones like Adinkra and Kente have ever since played a prominent role in Ghanaian culture, particularly in times of customary occasions and events. Some of such ceremonies are funerals, festivals, marriage and naming celebrations. The smock (fugu) is a textile made up of single strips, waved with hands and created on a horizontal loom, interlocked together with a sewing machine.

While the smock (fugu) is made in the northern part of Ghana (Savanna, North East, Northern, Upper West and Upper East), its importance extends beyond the three northern regions' borders. Similarly, the smock's traditional importance is fundamental to the citizens of Northern Ghana since serves as the apex of certain customary practices in the country's south.

Irrespective of the ethnical origin of the cloth, almost all tribes in Ghana, together with those of the down south, wear the smock (fugu) as part of the chieftaincy institution.

The smock is adorned with small leather pocket and some writing indications among the Akans in Ghana's southern region, and it is worn by traditional potentates and kings, and warriors for special occasions. As a result, the fugu or smock attire is appropriate each and every Ghanaian, not just those who are known as the custodians. While the exact year when weaving began in Ghana is unknown, it is thought that the art was learned from Arabs in the 17th century. According to Nesbitt (2001), the Ghanaians made contact with Arab merchants during ancient times, learnt a myriad of textile and weaving skills.

The smock (fugu) one of the well-promoted Ghanaians' customary garment; heavily promoted by several of Ghana's presidents. Osagyefo Dr. Kwame Nkrumah and his comrades arrayed themselves with smocks as he proclaimed Ghana's freedom from colonization at the Polo grounds in Accra on Independence Day 1957.

You would think that with the president's pleas and funding for the company, the industry would grow and prosper, but this is not the case. According to Dramedo and Dabuo (2015),

1. The government provides little to no assistance to the fugu industry's expansion.
2. Ghana's textile industry primarily producers' textiles for clothing manufacturing.
3. The proliferation of continuous incoming of textile remains a main parameter, notwithstanding the fact that some Small and Medium size Enterprises have been developed.

4. Furthermore, higher import duties on raw materials for manufacturing, as well as a lack of financial input into newest set of machinery to undertake their operation in the local textile industry, are key drawbacks for the textile industry.

1.2 Statement of the Problem

According to some recent scholarly works on the root and influences of fashion trends, such patterns are typically inspired by the buyers themselves, rather than the dressmaking industry. Fashion patterns are simply a reflection of the emotional state of the consumer (Cho and Lee, 2005). In their article, it is also stated that culture, rather than political, fiscal, or even technical influences, has had the greatest impact on fashion styles and the acceptance since the 1990s. In comparison, George Sproles (1981) examines two opposing schools of thought: One contends that the apparel industry determines norms, while the other contends that shoppers play a larger role in shaping fashion trends. According to Quartey and Abor (2011), approximately 75% of apparel factories cut demand by 20% to 50%. This decrease is due to a number of factors. The main reasons for this are a lack of market and order for indigenous textiles, high manufacturing rates, high wages, high cost of raw materials, and an abundance of low-cost imitation textiles. Another parameter adding to the downturn has to do with the proliferation of low-cost second-hand clothes in the indigenous market. Whilst the trade provides outstanding importance to merchants and patrons, since it is inexpensive, it does not encourage patrons to go in for textile materials manufactured in Ghana due to the cost factor. According to Baden and Barber (2005), even though second-hand clothing is fully prohibited in Ghana, there is no guarantee that the local textiles industry can continue to expand production capability since second hand clothing has been taken over by textiles and clothing imports from Asian countries, which are a major competition on the Ghanaian textile market. The smock (fugu) industry in Ghana's Upper East

region, a constituent of the textile industry, is not growing quickly, despite the fact that several people, and even women, are now involved in the operations in the industry. Since the smock industry in Ghana's Upper East region is not resistant to the above issues.

1.3 Research Objectives

1.3.1 Main Objective

To assess the challenges of the smock (fugu) industry in the Upper East Region of Ghana

1.3.2 Specific objectives

The specific objectives were to;

1. To identify and discuss factors contributing to the enhancement of popularity of fugu fabrics and fugu products in the Ghanaian and international communities.
2. Identify and discuss the challenges of the fugu production industry in the Upper East Region of Ghana.
3. To find out means of improving upon the production and marketing of fugu products of the Upper East Region of Ghana.

1.4 Research questions

The research questions that guided the study are:

1. What are the influential factors contributing to the popularity of the fugu fabrics and fugu products in the Ghanaian and international communities?
2. What are the challenges of the fugu production industry in the Upper East Region of Ghana?
3. In what ways can the production and marketing of fugu products of the Upper East Region of Ghana be improved?

1.5. Scope of the study

This study covers considerations on both the production of the indigenous woven fabrics and the production of the fugu (smock) goods.

1.6 Significance of the study

In the past years, the rest of the world has focused on Africa, with an emphasis on the research and appreciation of African culture and arts steadily expanding (Patrick, 2005). This research is thus useful in understanding, from an anthropological perspective, the explanations for the fugu cloth producers' poor standard of living. This thesis also contributes to the current literature on fugu cloth and African cultural clothing-related subjects, which can be useful for future studies. This research is helpful in identifying demand for northern fugu cloth and the African textile industry in general. Finally, participate in discussions about how to develop the local Ghanaian textile/garment industry so that it can benefit from the growing success of these fabrics.

1.7 Organization of the Text

This thesis is divided into five chapters. The first chapter is an introductory chapter that addresses the fugu cloth, its importance in African cultures, and its use from pre-colonial times to the present. It also addresses the research issue, the difficulties that fugu producers face in producing and marketing fugu cloth in Africa and the Western world. The chapter also defines the study goals and research questions, which primarily aim to determine the reasons for the growing popularity of fugu fabrics and the numerous appeals by various presidents to increase the use of local fabrics while fugu cloth producers remain impoverished.

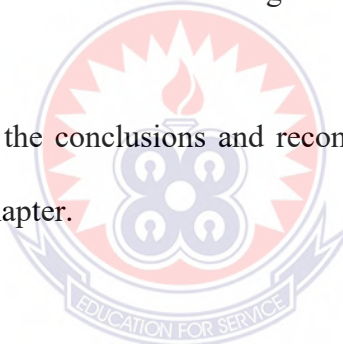
The summary of the literature is included in the second chapter. The chapter presents some reasons why fugu producers experience difficulties in manufacturing and selling their goods.

These causes include high raw material prices and a lack of government commitment to investing in the fugu industry.

The approach, which explains the process used to conduct the research, is discussed in the third chapter. It outlines the explanatory analysis approach as well as the form of data that will be obtained, which is qualitative. It also goes into the sampling specifics, as well as data collection and interpretation processes.

The fourth chapter discusses the results from the questionnaire and interview responses' conclusions. It also discusses the difficulties that fugu cloth manufacturers face during the manufacturing and sale processes.

Finally, the fifth chapter presents the conclusions and recommendations derived from the data analysis performed in the fourth chapter.



CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical framework of the study

Abdallah (2010) revealed that Ghana, which is one of the countries in West African with a thriving textile industry, is steadily entering the ranks of other sub-regional countries with a collapsed textile and sub-sector which produce garment. This is actually in line with the claim that the once leading sub-sector in the Ghana's industrial space, which served as one of the main sources of revenue and foreign exchange to the country, has experienced a significant drop over the years, owing largely to the policy of trade liberalization, which rendered it nearly not possible for the country's textile industry products to compete with imports cheap products, especially from Asia (Quartey, 2006). In the 1970s, over 40 textile companies employed over 25,000 citizens, now the country is left with only 4 textile companies employing fewer than 4,000 people. In 1977, 27% of the overall manufacturing employment in the country resulted from 25,000 jobs (Abdallah, 2010). However, by 1995, jobs in the sub-sector had dwindled to just 7,000, with a further 5,000 woefully underemployed. About three hundred billion Ghana old Cedis in potential revenue per year was lost as revealed by the Ghana Revenue Agencies Governing Board (RAGB), due to textile smuggling, and Ghana's once-leading textile industry is now saturated with Chinese sub-standard textile goods, hence an increase in Ghana's unemployment index as revealed by Abdallah (2010) and Quartey (2006). According to Quartey (2006), the country's overall industry textile output peaked at 129 million yards in 1977, with a power consumption rate of around 60%. Unfortunately, total industry output dropped to 46 million yards in 1995, including output from the four major firms, Ghana Textile Manufacturing Company (GTMC), Printex, and Ghana Textile Printing (GTP), Akosombo Textile Limited

(ATL), and Akosombo Textile Limited. In terms of revenue production and foreign exchange, textile exports produced in 1994, 179.7 million US dollars, but revenue from exports has steadily declined, with the figure falling to 3.173 million US dollars by 1998. (MOTI, 2005; Quartey, 2006). These figures clearly demonstrate the scale of Ghana's textile industry's decline. The researcher's preliminary survey of the Ghana textile industry indicates that the sub-sector has undergone steady drop over the years, and some industrial watchtowers according (Egu, 2009) have not only traced to internal bottlenecks but also to some external factors that cut through the different factories operations, from raw material procurement to sales. The influx of cheap Asian textiles (primarily from China) and the prevalence of used and second-hand garments on the Ghanaian market are the two most serious challenges (Quartey, 2006). It has been noted that many Ghanaians have switched to the use of certain international textiles due to affordability, thus reducing patronage of locally produced textiles. These hypotheses were classified as follows: manufacturing, marketing, and finance

According to the Basics Theory of Production, production is characterized as an economic process that converts raw materials into finished products by using resources to produce products or services that can be exchanged. Some economists according to this source, have characterized production narrowly as all economic operations rather than consumption, and consider any business activity other than the final transaction to be a form of production. Production is a phenomenon that happens in space and time, and since it is a flow term, it is calculated as a rate of production per the time duration. The process of production is thus defined as any operation that increases the correlation among the path of goods and services demanded and the amount, type, shape, scale, duration, and goods and services distribution available in the market place. Development processes have three components: the quantity of the products produced the type of

the good or service generated, and the temporal and spatial distribution of the good or service produced. According to Ali (2009) economists refer to inputs or materials used in the manufacturing process as factors of production,. The numerous potential inputs are typically classified into six categories: raw materials, equipment, labor supplies, capital goods, property, and entrepreneur.

According to the Theories of Early Production (2010), philosophy of production refers to the idea of what is constant and natural in the production industry. This information has historically been acquired in tacit form in the technical expertise of artisans and managers in the industrial space, however more and more of it today is being captured in writing by scholars. There are two types of production theories: descriptive and normative. Even where the subject of analysis is the same, the two resulting philosophy paradigms vary significantly. Descriptive theory provides information of historical or current development but does not assist in changing it to further meet current requirements. Normative theory of production, on the other hand, incorporates broadly applicable information and tools that can be used in production management, especially for maximizing current production and preparing new production.

According to the two distinct development theories, the descriptive theory focuses on historical and academic research, while the normative theory is pragmatically based and therefore ideal for industries dealing with the production of tangible goods, such as textile production, to maximize competitiveness and create sustainable products to fulfill current needs. The descriptive theory of development is common in the fugu industries of Ghana's upper east region. The majority of the fugu cloth clothing styles are vintage and unfashionable. There are no improvements or

modifications to the technology used in the manufacturing processes, which weakens the fugu industry.

2.2 Weaving in Ghana

The exact year when weaving commenced in Ghana is not known but Mensah asserts that the skill of weaving was learnt in the 17th century (Mensah, 1998). The skill is believed to have been learnt from the Arabs. Nesbitt (2001) indicates that during the ancient times, the Ghanaians made contacts with the Arab traders and many skills in the area of textiles were imparted to the Ghanaians. Dramedo and Dabuo (2015) asserts that the weaving of the smock (fugu) centered on the Moshie, Kokomba, Dagomba, Mamprusi, Lobi and Gonja ethnic groups and was the preserve of the men. In today Northern Ghana, the weaving of smock (fugu) is practiced in almost all communities in the three northern regions and women have grown to take a fair share of the business.

2.3 Indigenous Ghanaian textile

Indigenous Ghanaian textile industries have immensely contributed to the sustainability of rural development in Ghana. This textile comes mainly in strip forms and are fashioned into traditional clothes and garments used in various jurisdiction for traditional festivities (Dzramedo, et al, 2011). Indigenous textiles are traditional methods of textiles production perceived to have emanated from or are native to the northerners hence the Gonjas and are expressive of the people's culture through clothes. Textiles become indigenous when everything about them has traditional origin. Products within the Ghanaian indigenous textile industry include; traditional woven cloth (Kente, Kete-Agbamvo and Fugu), 'Nwomu', dyed materials such as Kuntunkunu, Birisi, Kobene and printed Adinkra or Ntiamu designs" (Asante, 2005; Appiah, 1993; Akrofi, 2004).

Akwaboa (1976) discloses that textile production in Northern Ghana centres on the following ethnic groups: Moshie, Kokomba, Dagomba, Mamprusi, Lobi, and Gonja among others. Indigenous weaving in Gonja and Dagomba used to be the reserved of the male sex and was done on vertical looms while spinning and processing of the raw cotton was an art for their female counterpart. However, this has changed and women are now seen in the art of weaving but not necessarily the sewing of smocks.

Smock is one of the cherished traditional apparels of the people of the north and therefore any effort to reactivate indigenous smock weaving centers in the Northern part of the country is a recipe for sustainable rural development. Amateye (2009) opines that the traditional value of smock is central to the people of Northern Ghana especially the Kusasi, Mamprusi, Gonja and the Dagomba who are also identified by their type of textiles art which is usually used for smock locally referred to as 'fugu'. The smock (fugu) which is one of the garment designs exclusively manufactured in Ghana which is made up of aggregates of single strips of hand-woven cloth produced on a horizontal loom, and sewn together by hand or machine (Abdul-Rahim et al., 2016; Nartey, 2011). Though produced in the northern parts of Ghana (Northern, Upper East and Upper West regions), the value of the smock/ fugu transcends the borders of the three northern regions. In the same way as the traditional value of the smock is central to the people of the Northern Ghana, it is also the pinnacle of some traditional customs in the southern parts of the country (Dramedo, and Dabuo, 2015). The smock (fugu) is an important feature in the chieftaincy institution in Ghana among almost all the ethnic groups including those in the south. Among the Akans in the southern part of Ghana, the smock is decorated with small packets of leather and some inscriptions, and these are worn by the paramount chiefs and war chiefs for

ceremonies. This therefore makes the smock (fugu) an attire for all Ghanaians and not only northerners as alluded (Abamfo, 2013; Mensah-Brown, 2014). The smock (fugu) is the only Ghanaian traditional attire which has been extensively marketed by many Presidents of Ghana. On Independence Day 1957, Osagyefo Dr Kwame Nkrumah and his compatriots were adorned with smock when he declared the independence of Ghana at the Polo grounds in Accra. The President then went ahead to encourage all educated nationalists to wear the smock as a move to unite all the people in the country and also as a move intended at having a national dress like all the new republics during that era (Condra, 2013). To make the fugu visible on the international stage, President Jerry John Rawlings made it a point to constantly wear smock both locally and internationally (Acquah, 2002).

‘Fugu’, like other traditional clothes such as ‘Kente’ and ‘Kete’ are linked with royalty among Northerners; which are hand woven on a locally-made loom. The fabrics woven on the Loom comes in strips and are sewn together to shape a bigger bit of material. These fabrics are visual representation of history, philosophy, ethics, oral literature, religious convictions, political thought and aesthetic standards of the general population who made these materials. Though the techniques used in weaving these cloths are similar in nature, they differ in design from region to region in Ghana. In Ghana, the comely known woven customs are ‘Fugu’ for Northern region, ‘Kente’ for Ashanti region and ‘Kete’ for Volta region. Their unique characteristics portrayed in design elements such as colour, motifs and philosophy peculiar to each region have the potential, when harnessed effectively, to bring these regions together.

2.4 The weaving process

Weaving is one of the oldest and most widely used methods for making fabric, thus, woven fabrics are widely used in Ghana. Weaving is the interlacing of two sets of yarns to form a fabric (Korankye, 2010). For Korankye (2010), all woven fabrics are made with two or more sets of yarns interlaced at right angles. The integration of 'Fugu' weaves, like that of the kente and Kete is formed by the interlacement of warp (ends) and weft (picks or fillings) yarns which interlace at right angles with each other according to the type of weave required. Once the filling yarns have been prepared and the warp yarns have been set in place, the loom goes through the primary principles of weaving: Shedding, Picking, Beating Up and Letting off (Asmah, 2014).

2.4.1 Shedding

The shed is formed by raising the harnesses to form an open area between the sets of warps. The formation of the shed is known as shedding.

2.4.2 Picking

While the shed is open, the yarn is transported across the opening to lay a filling yarn across the width of the loom. The insertion of the filling is known as picking. A single filling yarn is known as a pick. Speed of weaving machines is generally expressed as the number of picks per minute or meters of filling inserted per minute. Speed obviously is related to the width of the loom and wider looms; weaving wider fabrics, would require more time for one filling insertion.

2.4.3 Beating Up

Beating up is done with the reed, the comb like device that pushes the filling yarn close against the woven fabric (to the fell of the cloth) so as to make it more compact.

2.4.5 Letting Off

As the woven fabric is formed, it must be moved or let off from the warp beam and taken up on the cloth beam to make room for the formation of more fabric (Asmah, 2004). All these functions are harmonized so that they occur in the appropriate sequence and do not interfere with one another. African textiles are a part of African cultural heritage. In most African countries such as Nigeria, Uganda and Ghana, the producers are men while women spun threads (Picton & Mack, 1979). Example of African woven textiles is 'Asooke' fabric by the Yoruba people in Nigeria (Picton and Mack, 1979).

2.5 The Loom

The loom is the most important and vital equipment used in the weaving of traditionally-woven customs. Loom comes in sizes and forms. As revealed by Hatch (1993), the shuttle-less loom has no shuttle. This is replaced by a discrete length of yarn taken from an external supply package which passes through the shed at the appropriate time in the weaving cycle. This means that it is not every loom that uses shuttle. Hatch further describes other looms such as Rapier looms which use rapier, a rod or a steel tape, to carry filling yarns through the shed from a stationary yarn package at one end of the loom. This gives the width of the fabric to be woven. Another is the Air-jet loom which uses a jet of air to carry the filling through the shed (Ross & Adedze, 1998). The initial propulsive force is provided by a main nozzle with the electronically controlled relay nozzles providing additional booster jets to carry the yarn farther. This is followed by a water-jet that uses a higher-pressure jet of water to carry the filling yarns through the shed. The filling yarn is drawn from a stationary package at the side of the loom, enters measuring drums and continues through a guide to a water nozzle, where a jet of water carries it

through a shed after the beat-up of the filling. Filling streaks in fabrics are rare due to minimal tension on the filling yarn during intersection. The looms described above are faster than the locally made looms which the researcher encountered, filling yarn during intersection. The looms described above are faster than the locally made looms which the researcher encountered.

2.6 Similarities in traditionally woven customs

‘Fugu’, like any other customary woven custom is done with the traditional looms. However, the loom structure differs from one cultural centre to another. Designing for the weaves within the local weaving industry is conceived and planned by the traditional producers from memory and cut out pieces kept in polythene bags. In finding out the reasons behind these practices, Lartey (2014) revealed that producers’ design concepts are developed based on their weaving experiences on the loom over a long period of time. It was noticed, that there were no formal designs that can be followed to weave a fabric, but only through the informal way of education where fathers and older members of the community transfer their knowledge in design to the younger generations. The high price of traditional textiles is as a result of the high cost of production relative to high prices of yarns, dyes and duration of production of these fabrics. The results of a study by Lartey (2014) revealed that there are no recognized open markets for indigenous textiles except for the Agbozume ‘Kete’ Market in the Volta Region and the smock/‘fugu’ market in Daboya. It was also found that the existence of the Agbozume ‘Kete’ Market gained recognition for ‘kete’ business. Apart from the earlier mentioned markets for traditional woven textiles, the bulk of marketing is done by the individual technically known as trekking (Lartey, 2014).

2.7 The Concept behind the Integrated designs

The idea of cloth wearing has existed among different ethnic groups in Ghana. Regarding indigenous cloth, the entire country depends on the weaves that comes from specifically Northern, Ashanti and Volta region for their supply until recently where they switched for foreign fabric because of it relatively low price. The hand woven ‘fugu’ is attributed to the people in the north, the ‘Kente’ cloth to the Akan fraternity or the Asante’s and ‘Kete’ to the Ewes all of Ghana signifying an aspect of fashion that reflect their arts and culture. This variety of ‘Fugu’, ‘Kente’ and ‘Kete’ patterns have been invented by the custodians of these sets of producers over the years. Each of the weave designs has traditional concept associated with them. The selected designs from the three chosen regions connote abstract and symbolic representations. The framework of their composite art included layout, pattern, motif, sketch, draft, form and arrangement of line(s) which are all synonymous to each other. These foundations serve a functional purpose of providing aesthetic pleasure to the user of these weaves. For the ‘Fugu’, ‘kente’ and ‘kete’ designs, there are some philosophical underpinnings of the motifs that constitute the designs concepts which are in effect common to all three communities who weave these cloths. ‘Nwotua’ (snail shell), ‘Nkofe’, ‘Ekye’ (hat), fish, snake, crocodile and cowries were the designs used in the integrated cloth.

2.8 Integrated Cloth Design and Colours

The power of colours is intense because colour influences mood, feeling, harmony and ambience. Though there are many colours in the world and different colours communicate different meanings to various people, the research used white, yellow, blue, and orange. Traditional colours that reflect in the Ghanaian National flag are Red, Gold (Yellow), Green and

Black with White been the spiritual colour of the fetish. Other colours such as, Blue, Orange, Violet, and Purple are solemnly used.

2.8.1 White – ‘Fitaa’ or ‘Fufuo’ (Ashanti), ‘Amadedexe’ (Volta) and ‘Zehpeli’ (Northern)

The colour white chosen represents the spiritual motivation, the ability to be open and receptive to the divine, or the spiritual world, that is unconcerned with worldly matters or ambition but reflects an inner illumination. In Northern, Ashanti and Volta Regions, it symbolizes contact with ancestral spirits, deities and other unknown spiritual entities such as ghosts. It is also used for spiritual purification, healing, sanctification rites and festive occasions. White colour is associated with innocence, cleanliness and purity, which creates a peaceful and relaxing interior. It is believed that a child is born ‘pure’, without sin therefore a white cloth is worn to adore a new born baby. Also, when a person dies, he/she returns to a ‘pure’ state again, therefore the dead is clothed with white which signifies the beginning and end of life. The choice of white in the targeted cloth is to signify the purity and newness of the wearers.

2.8.2 Blue – ‘Bribri’ or ‘Bibri’ (Ashanti), ‘Amadidi’ or ‘Blb’, (Volta) and ‘Vakahali’ (Northern)

Blue colour can be seen in all traditional hand woven cloths in Ghana. It reminds people of the sky and the ocean, which have a calming effect on people (Enniful, 2012). The blue colours are “soft and introspective” and help to stand out at the right moment. Most royal apparels like ‘fugu’, ‘kente’ and ‘kete’ have traces of blue in them. This symbolises infinity, calm, relaxation, coolness, tranquility, good fortune, peacefulness, harmony and love related ideas. Blue is a cold colour and appears to recede from the eyes. This brings to light the importance of the use of blue in the integrated cloths that portray peacefulness, harmony and love.

2.8.3 Yellow – ‘Akoko Sraɛɛ’ (Ashanti), ‘Amakpadidi’ (Volta) and ‘Duzem’ (Northern)

The choice of the colour yellow for the integration was influenced by the rich minerals in the land. Yellow is associated with the sun, sunflower, gold, and egg yolk. It relates to hot climates and lifts spirits. According to Enninful (2012), yellow is a luminous and vivid colour which conveys the idea of purity and symbolizes sanctity, preciousness, royalty, wealth, spirituality, vitality, heat, happiness and fertility. Ghanaians adore the colour yellow as it symbolizes the richness of the land. A woman dresses in gold during the marriage or after marriage for at least one week to show that she is newly married.

2.8.4 Orange – ‘Akutu’ (Ashanti), ‘Akutudidi’ (Volta) and ‘Dagn-kom’ (Northern)

Orange is the colour of ripped mango. It is between red and yellow on the spectrum of light on the traditional colour wheel. Its name is derived from the fruit. Orange colour has some characteristics of red and yellow such as brilliant and cheerful colour which gives the impression of warmth and appears to advance towards the observer. Therapeutically, it increases heart rate and circulation (Meyer, 1999).

2.8.5 Brown – ‘Ahabandada’ (Ashanti), ‘Amakpafufu’ (Volta) and ‘Zag-Tankpawu’ (Northern)

This is associated with the colour of Mother Earth. In most Ghanaian traditional homes clay pots brown in colour are used as water storage and for boiling medicine and for cooking. Brown is usually obtained from clay and dried leaves and is therefore associated with healing and the power to repel wicked spirits (Lystad, 1960). Collectively as a Nation our existence or survival is controlled by the heavens and the earth. Our substance and survival are identified with the fruits of the earth and the freshness and refreshing reign of heaven and these two elements represents

the brown and the blue colours in the integrated cloth. The yellow and the orange reflect the wealth and the treasures that the Almighty God ('Twediapong Nyame') offers to the nation. Such philosophy justifies the use of these colours. The cloth conveys harmony and unity in diversification hence the name, 'unity is strength', 'dekawɔwɔme ηuse le' (Volta Region), 'Nkabom ma ahoɔden' (Ashanti Region) and 'Nangban-yini n'nye yaa' (Northern Region)

2.9 Challenges associated with the weaving craft industry

In a study by Dzramedo & Dabuo (2015), it is revealed that, the various smock production communities cherished and pay much attention to the craft of smock production as it is their main source of revenue for their family especially within the lean season when farming activities are on the down side. Through the study, a number of challenges were identified that hinges on the production processes and in some instances the quality of smock produced, hence its marketing. Notable among them are the tools and materials used, which are absolute and crude, making the process of weaving slow and tedious. Although some artisans think of maintaining the same tools and equipment, most advocated for a new, improved tools and equipment that will help make work easier and faster. There is also a demand to improve on the quality and processes involved in yarns produced locally, as this will help reduce prices of locally manufactured smock and improve on quality of products manufactured. Among the challenges identified were the fastness of the local dyes used in the dyeing process of cotton yarns and the limitation of colours used. The producers are ready to welcome any process that will improve on the fastness properties of dyes used but not to change production processes and colour yield. They also declared their intension to use other bright colour yielding processes of natural sources provided the colour yielding materials is/are available and accessible to their communities.

In identifying challenges encountered with regard to the acquisition and use of the raw materials in the production processes of fugu, a study by Dzamedo & Dabuo (2015) revealed the following; 12 of the respondents representing 7.02 identified frequent shortage and delays in accessing raw materials as challenge they faced in the production of smocks, 26 respondents attributed the delay to slow pace of strip weaving for the sewing of smocks; 82 respondents relate the challenges to the difficulties associated with the cultivation and spinning of cotton into yarns which is the main form of raw material for the local smock production while 51 of the respondents relate the problem to lack of fund to purchase the raw materials for the production. These are represented in percentages of 15.2%, 48.0% and 29.8% respectively. Besides, Challenges relating to the sewing of strips into smocks were seen as culture appreciation and a way of sticking to tradition; in that, the artisans stated that, marketers prefer hand stitched smocks to machine stitched smocks, hence they enjoyed stitching with hand needles. The simple reason being that, the hand stitched smocks conform to tradition and make the garment appeal better on the wearer in terms of easiness in flare at the base or hemline, making it easier to spin when performing traditional dances that involved mostly turning. Also, marketing is a major challenge as almost all the weaving centers in the various epicenters of production lamented that their main mode of selling their products is conveying them to regional market center in Tamale or when they reserved an order from a client or a dealer orders for some quantity to be produced from him or her (Dzamedo & Dabuo, 2015).

On issues relating to skill training programmes and support systems for artisans, the outcome of a study by Dzamedo & Dabuo (2014) reflects little or no action to that effect. However, COTVET-PSU outreach team claims they have given support in terms of skill training and

support for tools to the smock producers association in Tamale. As revealed by Dzamedo & Dabuo (2015), there is no training programme or workshop organized by any assembly or any NGO to train or educate the artisans on ways of raising capital to finance their businesses through formation of cooperatives to solicit for funding from both governmental and other institutions. Although training and support listed by government agencies are all limited to Tamale and perhaps Daboya only, no training was carried out on ways of production to improve on quality delivery in smock production. There is no assistance to improve on tools and equipment, workplaces for artisans and amenities like water, electricity and good road in these communities to facilitate easy accessibility which may go a long way to improve on the marketability of the products.

With glowing demands for the use of environmentally safe fibres and organic dyes (Gam and Banning, 2011), the smock industry has a chance of penetrating into the larger market globally. However, this will only be possible if issues of motivation, inadequate facilities and amenities, lack of funding and insufficient managerial ability as challenges in other garment producing industries like AGOA in Ghana (Quarcoo, et al, 2013) are addressed by stake holders in effort to promote the industry as also identified through the field survey.

Challenges must be overcome if sustainability is key in the production and marketing lines of any product. This may include, levels of maintaining product value, quality, aesthetics, meeting needs of producers and coping with higher material and labour cost (Lisa et al., 2013). In a study by Dzamedo & Dabuo (2015), it became obvious that problems relating to the cultivation, processing of the cotton into yarns and the weaving processes can be improved with the injection of funds into the smock weaving business. Although, government's effort through promises

made to establish craft centers in some selected towns like Daboya, Yendi and Tamale, the projects that are to be supported by United Nations Industrial Development Organisation (UNIDO) have not yet taken off (Buta, 2013; Mubarik 2014). In assessing the challenges associated with the promotion of smock weaving in the West Gonja District in order to determine how these challenges can be overcome for sustainable strategies that will improve on capacity building in the weaving sector, Dzramedo & Dabuo (2015) used a Likert scale approach in collecting and analyzing data to that effect. When the researchers assume there is ready market available for the smock products, the respondents' responses revealed there is some level of marketability for their products, 84 of the respondents agreed and 54 of them strongly agreed. This implies that if production can be beefed-up, patronage will equally improve. Akalaare (2000) confirms that, the demand for the smock production is growing. He therefore encourages indigenes to see the craft as a business other than a heritage, thereby demystifying the arts of smock weaving to enable more people patronizing it and using it on the bases of fashion instead of ceremonial wears.

Producers believe if a common local market can be established and a festival instituted to celebrate the smock heritage and other artifacts similar to those seen in Asante and Ewe land, it will go a long way to improve on the patronage of the products. This they believe will increase the tourist attraction base of the district, open the district for investors and also generate income for artisans thereby boosting the revenue level for the District Assembly as a whole. The findings revealed that there is little or no support from any institutions or the district assembly toward the growth of their businesses. Other forms of support toward the sustainability of their businesses were not also forthcoming, in the form of technical training to improve on their skills. They equally believe there is the need to develop easier and faster methods of production processes to

improve on quality and introduce varieties of smock or other types of garments. Generally, it was identified that, sustainability of this craft will largely depend on the sharpening.

In spite of all the challenges identified, Dzamedo & Dabuo (2015) wanted to know if the business of smock production is lucrative. The results had 67 (39.2%) of the respondents agreeing to the lucrativeness of the business while 104 (60.8%) stated no, implying that not all engaged in the smock business considered it as lucrative though they all believe it can be a lucrative venture if all parameters are put right. A follow up question asked respondents to state what they want to see being done differently to improve on their businesses. The responses were classified by the researchers into three categories; 93 representing 54.4% of the respondents stated they require for financial support in various forms, 33 of them representing 19.3% asked for improved working conditions, accessibility of materials, tools and equipment and technical support in terms of processes associated with production such as enhanced dyeing techniques, weaving techniques and the stitching and finishing of the products. The third part of the demand from 45 respondents representing 26.3% were based on improved market condition for their products to enable them widen the market base with export opportunities created for their smock production. In 2015, the Ministry of Trade and Industry in collaboration with the Savannah Accelerated Development Authority and the World Bank launched an initiative which is that 'smock should be worn on the first Friday of every month in Ghana (Adjei et al., 2016). With these and many other presidential appeals and support for the industry, one would expect the industry to thrive and flourish. However, this is not the case. Dzamedo and Dabuo (2015) aver that there is little or no support from Government towards the growing of the business. There is no training on how to improve quality or to improve the tools and equipment used.

2.10 Marketing

The World Trade Organisation (WTO) is a multilateral organization that deals with international trade law (Redmond, 2008). Approximately over one hundred and fifty (150) member countries, according to WTO Policies on Textiles and Clothing, the WTO's key priorities are to apply free-trade concessions to all members, create free foreign trade with less tariffs, make trade more predictable by current laws, and make trade more competitive by removing subsidies. To function efficiently, the WTO works closely with the two other elements, the World Bank and the IMF. Trade liberalization is inequitable to developed countries such as Ghana. It weakens developed countries' dysfunctional industries by actually making the wealthy even wealthier at the expense of the poor. The WTO does not properly allow for the complexities and asymmetries of economic growth under liberalization conditions. Developed countries and the global institutions governed by the WTO, such as the IMF (International Monetary Fund), have put significant pressure on developing countries to liberalize their trade laws, ignoring the risks to long-term growth prospects (Challenges of WTO, 2009). This has resulted in the introduction of cheaper international textiles into Ghanaian markets, resulting in a stagnation or decline in demand for local textiles such as fugu cloth. This makes it difficult for local fugu cloth producers in the Upper East area to find markets for their wares.

CHAPTER THREE

METHODOLOGY

3.1 Background of Population

The study was conducted in Ghana's Upper East Region, which is in the country's northwestern corner. It is bounded to the north by Burkina Faso, to the east by the Republic of Togo, to the west by Sissala in the Upper West Region, and to the south by West Mamprusi in the Northern Region. The region's 13 Districts are Bawku West, Bawku Municipal, Binduri (new), Bongo, Builsa North, Bolgatanga Municipal, Builsa South (new), Kassena Nankana West, Garu-Tempane, Kassena Nankana East, Pusiga (new), Nabdam (new), and Talensi. Historically, the Region attained Regional status in 1983, but had formerly been a part of the Northern and Upper Regions. Agriculture and related work accounts for 65.9 percent of the Region's economy, followed by manufacturing and transportation machinery work (14.5 percent), distribution work (9.5 percent), support work (3.9 percent), and skilled, technological, and related work (3.8 percent). These five professions account for 97.6 percent of all occupations. Handicrafts are also common in the area. The area has 1,046,545 people, but those between the ages of 15 and 65, which is the active age category in which an individual can participate in productive job; there are 540,345 people in the Bolgatanga Municipality, 38,542 in Kassena Nankana West, 59,751 in Kassena Nankana East, and 42,449 in Bongo District. For the analysis, the researchers used a sample method of qualitative testing. Survey analysis refers to a collection of techniques used to collect data from a variety of persons, groups, or other units of concern in a standardized manner. The researchers and research assistants worked closely to gather evidence. This allowed them to document the events on a regular basis using various data collection methods.

3.2 Research Design

Orodho (2003) defines research design as, “the scheme, outline or plan that is used to generate answers to research problems”. In an attempt to answer the research questions for this study, a qualitative research approach encompassing an array of field investigation techniques was employed, with both primary data sourced from field survey and secondary data from online repositories used.

Exploratory, explanatory and descriptive are the three (3) main types of research approach/design employed by researchers in every research project. The study employed a descriptive approach to assess the challenges of the fugu industry in the Upper East Region of Ghana. As indicated by Cooper and Schindler (2006), a descriptive study is concerned with finding out what, where and how of a phenomenon. The descriptive case study research method allows the researcher to create information in answering the what, how, who, and when questions that concern the research objectives, and hence is informed by practicality for collecting standardized data.

3.3 Target Population

The target population included all fugu producers and marketers in the Upper East Region. Usually, population targeted should have a certain level of observable features, to which the study advances to generalize the results of the study (Mugenda & Mugenda, 2003). The target population is not considered to be homogenous as this definition assumes.

3.4 Sample and Sampling Techniques

In this study, two types of sampling techniques were used, namely purposive and convenience sampling techniques. Purposive sampling allows a researcher to select respondents based on unique characteristics and their informative nature to accomplish the objective of a study. Langham (2000) indicated that convenience sampling helps make available information when higher numbers of respondents are surveyed and this aid in achieving the sample size required in a moderately quick and less expensive way. Convenience sampling allows respondents to be selected based on accessibility to the researcher.

Both purposive and convenience sampling approach were used to select master producers, dyers, smock manufacturers, and marketers from three Districts/Municipalities: Bolgatanga, Kassena/Nankana, and Bongo. Due to the heterogeneous existence of the population, the researcher used a variety of sampling methods for the diverse sectors of the sample. The researcher focused on this target group to answer the set research questions of the study to gain insights into the challenges of the fugu industry. This approach according to Israel (1992), (as cited in Owusu & Badu, 2009), eliminates sampling errors and provides data on all individuals in the population.

3.5 Sample Size

A sample is a portion or part of a population. The need to ensure samples are representative of the target population, hence a sample size is relevant.

According to Saunders et al. (2009), the number of respondents in the population that will serve as a representative of the entire group represents a sample. Snow ball sampling was used to identify ninety (90) producers, which included smock producers, smock sewers, and dealers.

Simple random sampling was used to choose seventy-five (75) marketers from different backgrounds spread throughout the country. In all, a total of 165 respondents were engaged.

3.6 Data Collection

There are several approaches in collecting data and as such the choice of tool and instrument used for a study depends mainly on the attributes of the “research topic, problem question, objectives, design, expected data, and results”, because each tool and instrument collect specific data (Ngechu, 2004). The study employed both primary and secondary data collection methods for data collection. Data was successfully collected by using questionnaire and interview guide with an Open Data Kit (ODK) via android tablet and smartphone. The primary data was collected from the study sample using survey questionnaires as the data collecting technique or instrument. A questionnaire that comprised a series of formulated questions that were convenient and easy to answer was used. A myriad of secondary data was collected from various publications and journals obtained from online repositories.

3.7 Data Processing and Analysis

Before processing the responses, the completed questionnaires were verified for consistency and completeness. Corrections were made to all the questionnaires received from the field for completeness. Sorting, numbering and coding were done before importing the data into Microsoft Excel 2013. Data analysis was done using the SPSS (Version 25.0).

Descriptive analysis was performed to describe the data set. Results were reported with summary statistics and presented graphically. 95 percent confident interval with a 5% error margin and P-value < 0.05 was used to assess statistical inference. Statistically significant level was achieved

for any P-value < 0.05. Description and content analysis approach, together with cross-tabulation tables, frequency, pie and bar charts was employed to represent findings.

3.8 Validity and Reliability

The degree to which a score completely represents a concept is termed Validity (Zikmund & Babin, 2010). Opinions from experts in the field of study were sorted, especially the supervising lecturer of the research study to establish the validity of the research instrument. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity.

Research process that produces workable results it is considered to be reliable. As indicated by Carlson and Anderson (2007), reliability is an indicator of measuring internal consistency and is the key to understanding reliability. Although reliability is necessary, it is not considered to be a utmost condition for validity. A reliable but invalid instrument will yield inaccurate results repeatedly.

The statistics collection instruments that are; the questionnaires for the study were tested for its validity and reliability. By validity, the best questions after a critical examination of a range of possible questions were chosen to measure the subject matter. This was made viable after the pre-test. However, to meet the need for reliability, questions might be analyzed to check the degree of consistency in measuring the concept at hand. To this end, ambiguity in wording and unclear questions was taken out or corrected subsequently.

3.9 Ethical consideration

The ethical practice was observed accordingly. According to Creswell (2013), any misconduct or impropriety that may reflect on the organization or institution of the research participants should be protected, trust should be established between the two parties, and thus the researcher and

research participants should endorse the integrity of the research work. An ethical practice that regulates research of this nature was appropriately observed. An introduction letter was requested from the Department to seek permission from the various authorities from the Bolgatanga Municipal, Kassena/Nankana Municipal and Bongo in the Upper East Region before the study was conducted. Informed consent was sought from the participants and their confidentiality was assured.



CHAPTER FOUR

ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents these sections with analysis results and key findings revealed through this research study. Four (4) main sections are presented by this chapter are profile of study sitting, demographic characteristics of respondents - 90 producers and 75 marketers, Marketing trend among respondents and lastly, Financing and Challenges among producers and marketers.

4.1 Profile of study sitting - *Upper East region of Ghana*

The study was carried out in the Upper East region of Ghana. Three main districts in the region were considered for this research study. Namely, Bolgatanga Municipal, Bongo District, and Kassena-Nankana Municipal.

Aside farming as the major occupation in the selected districts - people of Bolgatanga Municipal, Bongo District, and Kassena-Nankana Municipal actively engage in smock locally known as fugu production. A systematic review depicts that the industry faced a lot of marketing and financing challenges such as; there are no reputable markets for producers to procure raw materials with the exception of Bolgatanga, for manufacturing in the areas visited. (Adjei et al., 2016), Manufacturers in Bongo and Kassena Nankana Districts are unable to sell a lot of products within the week and the clients of these manufacturers are predominantly individuals, tailors and seamstresses. There has also not been support from government to the manufacturers within the catchment area. (Adjei et al., 2016). Displayed below are some of the smock (fugu) produced in the Upper East Region.















Sisala, and Kanjegah tribes, as well as the Hausa and Mossi, are mixed in with the various peoples of the north. Despite the district's urban structure, the bulk of the population worked in agriculture, 19 percent in commerce, 12 percent in manufacturing, mostly handicrafts, and just 7.4 percent in public services in the 1990s. Few workers exist in the mining and manufacturing industries, as well as in metal-working shops, repair shops, and painting shops, but they are a small minority. (Wikipedia, 2021)

4.2.1 Bongo District

Bongo District is one of the Upper East Region's fifteen districts. The Legislative Instrument (L.I.) 1446 constituted the assembly as an ordinary district assembly in 1988. Bongo is the capital of the municipality, which is situated in the central part of the Upper East Region. Subsistence farming and handicraft production are the most common occupations in Bongo District. Two senior secondary schools, thirteen junior secondary schools, and forty primary schools are located on the island. Gurene is spoken by almost 90% of the district's residents. (Wikipedia, 2021)

4.2.2 Kassena-Nankana Municipal

Kassena-Nankana Municipal is one of the Upper East Region's fifteen districts. It was originally a part of the broader Kassena-Nankana District until part of it was broken off to form Kassena-Nankana West District on February 29, 2008, and the remaining original part was renamed Kassena-Nankana East District. On June 28, 2012, it was elevated to municipal assembly status, becoming Kassena-Nankana Municipal. Navrongo is the capital of the municipality, which is situated in the western part of the Upper East Region. The municipality's trading and industrial operations are mostly focused on foodstuffs, semi-processed commodities, and crafts. These

products are sold in local stores as well as outside of the municipality. Foodstuffs, poultry, and finished goods are among the commodities traded. There are few large-scale manufacturing industries in the Kassena-Nankana Municipality. It is mainly characterized by small scale food production, art and manufacturing industries, examples of which include smock weaving, pottery and blacksmithing. (Wikipedia, 2021)

4.3 Demographic characteristics of respondents – (90 producers and 75 marketers)

A total of 90 producers and 75 marketers of smock products were included in the analysis. Out of the 165 total sample size, majority of 85 (51.5%) were females with 80 (48.5%) males. Most of the marketers/marketers who participated in the research are males 51 (68.0%) and more female producers 61 (67.8%). Less graduates; Polytechnic graduates (14.5%) and Degree holders (13.9%) as well as those with no formal education (12.1%) compared to JHS (27.9%) and SHS (16.4%) etc. took part of the research study. However, most of the smock (fugu) marketers who participated in the study were graduates; Degree holders (28.0%) and Polytechnic graduates (24.0%). A higher proportion of 66 (40.0%) out of the total respondents are from the 31-35 years age group, reflecting in both the producers and marketers. 24.4%, 19.3% and 16.3% participants were from the 26-30 years group, Above age 50 years group and Below 25 years group respectively. Assessing supplier's length of years in the smock (fugu) production, majority (37.8%) of the producers have been in this industry for 1-3 years. 20.0% (18) of the producers have worked for more than 10 years, 17.8% for 7-10 years, 14.4% for 4-6 years with only 10.0% who have been in the business for less than a year. Similarly, marketers/marketers years of patronage assessment reveals that, majority of 26 (34.7%) respondents have patronage smock (fugu) products for 1-3 years. This is an indication that the industry faced a lot of marketing and financing challenges. 20.0% (15) have used the fugu products for 4-6 years or above 10 years

with 16.0% for 7-10 years as well as only 9.3% for less than a year. Out of the total 165 participants, majority 75 (45.4%) were sampled from Bolgatanga Municipal with 40 being producers, with 27.3% (45) each from Bongo and Kassena-Nankana Districts. See table 4.1 for details of the findings.

Table 4.1 Socio-Demographic characteristics of respondents

VARIABLES	Producers (90)		Marketers (75)		Total (165)	
	n	%	n	%	n	%
Gender						
Male	29	32.2	51	68.0	80	48.5
Female	61	67.8	24	32.0	85	51.5
Education						
No formal education	15	16.7	5	6.7	20	12.1
JHS Leavers	38	42.2	8	10.7	46	27.9
SHS Leavers	16	17.8	11	14.7	27	16.4
Middle school certificate holders	13	14.4	12	16.0	25	15.2
Polytechnic graduates	6	6.7	18	24.0	24	14.5
Degree holders	2	2.2	21	28.0	23	13.9
Age						
Below 25 years	18	20.0	9	12.0	27	16.3
26 -30 years	24	26.7	16	21.3	40	24.4
31-35 years	40	44.4	26	34.7	66	40.0
Above age 50 years	8	8.9	24	32.0	32	19.3
Years in business/patronage						
Less than a year	9	10.0	7	9.3	16	9.7
1-3 years	34	37.8	26	34.7	60	36.3
4 -6 years	13	14.4	15	20.0	28	17.0
7 – 10 years	16	17.8	12	16.0	28	17.0
Above 10 years	18	20.0	15	20.0	33	20.0
District of residence						
Bolgatanga	40	44.4	35	46.7	75	45.4
Bongo	25	27.8	20	26.7	45	27.3
Kassena- Nankana	25	27.8	20	26.7	45	27.3

Source: *Field Survey, 2021*













Table 4.3 Price range of Smock (fugu) products among manufacturers

Price Range of Smock Products	Frequency	Percent (%)
Less than GHC 100	6	6.7
GHC 100-GHC 150	41	45.6
GHC160-GHC200	28	31.1
GHC200-GHC400	10	11.1
GHC500 and Above	5	5.6

Source: *Field Survey, 2021*

4.4.3 Raw materials of Smock (fugu) in the Upper East Region

Interaction with respondents revealed that one of the major challenges in the smock (fugu) industry was the availability of adequate raw materials. Following this, an attempt was to investigate the various markets manufacturers purchase their raw materials in light of the three main districts - Bongo, Bolgatanga and Kassena-Nankana. The analysis reveals that most of the manufacturers in Bongo District bought their raw materials from Bolgatanga Municipal (17). Few of them purchase theirs from Tamale, the Capital city (3), and from other markets. Majority (25) of the Bolgatanga municipal producers got theirs from Bolgatanga, the capital city of the Upper East Region. 11 of them reported to purchase theirs from Tamale with 8 from Greater Accra and from other sources (5) as well. Finally, most of the Kassena-Nankana manufacturers also bought their raw materials from Bolgatanga, the capital city with the remaining from Tamale (4), Accra (2) and other markets (2). See figure 4.6 for a detailed information.





question received no responses from 10.1% users. A descriptive analysis using the cross-tabulation to determine which Municipality sold the most smock items per week showed that factories in the Bolgatanga Municipality sold more per week than those in the other regions. Other Municipalities' manufacturers were only able to sell fewer than 25 yards in a week. This may be because the economy in Bolgatanga is larger than in the other regions, and because Bolgatanga is the provincial capital, people come from neighboring towns and villages to buy for retailing and personal use. Furthermore, tourists from both the southern part of the country and abroad stop in Bolgatanga before moving on to their destination, and some of these tourists make transactions while in Bolgatanga. When asked if they had reduced demand in the previous two (2) years, approximately fifty percent (49.9%) of producers said yes. A cross-tabulation of the Districts showed that producers had also reduced production in all districts, with Bongo District being the worst affected. 32 out of the total respondents in Bolgatanga replied.

When asked if they had reduced demand in the previous two (2) years, 54.1% of producers said yes. The descriptive analysis using the cross-tabulation of the Districts showed that producers had also reduced all the districts' production, with Bongo District being affected most. In Bolgatanga, 32 out of the total respondents said yes; 11 out of respondents said yes in in Kassena-Nankana as well as Bongo however, some factories, on the other hand, revealed to increase demand in the previous two years.

The reasons for the production cut, as seen in figure 4.8, suggest that high production costs (27.9%) and poor demand for the goods (35.7%) are the two key reasons for the cutting down production. Another significant reason is high wages leading to inability to pay workers (21.6%).



Table 4.4 Manufacturer's amount spent on raw materials

Variables	Amount
Kassena Nankana Municipality	Ghc 200.00 - Ghc 300.00
Bongo District	Ghc 200.00 - Ghc 300.00
Bolgatanga Municipality	Ghc 300.00 - Ghc 700.00

Source: *Field Survey, 2021*



CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Chapter five of this study presents a summary of all the key findings revealed by this research. A follow up conclusion is made in light of the findings. The final section of this chapter is recommendations for future studies, decision making and interventions for addressing/advancing the challenges of the smock (fugu) industry in the upper east region of Ghana.

5.2 Summary of findings

The study took place in three sitting - Bolgatanga Municipal, Bongo District, and Kassena-Nankana Municipal in the Upper East Region. A total of 165 respondents comprising of 90 producers and 75 marketers participated in this research study. Majority of 85 (51.5%) were females with 80 (48.5%) males. Most of the marketers/marketers who participated in the research are males 51 (68.0%). Less graduates; Polytechnic graduates (14.5%) and Degree holders (13.9%) as well as those with no formal education (12.1%) compared to JHS (27.9%) and SHS (16.4%) etc. took part of the research study. However, most of the smock (fugu) marketers who participated in the study were graduates; Degree holders (28.0%) and Polytechnic graduates (24.0%). A higher proportion of the respondents 66 (40.0%) fall within the 31-35 years age group. Majority (37.8%) of the producers have been in this industry for 1-3 years.

51.5% reported to manufacture all types of smock (fugu) products. Approximately 21% and 12% of them produce Dasenka type of smock which is also called as Batakari or Fuugu and Jampa type of smock respectively. The remaining types are Bana's type of smock and Kparikoto also

known as Agbada. Majority of 46% of the manufacturers sells their smock (fugu) products within price range of GHC 100-GHC 150.

The major challenges in the smock (fugu) industry were the availability of adequate raw materials. Most of the manufacturers in Bongo District bought their raw materials from Bolgatanga Municipal (17). The two main strategy producers used to improve on their production were obtaining loans for expansion and support from NGOs and Developmental partners.

Producers reduced production in all districts, with Bongo District being the worst affected. The significant key reasons for the cutting down production were high production costs (27.9%), poor demand for the goods (35.7%) and high wages leading to inability to pay workers (21.6%).

5.3 Conclusion

The findings of the questionnaire study revealed that few people were involved in training as smock product manufacturers in the area by apprenticeship. This reflects the fact that fewer apprentices were registered in the workshops visited, and 28.9 percent of the producers did not have any apprentices despite the fact that they would have liked to pass on the knowledge.

There were no reputable markets for producers to buy raw materials for manufacturing in the areas visited, with the exception of Bolgatanga, which had a market where some of the materials could be obtained. As a result, producers must fly to places like Burkina Faso, Kumasi, and Accra, raising manufacturing costs considerably.

Manufacturers in the Kassena Nankana and Bongo Districts cannot sell a significant quantity of products in a week, and their clients are mainly individuals, tailors, and seamstresses. The

government has also not given assistance to the producers in the catchment area. Manufacturers are finding it difficult to increase their capacities as a result of this.

5.4 Recommendation

The following suggestions have been made in light of the study's findings.

First and foremost, the Municipal and District Assemblies, as well as non-governmental organizations (NGOs) in the visited places, should organize seminars or create effective platform to teach the upcoming generation about the benefits of participating in the local textile industry. Since these residents will be paying fees, which will continue to raise the income pool of the state assemblies. It would also assist more people in being self-employed and, as a result, not depend only on the government to create employment for them.

Furthermore, private sector owners and medium-sized companies can engage in the trade of yarns, calico, dyes, and other raw materials., to help lower the production price and, as a result, the difficulty in obtaining the raw materials. Manufacturers of Smock may also form partnerships in order to buy products in bulk from larger markets.

Furthermore, the Municipal and District Assemblies can assist in grouping producers so that they can coordinate all works in order to determine larger markets such as multinational and even other larger local markets in the area. This will also assist the groups in evaluating bank loans to buy raw materials and supplies for further expansion, as well as compensate other individuals who serve.

There is also a need to create a festival solely for smock (fugu) where designers and producers can show off the latest designs and tools for smock manufacturing. This would help the product's demand significantly.

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11 – 15 years []

16 – 20 years []

Above 20 years []

SECTION B: WHICH FUGU PRODUCTS DO YOU TRADE IN?

6. Please tick [] the appropriate boxes for your selection and write where necessary.

Fugu fabrics []

Sleeveless fugu []

Bana’s fugu []

Jamp fugu []

Kparikoto/Agbada []

Debenka fugu []

Batakari fugu []

Other (Please specify)



**SECTION C: CHALLENGES HINDERING THE GROWTH OF FUGU
PRODUCTION INDUSTRY IN UPPER EAST REGION**

1. To what extent do you agree to the following as challenges hindering the growth of Fugu production in Upper East Region? Please tick [✓] the best answer to indicate whether you Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD) to the statements in the table.

Variable	Ranking				
	SA	A	N	D	SD
Expensive raw materials for the production of smock					
Influx of shoddy smock products in the market					
Limited market and non-existing markets					
Lack of education on marketing strategies					
Lack of skills in embroidery work					
Lack of cooperation from leaders in the production of fugu.					
Bureaucracy in the local production sectors.					
Lack of supervision by the leaders.					
Limited number of embroidery machines.					
Inadequate knowledge of designing					

Key: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD)

Others (Please specify)

**SECTION D: MEASURES TO HELP PROMOTE FUGU PRODUCTION IN
UPPER EAST REGION**

2. To what extent do you agree to the following as measures to help promote fugu production in Upper East Region? Please tick [] the best answer to indicate whether you Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD) to the statements in the table.

Variable	Ranking				
	SA	A	N	D	SD
Fugu products from the region should be given nice packaging.					
There should be ready access to loan for business expansion.					
Reduce rigorous production processes.					
Support from government, NGOs' and Development Partners					
The need to widen the market base for smocks/fugu.					
Ensure the product quality of fugu in the Upper East Region is good.					
Fugu produced from the Upper East Region should not be too expensive.					
Fugu products from Upper East Region should be designed to meet acceptable standards.					
Obtain loan for expansion.					

Others (Please specify).....

**SECTION B: THE INFLUENTIAL FACTORS CONTRIBUTING TO THE
POPULARITY OF THE FUGU FABRICS AND FUGU PRODUCTS IN THE
GHANAIAN AND INTERNATIONAL COMMUNITIES**

7. To what extent do you agree to the following as influential factors that contributes to the popularity of the fugu fabrics and fugu products in the Ghanaian and international communities? Please tick [] the best answer to indicate whether you Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD) to the statements in the table.

Key: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD)

Variable	Ranking				
	SA	A	N	D	SD
Advertising campaigns have enhanced the patronage					
Finishing of the fugu products have improved					
Behavioral change among Ghanaians toward made -in-Ghana goods					
Government assistance					
Production of quality fugu products					
Nice packaging of fugu products					
Improved technology in fugu fabrics and fugu goods production					
Influence of social media					
Fashion trend					
Wearing clothes to portray Ghanaian culture					

Others (Please specify).....

**SECTION C: CHALLENGES HINDERING THE GROWTH OF FUGU
PRODUCTION INDUSTRY IN UPPER EAST REGION**

8. To what extent do you agree to the following as challenges hindering the growth of Fugu production in Upper East Region? Please tick [✓] the best answer to indicate whether you Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD) to the statements in the table.

Variable	Ranking				
	SA	A	N	D	SD
Expensive raw materials for the production of smock					
Influx of shoddy smock products in the market					
Limited market and non-existing markets					
Lack of education on marketing strategies					
Lack of skills in embroidery work					
Lack of cooperation from leaders in the production of fugu.					
Bureaucracy in the local production sectors.					
Lack of supervision by the leaders.					
Limited number of embroidery machines.					
Inadequate knowledge of designing					

Key: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD)

Others (Please specify)

**SECTION D: MEASURES TO HELP PROMOTE FUGU PRODUCTION IN
UPPER EAST REGION**

9. To what extent do you agree to the following as measures to help promote fugu production in Upper East Region? Please tick [] the best answer to indicate whether you Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), or strongly Disagree (SD) to the statements in the table.

Variable	Ranking				
	SA	A	N	D	SD
Fugu products from the region should be given nice packaging.					
There should be ready access to loan for business expansion.					
Reduce rigorous production processes.					
Support from government, NGOs' and Development Partners					
The need to widen the market base for smocks/fugu.					
Ensure the product quality of fugu in the Upper East Region is good.					
Fugu produced from the Upper East Region should not be too expensive.					
Fugu products from Upper East Region should be designed to meet acceptable standards.					
Obtain loan for expansion.					

Others (Please specify)