UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

SMALL RUMINANT PRODUCTION AS A POTENTIAL SOURCE OF EMPLOYMENT FOR SENIOR HIGH SCHOOL GRADUATES IN THE SAGNARIGU DISTRICT IN NORTHERN REGION

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BY

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This thesis submitted to the Department of Agricultural Education, Faculty of Education (FOE), in partial fulfillment of the requirements for the award of Master of Philosophy in Agricultural Education

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DECLARATION

STUDENT

I, Amamata Kanlauru Hafuowie Seidu hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere:

SIGNATURE: ……..... DATE:

…….

NAME: AMAMATA KANLAURU HAFUOWIE SEIDU

SUPERVISOR

I hereby declare that the preparation and presentation of this thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the Faculty of Education, University for Development Studies.

SIGNATURE: ……. DATE: ……

NAME: MR. BENJAMIN ALENYOREGE

DEDICATION

This thesis is dedicated to the Almighty God for the wisdom and strength given me, my parents my children and all loved ones for their prayers, support, and encouragement throughout my study period.

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Thank you all, God richly bless you all.

LIST OF ACRONYMS

ECOWAS	**Economic Commission of West Africa States**
EMIS	**Educational Management Information System**
FAO	**Food and Agriculture Organization**
GDP	**Gross Domestic Product**
GLSS	**Ghana Living Standards Survey**
GSGDA	**Ghana Shared Growth and Development Agenda**
GSS	**Ghana Statistical Service**
GYEEDA	**Ghana Youth Employment and Entrepreneurial Development Agency**
IFAD	**International Fund for Agriculture Development**
ILO	**International Labour Organisation**
ILRI	**International Livestock Research Institute**
ISSER	**Institute for Statistical, Social and Economic Research**
ITC	**International Technical Center**
JHS	**Junior High School**
LDP	**Livestock Development Project**
LESDEP	**Local Enterprises and Skills Development Program**
MASLOC	**Micro-finance and Small Loans Centre**
MDGs	**Millennium Development Goals**
MELR	**Ministry of Employment and Labour Relations**

MLGRD	**Ministry of Local Government and Rural Development**
MOE	**Ministry of Education**
MOESS	**Ministry of Education, Science and Sports**
MOFA	**Ministry of Food and Agriculture**
NEP	**National Employment Policy**
NGO	**Non-Governmental Organization**
NLSP	**National Livestock Sector Project**
NYEP	**National Youth Employment Programme**
OECD	**Organization for Economic Cooperation and Development**
PAFN	**Pacific Agricultural and Forestry Network**
SADA	**Savanna Accelerated Development Agency**
SHS	**Senior High School**
SNDA	**Sagnarigu District Assembly**
SPSS	**Statistical Package for Social Sciences**
TVET	**Technical and Vocational Education and Training**
UNESCO	**United Nations Educational Scientific and Cultural Organization**
UNICEF	**United Nations International Children's Emergency Fund**
USAID	**United States Agency for International Development**
WAEC	**West African Examinations Council**
WANA	**West Asia and North Africa**

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ABSTRACT

There is great issue of concern to the alarming rate of the increasing number of SHS graduates who do not proceed to any higher education and cannot be absorbed by both the public and private sector in the job market annually in Ghana. Small ruminant production can provide lots of significant employment potential for youth to engage in. This study looked at the assessment of the potential of small ruminant production as a source of employment for Senior High School Graduates in the Sagnarigu District. The study examined the following specific objectives; to assess SHS graduates perception of small ruminant production, to investigate the activities that would to attract SHS graduates in the various communities to take up small ruminant production, to explore the employment opportunities in small ruminant production and to ascertain the challenges preventing SHS graduates to take to small ruminant production as an a source of employment. The study adopted the descriptive survey design. Data was then analyzed using descriptive statistics in the form of frequency distribution, percentages and standard deviations. Based on the study it was concluded that SHS the activities that would attract SHS graduates in the various communities to take up small ruminant production as a potential source of employment opportunity were earning good profit, getting support from MOFA, the availability of source of breeding stock and creating of ready markets. However, inadequate capital to start and inadequate feed/ feeding during the dry season were the challenging factors preventing SHS graduates to take to small ruminant production as a source of employment. The curriculum of senior high school agriculture should be revisited to make it more practically oriented. There should

also be the availability of source of breeding stock and start-up capital from Government, parents and relations.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the study

Agriculture is the mainstay of Ghana's economy. It contributes significantly to the nation's Gross Domestic Product (GDP) and employment. Statistics from the Ministry of Food and Agriculture (2013) indicate the continuous contribution of agriculture to the country's GDP. Agricultural contribution to GDP from the Ghana Statistical Services (2015) in the monetary front in Ghana increased to 7709.18 million Ghana cedis in 2016 from 7567 million Ghana cedis in 2015. On employment, the agriculture sector employs 50.6% of the economic active population of the country (MOFA, 2013).

The agricultural sector is an important sector of every economy. It serves as a source of employment and has a major contribution to rural development. Agriculture is the backbone of the Ghanaian economy, playing a critical role in ensuring food security, as well as socio-economic development. The sector is the main contributor to GDP, accounting for 34.4 percent in 2009, compared to 26.1 percent and 30.5 percent for the industrial and services sector respectively. Agriculture also employs 50 percent of the Ghanaian population (FAO, 2012).

Globally, livestock contribute about 40% to the agricultural gross domestic product (GDP) and constitute about 30% of the agricultural GDP in the developing world (World Bank, 2009). The overall contribution of livestock to household livelihood security is greater for poor households than for those who are comparatively better off (Heffernan, 2004).

The role of the livestock sector in employment opportunity cannot be underestimated. In Ghana, the sector record the highest of 9.3 person to employment in 2015. The livestock sector also play multiple roles in the livelihoods of people in developing communities (Herrero et al, 2013). Livestock production provides directly the lives and livelihoods of the world's most vulnerable and marginalized citizens (Heffernan, 2004). According to Perry and Sones (2007) and Randolph *et al*., (2007), livestock also contribute to the world's food supply, family nutrition, incomes, employment, soil fertility, transport and sustainable agricultural development.

Ruminants are those animals that ruminate. They have four stomach compartments, the rumen, reticulum, omasum, and abomasum. Small ruminants (goats and sheep) in this study are raised in almost all parts of Ghana. They play an important role in the provision of food and livelihood for farmers in times of drought and famine in particular (Bossio, 2009). Small ruminants in Africa represent 21% of the world's small ruminant population. Small ruminants are used by farmers as savings that generate cash especially during drought years and are sold when funds are needed. Small ruminants are also sold to raise money to replace large ruminants lost during droughts (ILRI. 2007).

FAO (2005) reported that small ruminants are a major livestock potential in West Africa and have a large share in GDP. Due to the rapid growth of the population there would be increased demand of animal products in the livestock sector especially small ruminants. According to OECD (2010), Small ruminant production is one of the main economic activities providing food, income and security for the poorest populations who are highly dependent on rain-fed agriculture for their livelihoods.

According to World Bank (2010), in West Asia and North Africa small ruminant production has a considerable significant economic and social value. Small ruminant are the most important source of livelihoods for the poor particularly in regions of dry areas. There are several advantages in small ruminant production. They do not require high initial cost, permanent buildings, low maintenance cost and also provide meat and milk as a source of protein and minerals.

In West Asia and North Africa (WANA), a study was conducted, to examine on the implications of small ruminant production for the livelihood for the poor. The study revealed that to improve the livelihood of the poor there should be assistance in the supply of improved breeds, improved veterinary services and rescheduling loans by government (Aw-Hassan *et al*, 2008).

In Northern Ghana the rearing of small ruminants is important to about 70% of the rural people engaged in rearing of small ruminants. This is because ecologically the Northern region is suitable for small ruminant production. Furthermore, biologically small ruminants are adaptable to long spells of drought conditions in northern Ghana better compared to cattle. In addition, the relatively short gestation periods for sheep and goat are an added advantage. The gestation period of sheep is 148 days and that of goats is 150 days thus, shortening their reproduction cycle (Ekarius, 1999).

According to Lebbie (2004) and Peacock (1996), small ruminants are better able to adapt to drought than cattle. Small ruminants can generate continuous income to smallholder farmers even during dry season. There is also a growing market demand for sheep and goat meat than other livestock in urban areas across West Africa. This presents an employment opportunity to increase income and sustain livelihoods of rural households. The small

ruminant farming is emerging as an important source of livelihood particularly for landless labourers and marginal farmers across Ghana. There are other benefits in small ruminant production. These includes provision of food and money, the provision of manure for soil fertility maintenance and draught power for cultivation and transport (Peden *et al*., 2007; Powell, Pearson and Hiernaux 2004).

Studies carried out on the contributions of small ruminant to creation of employment opportunities showed that these were enormous. In Egypt small ruminants contribute 43.6% and 47.7 % of the average total income among the high income farmers and the low income farmers respectively and therefore alleviating poverty in the arid regions (Metawi, 2009). In Ethiopia, farmers view small ruminant production to be a living saving bank and an insurance or financial reserve for a period of economic distress and crop failure as well as a primary source of cash income. In Kenya, small ruminants are also seen as savings and insurance against emergencies. Small ruminants are produced for various reasons with regular cash income from animal, milk and meat sales being the most important (Kosgey *et al*, 2006).

Employment according to the ILO (2015) definition, are persons of working age who were engage in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. Unemployment occurs when people are without jobs and they have actively sought for job within the past four weeks. Unemployment is also defined as 'the proportion of the economically active populations who are not working but are

available for work, Unemployment is a situation where people who are willing and capable of working are unable to find suitable paid employment (Ghana Statistical Service, 2010).

According to the National Youth Policy (2010), the youth constitute the bulk of the human resource potential, yet employment opportunities opened to them are limited. In Ghana, presently, there are about 230,000 young people who are seeking to enter the job market every year, but the formal economy is able to offer jobs to about 4,600 (2%) of them. The remaining 98 percent of these young people tend to find employment in the informal economy where the levels of compliance with labour standards are non-existent or very low or remain unemployed (ISSER, 2015). The economic development of the country is depended on the development of agricultural and the youth is the energy of development in every nation. There is the need for more emphasis to be placed on the role youth can play in agriculture. This implies that the active participation of Senior High School graduates to take up small ruminant production as an employment opportunity would boost economic growth (Baah, 2014).

Agriculture education is one of the key areas of education in the country. Currently agriculture education is studied through the Integrated Science subject which is an integration of the three natural sciences and agriculture by Pupils and students in the basic and secondary schools respectively (Ministry of Education, Youth and Sports, 2008).Employment opportunities in the private sector remain inadequate to absorb the growing numbers of the youth. For the sustenance of agriculture development the focus will be to engage the youth. In order to eradicate unemployment among the youth in the country and for that matter, Sagnarigu district as such, there is the need to assess the

employment opportunities available in small ruminant production for senior high school graduates.

1.2 Statement of the Problem

Small ruminant (sheep and goats) as in this study are among the most important species of livestock that contribute significantly to households' income. Small ruminant production is an important component of agricultural activities in developing countries, which serves as livelihood to smallholder farmers' and contributes to the sustenance of households (Mamabolo and Webb, 2005).

According to FAO (2006), economically small ruminant production is used by the rural small farmer to alleviate poverty and as source of employment to many. With regards to poverty reduction, statistics indicate that about 675 million of the world's rural poor, including nearly 170 million in sub-Saharan Africa, are entirely or partially dependent on livestock production for financial remuneration.

It is a common sense that the most pressing economic and social problems confronting countries today is youth unemployment. The economic situation in Africa has seriously undermined the ability of its youth to get employment. Many young people entering the job market are not finding jobs. The challenges of youth employment have become an issue of great concern not only to governments, but also to employers and trade unions in developing countries. There is anxiety in government when increasing numbers of young people who have left school and are unable to find jobs; they therefore roam about frustrated in the streets (OECD, 2009). Chikezie (2012) stated that the youth provide the manpower for the socio-economic development of any nation. They are the links to the development and transmission of culture of a society.

World Bank (2012) indicated that from 2000 to 2011, the number of employed young people worldwide increased by 16 million, which is a positive development. One of the fundamental challenges in the labour market is the number of these young graduates who cannot be employed in the formal sector. Governments are worried about the increasing numbers of young people who leave school and are unable to get employment. According to IFAD (2001), small ruminant production have a lot of significant employment opportunity for the youth to engage in productive and gainful on- and off-farm activities, across the value chain, including transport, feed provision/fattening, veterinary services, processing, trading and retailing. Youth unemployment is a menace and constitutes a real danger and a threat to development and growth of a nation. Youth Unemployment is currently one of the critical problems facing the Ghanaian economy. Youth employment rate is high in Ghana making Ghana one of the highest, thus about 60 percent of the unemployed in Ghana can be found in the 15-24 years age group (Amankrah, 2006).

In Africa each year about 10-12 million youth seek to enter job market and many do not succeed, resulting in the great challenge of youth unemployment in the continent. This youngest population is the engine of agribusiness enterprises. However, the youth lack access to credit, improved technologies, practical skills and fair markets necessary as well as other logistics and services for agribusiness success. Educational services have also expanded considerably, regardless of the quality of education offered to match with the skills for employment opportunities (Brooks *et al*, 2012). This has resulted in the large number of graduates from the SHS and the tertiary who are ill equipped to enter the job market upon graduation. The quality of training in agricultural technologies value chain, good credit terms and access to ready market have a huge influence in transforming

agriculture and livelihood of the youth. There are opportunities opened in agriculture for these educated youth which can be profitable with the right skills (PAFN, 2010).

SHS graduates should be directed towards employment opportunity in small ruminant production to help solve unemployment situation by exploring activities that would attract their interest to engage them in profitable ventures in small ruminant production. These activities may include creditworthy loans, business plans and entrepreneurship. These activities must be attractive to these SHS graduates to challenge them to build their self-confidence and aroused their interest for sustainability. In addition, small ruminant production is seen as the work for the old people. The youth of Ghana who are about 20 to 30% of Ghana‘s active population participation in agriculture is paramount to replace the ageing farmer population in the country which averages 55 years (GOG, 2013).

The development of agriculture must include the youth. According to MOFA (2011), the average age of a farmer in Ghana is 55 years and life expectancy averages between 55 – 60 years. The ageing farmer population in the country must be addressed to facilitate sustainability in agricultural production. There is therefore, the need for the youth to participate in agriculture which is necessary and vital for employment creation and also to facilitate food security in the country.

The challenges of youth employment have become an issue of great concern. The number of students who are unable to proceed to higher academic institutions after SHS is high: 60% in Ghana; (Ghana MOESS, 2008). There is anxiety in government when increasing numbers of young people who have left school and are unable to find jobs. Employment opportunities in both the public and the private sector remain inadequate to absorb the

growing numbers of the youth. According to ISSER (2010), the formal sector is only able to cater for about 4,600 out of 250,000 youths who enter the labour market annually. The number of youth (15 to 24 years) is projected to increase to 1.3 billion by 2050. For the sustenance of agriculture development and curbing the menace of youth unemployment the focus will be to engage the youth in small ruminant production. Furthermore, in developing countries such as Ghana and Sagnarigu District not exceptional, youth unemployment is still a big challenge though small ruminant production has shown to support households with food, income and for livelihood. In the Sagnarigu district of the Northern region of Ghana about 70% of the household are engaged in rearing of small ruminants because ecologically it is suitable for Small ruminant production (SNDA, 2012). Small ruminant production can provide lots of significant employment potential for youth to engage in apart from rearing and selling but feed provision, buying and fattening to sell, processing, and retailing. Therefore SHS graduates to take up to small ruminant production has the potential of reducing the problems of youth unemployment. It is in the light of all this that, this study assessed the potential of small ruminant production as a source of employment for senior high school graduates in the Sagnarigu district in Northern region.

1.3 Objectives of the study

The general objective of this study was to assess small ruminant production as a potential source of employment for senior high school graduates in the Sagnarigu district.

The specific Objectives of the study were:

1 To examine the employment opportunities in small ruminant production for SHS graduates in the various communities.

2 To determine the activities that would attract SHS graduates in the various communities to take up small ruminant production as a source of employment.

3 To ascertain how SHS graduates perceive small ruminant production as a source of employment.

4 To ascertain the challenges preventing SHS graduates to take up small ruminant production as a source of employment.

1.4 Research Questions

The main research question of the study was how can small ruminant production serve as an employment opportunity for senior high school graduates in the Sagnarigu district?

The specific research questions to address in the study were;

1 What are the employment opportunities in small ruminant production for SHS graduates in the various communities?

2 What activities can be used to attract SHS graduates in the various communities to take up small ruminant production as a source of employment?

3 What are your perceptions of small ruminant production as a source of employment?

4 What are the challenges preventing SHS graduates to take up small ruminant production as an employment opportunity?

1.5 Significance of the Study

The research hope to increase the existing literature on small ruminant and employment opportunity and to explore how the contribution of the youth to the agriculture sector can

be enhanced. Besides, no study has been done in the Sagnarigu district on the same topic and therefore has left a gap to be filled in this area.

Furthermore, this study will contribute valuable information to help SNDA and non-governmental organizations (NGOs) to use small ruminant production as an employment opportunity for the youth.

The findings of this study will also provide and make available a documented research findings on small ruminant production as an employment opportunity for SHS graduates. This study might also lead to more intensified research in small ruminant production and employment opportunity in the District.

1.6 Delimitation

This study delimited itself to small ruminant production (sheep and goats) as they are the most common domesticated animals. To realize the objectives of the study a data collection tool that could collect data fast with a limited time period was required. The researcher while appreciating other data collection tools delimited the study to the use of questionnaire as the data collection tool as it allowed the researcher to achieve the study objectives within the short timelines with minimal costs, tools and specialized skills.

The study was centered in five communities in the Sagnarigu district in the Northern Region of Ghana and focused only the largest communities, not including most of the rural communities. The study also focused on senior high graduates and not including the continued students.

1.7 Research Limitations

The following limitations were noted in the study. The time planned for fieldwork had to be adjusted as SHS graduates selected were quite often unavailable at the time of collection of questionnaires. There was a high level of rescheduling of collection of questionnaires which led to fieldwork taking much longer than was originally anticipated.

The study also used the multistage sampling or mixed method of sampling and no control for non-response could be implemented and therefore delayed the collection of data The study was faced with challenges, which might have affected the results, thus, respondents were frustrated on responding to the questionnaire because they did not get money as some people made them to understand. This made the researcher to visit the respondents on several occasions before the questionnaires were retrieved for analysis. There was also the issue of time constraints as this indeed delayed the analysis and the final submission of the entire work. However, the findings from this study are beneficial as they provide a baseline of information about small ruminant production and employment for the youth.

1.8 Definition of terms

1.8.1 Employment

Employed persons, according to the ILO (2011) definition, are those people who have worked more than one hour during a short reference period (generally the previous week or day). However, unemployment is defined as 'the proportion of the economically active populations who are not working but are available for work, (Ghana Statistical Service, 2000).

1.8.2 Small ruminant

Ruminant animals are those animals that ruminate. They have four stomach compartments: the rumen, reticulum, omasum, and abomasum). Small ruminants in this study refers to sheep and goats as one unit and are domestic animals that are raised in almost all parts of Ghana and other parts of the world.

1.8.3 Unemployment

According to Emeh (2012), unemployment is a situation where people who are willing and capable of working are unable to find suitable paid employment. Unemployment occurs when people are without jobs and they have actively sought for job within the past four weeks (ILO 2007).

1.8.4 Youth

The United Nations Organisation and Commonwealth Secretariat defines youth as persons within the age bracket of 15 and 35 years. Youth generally refers to people who are young, have abundance of energy and strength both mentally and physically (Bahaman *et al.*, 2010).

1.9 Organization of the Study

The study or research was structured in the following order.

Chapter one introduction; this consists of the background information, the statement of the problem, objectives, the significance of the study, aim of research, research questions, limitations and the methodology used for the study.

Chapter Two reviewed literature on key areas including; theoretical framework and framework, livestock production, small ruminant, small ruminant production, small ruminant production and employment opportunity and the challenges of small ruminant production.

Chapter Three looked at the methodology: the study design the study area, sampling techniques, data collection tools, data collection procedures, data analysis and ethical considerations.

Chapter Four looked at the results and discussion made up mainly of the field report generated from responses to questionnaires by respondents on small ruminant production as an employment opportunity for senior high school graduates in the Sagnarigu District

Chapter Five; comprises of the summary, conclusion and recommendations/suggestions from the study.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

Review of literature is an essential feature of any academic project. An effective review of literature creates a firm foundation for advancing knowledge, facilitates theory development and uncovers areas where research is needed (Webster and Watson, 2002).

In this chapter, literature review was essentially directed at: livestock and small ruminant, small ruminant production, unemployment and employment status, perception of youth to agriculture and employment, the community and motivation.

2.1 Theoretical Framework

In assessing employment opportunity in small ruminant for SHS graduates the Big Five Career Theories developed by scholars in the USA were looked. These included; Person-environment-correspondence Theory or Theory of Work-Adjustment (TWA) by Holland's Theory of Vocational Personalities in Work Environment, the Self-concept Theory of Career Development formulated Gottfredson's Theory of Circumscription and Compromise, and Social Cognitive Career Theory (SCCT) Leung (2008).

The theoretical framework which underpinned this study was Social Cognitive Career Theory (SCCT). This theory offers a comprehensive framework to understand the development of career interest, career choice, and performance that is grounded in self-efficacy theory and Super's Self-concept Theory of Career Development

According to Super (1990), career choice and development is essentially a process of developing and implementing a person's self-concept". Self-concept is a product of complex interactions among a number of factors, including physical and mental growth,

personal experiences, and environmental characteristics and stimulation. The theory by Super has received much attention in the USA as well as in other parts of the world.

Social Cognitive Career Theory (SCCT) by Lent (2005) is anchored in Bandura's self-efficacy theory (1997), which postulated a mutually influencing relationship between people and the environment. SCCT states that" self-efficacy expectations are shaped by four primary information sources or learning experiences, which are personal performance accomplishments, vicarious learning, social persuasion, and physiological and affective states".

According to Lent (2005), the SCCT has a model which makes various assumptions. The model assumes that there are three segments of interlocking process models of career development. These are;

- the development of academic and vocational interest,
- how individuals make educational and career choices
- Educational and career performance and stability.

The SCCT choice of model is important in this study because, in assessing small ruminant production as an employment opportunity for senior high school graduates these research questions were answered. What is the understanding of small ruminant production as an employment opportunity by SHS, what activities would motivate them to take small ruminant production as an employment opportunity, what are the employment opportunities in small ruminant production for SHS graduates in the various communities and what are the challenges preventing SHS graduates to take to small ruminant production as an employment opportunity.

It views the development of career goals and choices as functions of the interaction among self-efficacy, outcome expectations and interest over time. These three segment models are centred on the following variables

2.2 Conceptual Framework for the Study

A study of this kind required a clearly spell out conceptual framework to facilitate it. This was based on judgment from literature reviewed, concepts and theories on the various activities of small ruminant production as an employment opportunity by SHS graduates. This is a schematic diagrammatic presentation of the relation between key concepts and the (variable) small ruminant production as an employment opportunity (Figure 2.1).

In assessing small ruminant production as an employment opportunity for senior high school graduates these concepts were investigated; the understanding of small ruminant production to SHS graduates as an employment opportunity, the activities would attract SHS graduates in the various communities to take up small ruminant production as an employment opportunity, the employment opportunities in small ruminant production for SHS graduates in the various communities and the challenges preventing SHS graduates to take up small ruminant production as an employment opportunity. The study can therefore be said to be effective when the objective of the study can help senior high school graduates to take to small ruminant production as an employment opportunity.

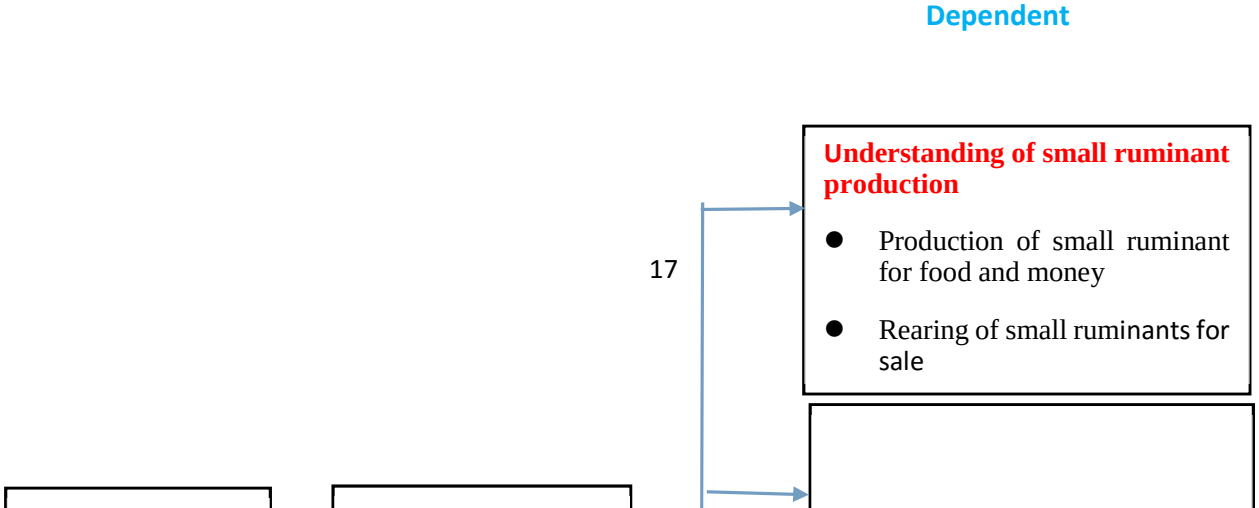

Figure 2.1: Conceptual framework for the Study

Source: Author's Construct, 2015

2.3 Livestock production

Livestock production is critical for poor people in the developing world (Kruska *et al.*, 2003; Randolph *et al.*, 2007). Livestock are often the only source of livelihood especially

in the arid areas of the world (World Resources Institute, 2005). Globally, livestock contribute about 40% to the agricultural gross domestic product (GDP) and constitute about 30% of the agricultural GDP in the developing world (World Bank, 2009).

The overall contribution of livestock to household livelihood security is greater for poor households than for those who are comparatively better off. Livestock play multiple roles in the livelihoods of people in developing communities (Herrero et al., 2013 and Heffernan, 2004). Livestock production provides directly the lives and livelihoods of the world's most vulnerable and marginalized citizens (Heffernan, 2004), and also contribute to the world's food supply, family nutrition, incomes, employment, soil fertility, transport and sustainable agricultural development (Perry and Sones, 2007; Randolph *et al*., 2007 Thornton, 2002).

Livestock production is an important component of agricultural activities in developing countries, which serves as livelihood to smallholder farmers' and contributes to the sustenance of households (Mamabolo and Webb, 2005). Livestock production is the source of cash income for subsistence farmers where they sell these animals to purchase foodstuff in the event of unprofitable agriculture season (Rahman, 2007).

The livestock sector in Ghana contributed to about 6.1 percent of agriculture Gross Domestic Products including poultry (MOFA, 2011). The livestock sub sector offers a huge employment opportunity for the teaming jobless youth, due to its economic prosperity and wealth creation (MOFA, 2012).

Small ruminant not only provide only meat and milk but also provides manure which is now an invaluable resource to crop and vegetable farmers for the maintenance of soil fertility and structure (Masikati, 2010; Awuma, 2012; Oppong-Anane, 2013). However,

meat production in Ghana is insufficient in meeting the growing local demand, (MOFA, 2012)

According to Adam, *et al* (2010), [as cited in Adam and Boateng, 2012] Northern Ghana is the hub of livestock production in Ghana. Livestock production is important for food security and poverty reduction in northern Ghana and in sustaining rural livelihoods, (Karbo *et al.*, 2007). In northern Ghana Livestock are sold during food shortage periods in the lean season to buy food for the household (Quaye, 2008).

2.4 Biology Importance of Small ruminant

Ruminants are the horned mammals such as cattle, sheep, goats, deer, giraffes, and antelopes and they belong to the suborder Ruminantia and a tribe called Caprini. They are hoofed, even-toed and have a complex stomach divided into four compartments. Ruminants are those animals that ruminate; thus they chew their cud consisting of regurgitated, partially digested food. We have large ruminant and small ruminant. Large ruminants include cattle and Small ruminants include goats and sheep (The American Heritage Dictionary of the English Language, 2000).

Small ruminants refer to sheep and goat in this study. These are domestic animals raised in almost all parts of Ghana. The extensive system of production of small ruminants is practiced through the country. They graze and/or browse depending on what is available. Small ruminants (goats and sheep) were first of the ruminants to be domesticated. They were domesticated in southwestern Asia and distributed in various parts of the world. They are reared for various purposes including meat, milk, wool, skin, hides and manure. They are considered easy to rear and they form an important economic position especially in

small scale farms, this due to their adaptation ability, easy to care for and efficient use of pasture coupled with readily available market (Devendra, 2006).

Small ruminants are among the most important species of livestock that contribute significantly to households' income. Small ruminant production is an important component of agricultural activities in developing countries, which serves as livelihood to smallholder farmers' and contributes to the sustenance of households (Mamabolo and Webb, 2005).

Small ruminants are reared in almost every part of the world for multiple purposes, which include meat and milk for human consumption, wool for clothes and power for farm and transport. Small ruminant forms an integral part of livestock rearing in Sub-Saharan Africa (SSA). They provide their owners with a vast range of products, kept for immediate cash sources and services such as milk, meat, wool, skin, hair, horns, bones, manure, security, gifts, religious rituals, medicine and also have various social and cultural functions. Small ruminant are among the major economically important livestock, playing an important role in the livelihood of resource-poor farmers. Being small-sized animals, they require a small initial investment (Kosgey, *et al*, 2006).

Small ruminants are found in almost every town and village mainly on the free range in West Africa. They are easy to rear based on their size and can easily adapt many environmental conditions. Their small size, together with early maturity, makes them suitable for meeting subsistence needs for meat and milk; they contribute to both protein diet and income generation for the rural people. They have the ability to convert forages, and crop and household residues into meat, fibre, skin and milk. Small ruminants provide

the easiest and most readily accessible source of credit available to meet immediate social and financial obligations (Devendra, 2006).

Small ruminants in Africa represent 21% of the world's small ruminant population. Small ruminants are used by farmers as savings that generate cash when the environment is harsh, especially during drought years and are sold when funds are needed. Small ruminants are also sold to raise money to replace large ruminants lost during droughts (ILRI, 2007).

Small ruminant have short reproductive cycles with a high incidence of multiple births giving a quick interval of selling part of their flock and generating cash income. Also, Small ruminants also require lower feed as compared to cattle with their large body size. The small size of sheep and goats has distinct economic, managerial, and biological advantages. Economically, low individual values mean a small initial investment and correspondingly small risk of loss by individual deaths. Managerially, they are conveniently cared for by women and children, occupy little housing space, lower feed requirements, and supply both meat and milk in quantities suitable for immediate family consumption. Biologically, because of their reproductive rates, flock numbers can be restored more rapidly. Small ruminants also have higher survival rates under drought conditions compared to cattle. They are widely adapted to different climates and are found in all production systems (Okunlola *et al*, 2010).

According to Ajala (2008), in South West Nigeria, in addition to meat production and religious purpose, goats are used for customary rites. Small ruminants are also kept for a variety of economic reasons including savings and investment, security and insurance, stability, and social functions. Sheep and goats appear to withstand drought better than

cattle, and their short reproductive cycle allows them to recover quickly from rapid resumption of breeding following drought or devastating disease infestation.

The role of sheep and goats as a continuous source of protein during and immediately following a period of drought is one major reason for making them the most important component of livestock in pastoral and agro-pastoral production system (Devendra, 2006). Small ruminants are slaughtered often in honour of a special guest, a visiting friend or relative, for festivities and religious rituals. More importantly, small ruminants play a key role in stock association building (building social capital or harmonizing relationships) between non-household members in rural areas. Because of their small size, sheep and goats provide more convenient sources of meat than cattle (Peacock, 1996).

Small ruminants play an important role in improving food security and alleviating poverty. They act as store of wealth and determine social status within the community and are important to the efficiency, stability and sustainability of farming system (ILRI, 2007).

There are also other benefits in small ruminant production from giving of food and money, through the provision of manure for soil fertility maintenance and draught power for cultivation and transport (Peden et al., 2007). Small ruminants are more prolific and can be started with much lower start capital. Equipment needed requires only minor expenditure and improvisation. Small ruminant production can be lucrative as a business in many aspects.

2.5 Economic importance of Small ruminant production

Small ruminants (goats and sheep) are suitable livestock for production systems with limited resources (Devendra, 2006). Small ruminant production forms an important

economic venture especially to small scale farmers. Small ruminant production plays a very important role in the lives of households in developing countries and has lasting effects in bringing about social change by improving the incomes of the rural farmer. Small ruminants make a very valuable contribution, especially to the poor in the rural areas. These contributions range from precious animal proteins (meat and milk) to fibre and skins, draught power in the highlands, food security and stable households (Devendra, 2004).

According to Adu *et al*, (1996), [as cited in Egbunike and Nworgu, 2006] small ruminants in Southern Nigeria are integral component of the household, where they contribute to the cultural, food and socio-economic life of the people. Small ruminants provide the easiest and most readily accessible source of credit available to meet immediate social and financial obligations.

Small ruminant production forms an important economic and ecological niche in agricultural systems throughout the developing countries. Their current contribution is not commensurate with the potential capacity for higher levels of production (Devendra, 2004). Small ruminant production contributes economically to the poor farmer in terms of household income and provision of the main means of survival and security as the sale of animals, milk manure and livelihood, (Devendra, 2011).

Small ruminants are suitable livestock for production systems with limited resources (Devendra, 2006). There are different production systems. The restrictive systems such as tethering and intensive systems; however farmers in the Northern region practically commonly adapt the extensive system of production. In most communities, the rearing of small ruminants is for various reasons such as income generation, religious purpose, household consumption and hobby and as security against crop failure (Lebbie, 2004).

Compared to cattle, small ruminants require lower feed due to their small body size (Okunlola, *et al*., 2010). Small ruminants can easily be integrated into different farming systems (Hirpa and Abebe, 2008). Small ruminants serve as means of ready cash and a reserve against economic and agricultural production hardship. Small ruminants are also kept for both tangible and intangible benefit (Kosgey *et al*., 2006).

Small ruminant production plays a positive role in food security through improving farm household income in the form of employment opportunities. Small ruminants are sources of essential proteins in many poor regions. The income from these ventures relieves the meager income of poor farm households from depletion by other non-food expenditures of households. Furthermore, small ruminant production plays a crucial role towards food security at the global, national and local levels (Ajala, 2008).

Small ruminants are widely distributed and are of great importance as major source of livelihood for smallholder farmers and the landless in rural communities in developing countries. To make farmers aware of the potential for small ruminant and promote production will require Support for the establishment of a market structure, together with cost of production figures, an extension program, marketing information, availability of breeding stock, the setting up of standards, and the development of an appropriate technological package for small ruminants and large ruminants (MOFA,2011)

2.6 The youth and perception of Small ruminant production

Agriculture is the bedrock of most developing countries, including Ghana. Agriculture education is to promote the acquisition of practical skills and self-reliance in farming and Business Education aims at giving commercial skills, inculcating skills of understanding

and appreciation of business operations and economic entities and principles (Anarfi and Appiah, 2012).

There are several management practices on the field that would attract youth to take up small ruminant production as a source of employment. Some of these practices are either good or poor; the good practices need to be intensified and the poor ones need to be replaced to attract the youth into small ruminant production as a lucrative venture to help solve youth unemployment. The youth need access to productive resources, if they are to engage in small ruminant production as a potential source of employment. They need access to land, credit facilities, technical knowledge, training in business and entrepreneurship, support for micro enterprise development, apprenticeships, voluntary work experience and appropriate career advice as well as other follow up services (IFAD, 2001).

The increase in educational attainment has been accompanied by an economic transformation away from agriculture and into the manufacturing and service sectors, which account for 75 percent of GDP and 56 percent of total employment. Yet employment in these sectors has not kept up with the increased numbers of educated potential workers, resulting in high youth unemployment and difficulty in accessing good quality jobs by educated youth (World Bank, 2010). Unemployment rate in Ghana averaged 8.82 percent from 2001 until 2013, reaching an all-time high of 12.90 percent in 2005 (Ghana Statistical Service, 2015).

Education and Skills Development plays a critical role in the socio-economic development. It provides opportunities for growth, poverty reduction, employment, productivity and

human development. Education and skills development underpin any strategy of human development and productivity as it is through education that the necessary skills, knowledge acquired aptitudes and the creative abilities of individuals are released, to open the way to a better life and society (GSGDA, 2010).

According to GSGDA (2013), acquiring and applying knowledge and skills in solving problems in society have remained essential aspects of national development efforts aimed at achieving growth and social equity. However, there is low motivation and poor conditions of service for education sector workers to put on their best based on performance.

The rate of youth unemployment can be curbed when the youth is encouraged to participate in contract farming (Silva, *et al* 2009). The rate of youth unemployment can also be curbed with youth in apprenticeship and skills training. This is in partnership with the private sector which emphasized the recognition of apprenticeship to acquire proficiency in the numerous areas of skill, industry and craftsmanship (GOG, 2004).

According to OECD (2015), there are many different ways to minimize youth unemployment. This may include relevant skill training and entrepreneurial skills during senior high school. Though many factors impact a country's capacity to contain youth unemployment in times of crisis, there should be institutional arrangements mediating between education and work and facilitate transitions into employment are perhaps those of the most important.

The youth perception on small ruminant production would be based on the impact of their need, their experiences in agriculture and the way they see themselves in agriculture. The

way they would perceived small ruminant production as a source of employment is influenced by needs and motives, past experiences and self-concept. Perception is how a person interprets a situation or a challenge into something meaningful based on previous experiences. According to Pickens (2011), perception is the process of recognizing and interpreting sensory stimuli. Perceptions are needs that are influenced by personal characteristics. The opinion an individual forms about situation depends on the information available to that individual and the extent to which the individual is able to properly interpret the information acquired.

Rural youth were more aware of the importance of agriculture to household food security, but this link was not as strong for urban youth. These differences in perception are probably because urban youth have more exposure to other career options and easier access to an increasing variety of food types (FAO, CTA and IFAD, 2014).

Agricultural science graduates, have more specific and formal perceptions about agriculture reflecting an academic approach to the teaching of this subject in secondary schools. These senior high school graduates also commented that they had received very little practical training as part of their agricultural courses at school (PAFN, 2010).

The participation of the youth in agriculture even with the introduction of the government programme known as youth in agriculture has been very low largely because the sector has not been made attractive due to risk, cost, inefficacy and its labour intensive nature (MOFA, 2011).

2.7 Senior High School Education

The Educational Management Information System (EMIS), of the Ministry of Education (MOE), noted that on the average, 55% of graduates from JHS were unable to enter into SHS every year due primarily to lack of access. One other factor that contributes to graduate from the JHS not entering into the SHS is financial constraint on the part of parents/guardians, Majority of this group (33%) are "Not Employed, Not in Education and Not in Training" (NEET).

Secondary education continues to expand rapidly worldwide. Over one-half billion students were enrolled in secondary schools in 2004 worldwide, an increase of more than 60 million students in just five years (UNESCO, 2007).

The Senior High School was introduced in 2007, expanding the system to four years but the curriculum was not change; a policy that is being reversed after three years. Due to this, there were no graduates in 2010, and there were two cohorts graduating in 2013. In the public national schools, all students take a Core curriculum consisting of English Language, Integrated Science, Mathematics, and Social Studies. Each student also takes three or four Elective subjects, chosen from one of seven groups: Sciences, "Arts" (social sciences and humanities), Vocational (visual arts or home economics), Technical, Business, or Agriculture. There should be effort made in senior high schools curriculum to help students acquire work-based knowledge and skills related to job search. The curriculum have the obligation to equip SHS graduates with the skills needed to obtain vocational training and employment opportunity. However, the curriculum only help students to develop their academic ability neglecting largely their career development's needs. This result in majority of the SHS graduates who cannot gain admission into tertiary institutions or find any gainful employment.

Table 2.1 Programme of Study in Northern Region SHS

Programme	Boys	Girl	Total	Pass Percentage (%)
1.Agriculture	6,830	1,397	8,227	13.0
2. General Sc.	3,095	1,306	4,401	6.9
3. Business Accounting Secretarial	 8,234 86	 4,217 43	 12,451 129	 19.7 0.2
4. General Arts	1,5457	9,143	24,600	38.8
5. Home Economics	3,216	6,713	9,929	15.7
6.Visual Arts	1,096	442	1,538	2.4
7.Technical	1753	327	2,080	3.3
Total	**39,767**	**23,588**	**63,355**	**100**

Source: Computed from MOE SHS Report, 2011/2012

Senior secondary education plays a fundamental role in the formation of skills for success in the labor market, as secondary education and beyond, is to provide graduates with adequate skills to enter the job market. This should translate into better employment prospects and higher wages, provided the labor market can absorb employees with their skills. However, there is slow transition of senior secondary school graduates to the labor market and the difficulty for educated workers to access good quality jobs, (Pacific Youth in Agriculture Strategy, 2010).

In Ghana -Secondary education is structured to equip the youth with skills for further education and for employment through the application of knowledge, to think analytically and creatively, and solve problems. The curriculum in the secondary high schools system puts more emphasis on the passing of examination to progress to the tertiary or post-secondary institutions. There is less focus, if at all, on employable skills at that level. This is because the students are prepared to pass examination to progress to the next level of education. The curriculum content is more theoretical than practical (MOE, 2010)".

2.8 Motivation

Kim and Lee (2008) define motivation as a desire to do something. Motivation is defined as the reason for doing things or powers that make things materialize (Obanyi *et al*, 2014). In this study, motivation will be looked at as a thing, reason or service that encouraged Senior High School graduates to take up small ruminant production as an employment opportunity.

According to Guay *et al* (2010), motivation is the reasons underlying behavior. Motivation is the attribute that moves us to do or not to do something. Remez (2001) define motivation as a desire to do something. Motivation is defined by Obanyi *et al* (2014) as the reason for doing things or powers that make things materialize.

Motivation is the internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job, role or subject, or to make an effort to attain a goal (Obanyi *et al*, 2014). Motivation results from the interaction of both conscious and unconscious factors such as the (1) intensity of desire or need, (2) incentive or reward value of the goal and (3) expectations of the individual and of his or her peers. These factors are the reasons one has for behaving in a certain way (Guay *et al* 2010),

'Motivation is a set of energetic forces that originates both within as well as beyond the individual's being to initiate work related behavior and to determine its form, direction, intensity and duration' (Green, 2009).

For purposes of this study, motivation refers to those reasons or purposes that underlie behavior characterized by willingness and attraction for senior high school graduates to see

small ruminant production as an employment opportunity. Motivation is thus the desire of individuals to change or behave in a certain manner so as to satisfy their needs.

According to Emily (2011) and Remez (2001), 'basic physiological motivational drives affect our natural behavior in different environments. Our motives for achievement can range from biological needs to satisfying creative desires or realizing success in competitive ventures. There is self-efficacy in an individual who perceived competence in a given area, and people tend to be more motivated to participate in activities in which they excel. A person's perceptions can be attributed to ones failure to lack of effort than attributing failure to lack of ability, whereas the opposite is true for successful performance. Explicit and implicit motivations are two motives that are directly involved in the prediction of behavior and often work together to determine the behavior of the individual in direction and passion.

Socially, the community as a whole plays a large part in the upbringing and development of each of its members. There is poor societal value orientation placed on agriculture by most parents in our communities over certain careers such as medicine, engineering and law, making the Youth to look down upon agriculture (Amadi, 2012).

The traditional communities in northern region and specifically the Sagnarigu district, the elders are the custodians of the transmission of the traditional and cultural obligation and usually coordinating all educational activities at local level. Most young people received their agricultural knowledge from their families and community, but knowledge provided is not coordinated for efficient and effective use. There should be formal sessions for sharing and transferring traditional agricultural methods and technologies in particular (Pacific youth in agriculture strategy, 2010).

Acquiring and applying knowledge and skills in solving problems in society have remained essential aspects of national development efforts aimed at achieving growth and social equity. However, there is low motivation and poor conditions of service for education sector workers to put on their best based on performance (GSGDA 2013).

According to the 2010 population and housing census, the Sagnarigu District has an estimated population of, 148, 099 constituting 74,886 males representing 50.5% and 73,213 females representing 49.5%. There are 23,447 households in the district with an average household size of 6.3 people and all these households engage in the rearing of livestock, especially small ruminants. These small ruminants are often sold in the off seasons to argument the financial standings of a household (Ghana Statistical Service, 2010).

The basic business skill training is not enough to help new entrepreneurs launch their own businesses; training must be supplemented with motivational packages. These packages includes; financial capital, including access to microfinance and other forms of credit for start-up businesses, government support opportunities in the form reliable stock and technical services and additional forms of capital; knowledge capital, to help participants understand markets and available resources (World Bank, 2009).

Motivation in the area of promoting entrepreneurship is becoming increasingly recognized as an important strategy that can leverage the energy of individuals and civil society to expand the creation and supply of jobs. Entrepreneurship training, especially if embedded in school and college curricula, can promote a culture of innovation, risk taking, and business formation that enhances competitiveness, growth, and job creation in both developed and developing economies. Therefore, promoting entrepreneurial values, and

providing concrete support for new entrepreneurs, could significantly boost job creation (World Economic Forum, 2009).

2.9 Small ruminant production and employment opportunities in the communities

According to Brooks *et al*, (2012), agriculture is currently the employer of most of Africa's young people, and likely to remain so in the future. Communities play an important role in traditional societies. The community as a whole plays a large part in the upbringing and development of each of its members, socially, culturally and spiritually. There should be formal sessions for sharing and transferring traditional agricultural methods and technologies in particular (Pacific Agricultural and Forestry Network, 2010).

The generation of young people entering adulthood, agriculture offers the best opportunity to move out of poverty and build satisfying lives. As such, the Government of Ghana considers the agricultural sector as an immediate source of employment for the youth, especially those in the rural areas (MOFA, 2011).

Employment is the primary means provided by the society for individuals to achieve and maintain economic security. Thus, societies are obliged to provide employment opportunities to the citizens. The current problems of youth unemployment in developing countries including Ghana are a result of different mix factors (zed books, 1994).

One of the serious developmental challenges in both the developed and developing countries in recent times is the issues of unemployment which requires an immediate and a collaborative effort to address them. Government has in the 1992 Constitution of the Republic of Ghana recognised the threats which unemployment and vulnerable

employment pose to national stability, economic growth and development and has shown commitment to its obligation to provide decent work for all its citizens (NEP, 2014).

Youth unemployment rate was established to be an urban phenomenon particularly among the youth. The reason is that that the youth are often attracted to the cities in search for non-existing jobs, as they find rural life unattractive largely due to the lower earnings of agriculture, which is the main economic activity in the rural areas (ILO, 2006). The global youth unemployment rate has been rising since 2011; it is currently estimated at 12.6 percent and is projected to increase to 12.8 percent by 2018. In contrast, the global adult unemployment rate, while also rising slightly, is much lower at 4.6 percent in 2013 (ILO, 2012).

Unemployment situation in Ghana is increasing among the youth especially senior secondary school graduates who have not learnt any employable skill. A number of reasons may result in the level of unemployment in a given economy. These may include, the educational curriculum and policies, preference for white-collar jobs, inadequate skill training, lack of capital, perceptions towards agriculture and total dependency on family for livelihood (Ashford, 2007).

According to World Bank report (2012), Ghana has an acute problem of youth unemployment of which 48% of the youth between the ages of 15-24 years are jobless. Globally, the rate of unemployment of the youth is ranked 12.6% as compare to that of adults at 4.8%. There is an acute problem of youth unemployment in Ghana that requires a multi-pronged strategy to raise employment opportunity to support them. The youth need to acquire skills and experiences that would open the chances to employment opportunity

to drive the economy of the country forward. Agriculture is a very important tool for the development of any nation and for sustaining agricultural productivity the onus lies on the youth. Youth employment rate is high in Ghana making Ghana one of the highest, thus about 60 percent of the unemployed in Ghana can be found in the 15-24 years age group. According to the Ministry of Manpower (2012), Youth and Employment the causes of youth unemployment in Ghana include the following: the introduction of the Junior Secondary School and Senior Secondary School system without adequate planning for integration into the trades/vocations and job placement; education and training have no link to the needs of the important sectors of the economy; the near collapse of Ghana's industrial base due to ineffective management of the divestiture process which resulted in the closure of many factories without a structural transformation of the economy to generate alternative jobs for people; the shrinking of public sector employment opportunities coupled with a relatively slow growth of the private sector and the lack of a coherent national employment policy and comprehensive strategy to deal with the employment problem.

High youth unemployment is not inevitable, even during an economic crisis; it is the product of the interaction between the economic context and particular policies. Data and policy experiences in countries show which kinds of policies are effective in boosting young people's employability: ensuring that all young people achieve both a good level of foundation skills. This can be achieve making secondary education relevant to the skill needs of the labour market by developing vocational education and training, and bridging education to the world of work by including work-based learning; securing flexible pathways into tertiary education; and providing good study and career guidance services

so that young people can make sound, informed career decisions, (Education at a Glance, 2015).

In Ghana, the unemployment rate is 3.6 percent, and the majority of the working population is employed in agricultural activities (55.8%) and those who are currently employed only (9.4%) attained secondary school education or higher. About 3.4 million households in Ghana own or operate a farm or keep livestock, GLSS 5 (2008).

According to NEP (2014) increased number of school leavers, could not be absorbed quickly by the economy and therefore more of these leavers became unemployed. Governments have pursued several reforms to ensure that the educational system is more practical and relevant to the development needs of the country.

In Ghana, as cited in Akpan (2010), youth unemployment is estimated at 40%, which is worsened by the recent trend of large numbers of graduates from senior high and tertiary institutions in search of nonexistent jobs. However, the best job opportunities for them will be in the agriculture field. Although agriculture poses great opportunities, young adults also face obstacles due to the lack of access to land, credit, and improved agricultural practices. To address the challenges of attracting the youth to stay within their communities is to focus attention on agricultural enterprises such as small ruminant production and other agribusiness.

The youth refers to young men and women who are mentally and physically and have abundance energy and strength and the main engine and catalyst for the economic development of a country (Bahaman *et al* 2010). Youth are very important resource for every nation especially for sustaining agricultural productivity, an important sector for development. The youth are stakeholders in the development process especially in view of

the great assets of youth, resilience, resourcefulness and perseverance but unfortunately, they are virtually left out in policies and programme considerations (FAO, 2012).

The development of the agricultural sector depends on the youth. However, there is insufficient youth participation in this sector even though the youth are the most productive of any society, as this is the age where they are physically and mentally alert, (Mangal, 2009).

According to the 2010 Ghana Housing and Population Census, the youth constitutes about 35.1% of the population of Ghana. The United Nations Organisation and Commonwealth Secretariat, defines the youth as "persons within the age bracket of 15 and 35years".

According to Emeh (2012), unemployment is a situation where people who are willing and capable of working are unable to find suitable paid employment Unemployment occurs when people are without jobs and they have actively sought for job within the past four weeks (ILO 2007).

There are lots of significant employment potential for the youth to engage small ruminant production in productive and gainful on- and off-farm activities, across the value chain, including transport, feed provision/fattening, veterinary services, processing, trading and retail (IFAD 2001).

A study conducted by Devendra (2001) on the Contribution to food security, poverty alleviation and opportunities for productivity enhancement in Asia concluded that the levels of income reported is a proportion of the actual value of the small ruminants due to lack of market access resulting to farmers losing 40-45% total value of the animal to middlemen who exploited the situation. Small ruminant constitute an important national

and household level productive asset that generates a flow of income and employment throughout the year. Small ruminants significantly contribute to household income of the rural poor especially due to their short gestation period, high prolificacy and are easily adaptable to a wide range of climatic conditions while requiring little capital to maintain.

These characteristics mean small ruminants are particularly important as an employment opportunity. The economic contribution of small ruminants to poor farm households and livelihood systems in terms of household income is much higher than is imagined. Small ruminants contribute enormously towards promotion of livelihood security, (Misra, 2005)

FAO (2005) reported that small ruminants are a major livestock potential in West Africa and have a large share in GDP. Due to the rapid growth of the population there would be high demand of animal products in the livestock sector especially small ruminant. In this regards if the youth would be helped to realize that small ruminant production requires less land, less capital, less labour and given improved breeds with good management practices will give high returns on investments (Mamabolo and Webb, 2005).

Small ruminants have a potential role in social development programmes for the youth which has been initiated by many development partners- the Governments, NGOs, politicians, researchers etc (Devendra, 2006).

2.10 Youth and Unemployment

The United Nations Organisation and Commonwealth Secretariat, defines the youth as "persons within the age bracket of 15 and 35years".Youth generally refers to people who are young, have abundance of energy and strength both mentally and physically (Bahaman et al., 2010).

According to the 2010 Ghana Housing and Population Census, the youth constitutes about 35.1% of the population of Ghana. Youth unemployment rate established to be an urban phenomenon particularly among the youth. The reason is that the youth are often attracted to the cities in search for non-existing jobs, as they find rural life unattractive largely due to the lower earnings of agriculture, which is the main economic activity in the rural areas (ILO, 2006).

The global youth unemployment rate has been rising since 2011; it is currently estimated at 12.6 percent and is projected to increase to 12.8 percent by 2018. In contrast, the global adult unemployment rate, while also rising slightly, is much lower at 4.6 percent in 2013 (ILO, 2012).

Youth are very important resources for every nation especially for sustaining agricultural productivity, an important sector for development. The youth are stakeholders in the development process especially in view of the great assets of youth, resilience, resourcefulness and perseverance but unfortunately, they are virtually left out in policies and programme considerations (FAO, 2012).

The development of the agricultural sector depends on the youth. However, there is insufficient youth participation in this sector even though the youth are the most productive of any society, as this is the age where they are physically and mentally alert (Mangal, 2009).

According to Emeh (2012), unemployment is a situation where people who are willing and capable of working are unable to find suitable paid employment. Unemployment occurs when people are without jobs and they have actively sought for job within the past four weeks (ILO, 2007).

Youth unemployment is serious developmental challenges in both the developed and developing countries in recent times which s requires an immediate and a collaborative effort to be addressed. Government has the 1992 Constitution of the Republic of Ghana recognised the threats which unemployment and vulnerable employment pose to national stability, economic growth and development and has shown commitment to its obligation to provide decent work for all its citizens (NEP, 2014).

High youth unemployment is not inevitable, even during an economic crisis; it is the product of the interaction between the economic context and particular policies. Data and policy experiences in countries show which kinds of policies are effective in boosting young people's employability: ensuring that all young people achieve both a good level of foundation skills. This can be achieved by making secondary education relevant to the skill needs of the labour market by developing vocational education and training, and bridging education to the world of work by including work-based learning; securing flexible pathways into tertiary education; and providing good study and career guidance services so that young people can make sound, informed career decisions (Education at a Glance 2015).

Education and Skills Development plays a critical role in the socio-economic development. It provides opportunities for growth, poverty reduction, employment, productivity and human development. Education and skills development underpin any strategy of human development and productivity as it is through education that the necessary skills, knowledge acquired aptitudes and the creative abilities of individuals are released, to open the way to a better life and society (GSGDA, 2010).

According to GSGDA (2013), acquiring and applying knowledge and skills in solving problems in society have remained essential aspects of national development efforts aimed at achieving growth and social equity. However, there is low motivation and poor conditions of service for education sector workers to put on their best based on performance.

Agriculture is currently the employer of most of Africa's young people, and likely to remain so in the future (Brooks *et al* 2012). According to MOFA (2011), the generation of young people entering adulthood, agriculture offers the best opportunity to move out of poverty and build satisfying lives. The Government of Ghana considers the agricultural sector as an immediate source of employment for the youth, especially those in the rural areas. The Youth in Agriculture Programme has five main objectives, and making youth accept farming as a commercial business venture is one of them.

The rate of youth unemployment can be curbed when the youth is encouraged to participate in contract farming (Silva *et al*, 2009). The rate of youth unemployment can also be solved with youth in apprenticeship and skills training. This is in partnership with the private sector which emphasized the recognition of apprenticeship to acquire proficiency in the numerous areas of skill, industry and craftsmanship (GOG, 2004).

Agriculture remains the main source of employment for the growing workforce in Ghana. If agriculture is to play its economic role effectively and continue to provide quality raw materials to industry to support increased productive employment generation, then it is imperative to remove the constraints and impediments hampering it (NEP, 2014).

Even though this is a critical stage for this group of people since this is a period of transition into adulthood. If the youth are to engage in small ruminant production as a means of employment, they will need access to productive resources such as "access to land, credit facilities, technical know-how, training in business and entrepreneurship, support for microenterprise development, apprenticeships, voluntary work experience and appropriate career advice as well as other follow up services (IFAD, 2001).

According to OECD (2015), there are many different ways to minimize youth unemployment. This may include relevant skill training and entrepreneurial skills during senior high school. Though many factors impact a country's capacity to contain youth unemployment in times of crisis, there should be institutional arrangements mediating between education and work and facilitate transitions into employment are perhaps those of the most important as stated in Education at a Glance 2011.

2.11 Youth and Agriculture employment

Youth generally refers to people who are young, have abundance of energy and strength both mentally and physically (Bahaman et al., 2010). Youth is the focus acting as the backbone and catalyst for the country's economic development goals. Global population is projected to reach nine billion by 2050.

The youth is a very important asset for sustaining agricultural productivity which is an important sector for the development. The youth is a very important stakeholder in the development due to their, resilience, resourcefulness and perseverance and unfortunately, they virtually left out in Agriculture policies and programmes considerations (FAO 2006).

According to ISSER (2010), the formal sector is only able to cater for about 250,000 youths who enter the labour market annually. The number of youth (15 to 24 years) is projected to increase to 1.3 billion by 2050. Out of this number, majority will be born in developing countries in Africa and Asia, where more than half of the population still lives in rural areas (UNESCO, 2004). The rural youth continue to face challenges related to unemployment, underemployment and poverty. Despite the agricultural sector's ample potential to provide income-generating opportunities for rural youth, these are challenges related specifically to youth participation in this sector.

2.12 Small ruminant production and challenges

The challenges confronting livestock in recent times have been neglected and the main interest now has been more on addressing technical constraints (Amankwah *et al.*, 2012). According to NEP (2014), it is imperative to remove the constraints and impediments hampering agriculture for it is to play its economic role effectively and continually to provide quality raw materials to industry to support increased productive employment generation.

One of the challenges of the youth involvement in small ruminant production as an employment opportunity is poor societal value orientation. Most parents place importance over certain careers such as medicine, engineering and law, relegating agriculture and other careers, making the youth to look down upon agriculture. Inadequate skills, information in small ruminant production can hinder the development of this venture by SHS graduates. Also, insufficient access to knowledge and information can hinder the development of

entrepreneurial ventures. It is therefore better to include entrepreneurial skills development into agricultural education (Amadi, 2012).

According to Tweneboah (2001), the establishment and improvement of commercial small ruminant production enterprise requires an integrated approach. For improvement and commercialization of small ruminant production, credit facilities should be made available to farmers (FAO, 2006). Most financial service providers are reluctant to provide their services such as credit, savings and insurance to the youth due to their lack of collateral. Financial organizations providing products to cater for the youth in start-up funding opportunities and mentoring programmes will go a long way to help remedy this issue.

Reliable access to markets is one of the major activities to arouse the interest of the youth. Access to markets will help the youth to engage in viable and sustainable agricultural ventures. However, access to markets for youth is becoming even more difficult due to the growing international influence of supermarkets and the rigorous standards of their supply chains (OECD, 2015).

Policies often fail to account for the heterogeneity of youth, and do not provide them with effective support. During the policy process, too often young people's voices are not heard and so their complex and multifaceted needs are not met. Policy makers themselves must actively engage youth (Education at a Glance 2015).

There are also a wide variety of factors that prevents the youth from participating in agricultural activities; from economic, social and environmental factors reducing youth involvement in agricultural production. These factors are inadequate credit facilities, initial capital and production inputs, low farming profit margins, and a lack of agricultural

insurance, Inadequate credit facilities and low profit margins drive most youth in Ghana from agriculture (Akpan, 2010).

Feeding of these small ruminants is a challenge to improved productivity in smallholder systems. In the dry season there is difficult for livestock to meet their nutritional requirement due to bush fires resulting in decline in nutritive value of fodder. These livestock survive mainly on left over straw during the dry seasons which result in cyclic body weight gain in the rainy season and weight loss in the dry (Annor *et al.*, 2007).

According to Oppong-Anane (2013) and Awuma (2012), the feed and feeding regime of small ruminant production is dependent on natural grazing and crop residues. Due to urbanization the grazing fields are diminishing. The quality and supply of these feeds is a seasonal variable. The critical period of feed scarcity is from February to May. In the dry season the common feeding practice for small ruminants was open grazing in the natural pasture and harvested crop residues feeding are used as feeds for small ruminant. Browses such as Erythrina, Glyricidia, Leucaena and ficussp can be planted and harvested as feeds during the dry season.

According to FAO (2004), there is scarcity of feed during the dry season making the supply and quality of grazing and crop residues very low. Similarly, these animals walk long distances in search of feed and water during the dry season. There is absence or inadequate provision of credit services to begin or expand production and also high mortality and morbidity due to inadequate coverage of veterinary services. There are very limited market centres.

Tethering of animals during the rainy season, free-range management and lack of water during dry season is a big challenge to small ruminant production. There is also minimum investment in feeding and health, high mortality and theft. More so, the subsistence level of small ruminant production is being aggravated by high cost feeding during the dry seasons and access to loans is problematic for farmers with little or no collateral with high Bank interest rates (Egbunike and Nworgu, 2006).

Small ruminants reared under the extensive systems are allowed to roam about scavenging for forages and are very destructive to crops, prone to disease, risk of theft and parasite infestation. There is the challenge of "poor infrastructure, inadequate market information, lack of access to market and low bargaining power, lack of access to basic financial services, as well as weak institutions" ((Smith *et al*,, 2002 and Weaver, 2005).

Small ruminant production is faced with lack of access to extension service, training courses, and vaccination campaigns. Small ruminants scavenge round the neighborhood and this increases the risk of injuries and also theft (Lindahl *et al*, 2013).

According to Ngongi (2012), the youth have fewer chances to obtain capital or credit and assets from financial institutions especially in rural area is often tied to availability of collateral (usually land) that this young people do not have .

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodologies that were adopted for the study. The subsections in this chapter includes a study design, the study area, sampling techniques, data collection tools, data collection procedures, data analysis, ethical considerations and quality control measures.

3.1 Study Design

Research design according to Saunders, *et al* (2007), is the general plan of how the research would be conducted. It provides the outline of the study. The study adopted a descriptive survey design. This was because the objective of the study sought to assess the potential of small ruminant production as source of employment for senior high school graduates and this type of research design was appropriate.

The study therefore employed both the qualitative and quantitative research approach. Quantitative research is the type of research which examines variations in a quantity. It is based on measuring variables for individual participants to obtain results in numerical

values usually and, are submitted to statistical analysis for summary and interpretation (Graveter and Forzano, 2006). Quantitative research is a means of collecting data which allows meaningful generalization to be made with respect to the numerical relationships which existed in the sample, and which reflected the attributes of the entire population.

Descriptive survey design is a plan of the methods and procedures that are used by the researchers to collect and analyze data (Shukla, 2008). Descriptive survey research describes systematically a situation, problem, phenomenon, service or programme, or provides information about, say, living condition of a community, or describes attitudes towards an issue (Kumar, 2005).

According to Aggarwal (2008), descriptive survey design is devoted to the gathering of information about prevailing conditions or situations for the purpose of describing and interpreting. The descriptive survey design describes the frequencies at which the various variables occurred and how they vary to help our understanding of the phenomenon. This design was appropriate for this study because of the methods of gathering the information for the study and the objectives of the study sought to assess the perception of SHS graduates toward small ruminant production as a source of employment and. This design was also fast and efficient way of obtaining data on many variables from a large number of respondents while avoiding the challenges of long-term follow up.

The study was guided by a general objective that was based on the theory and literature survey, and set at the conceptualization of the project. The study pursued an explicitly stated objective, which was used to formulate the research questions. Structured and unstructured questionnaire were constructed and administered on appropriate respondents.

Furthermore, secondary sources of data gathering were employed.These sources were textbooks, published journal articles and information from the internet where appropriate.

3.2 The study area

The Sagnarigu District is located in the central part of the Northern Region of Ghana. It falls between Longitudes 0057”N and 00 57”W and Latitudes 9016” N and 9034”N. The district has an estimated total land size of 114.29kmsq – representing 26% of the total landmass of the region. It shares boundaries to the North with Savelugu-Nanton Municipality, to the South and East with Tamale Metropolis, to the West with Tolon District, and to North-West with Kumbungu District,(Ghana Statistical Service, 2010) (Figure 3.1).

According to the 2010 population and housing census, the Sagnarigu District has an estimated population of 148, 099 consisting of 74,886 males representing 50.5% and 73,213 females representing 49.5%. There are 23,447 households in the district with an average household size of 6.3 people. There are 79 communities in the Sagnarigu District and the 20 largest communities in the district are: Sagnarigu, Choggu-Mmanayili, Choggu Hill Top, Wurishe, Shishegu-Yepala, Gurugu-Yepalsi, Gurugu, Gbolo Kpalsi, Choggu Yapalsi, Kasalgu-West, Katariga-Yepala, Malshegu, Sognayili, Kasalgu East, Sugashie ,Katariga, Garizegu, Yongduni and Shishegu (Ghana statistical service, 2010)

Most people in Sagnarigu District are engaged in agricultural activities. A higher (47.9%) proportion of the population is in the rural than the urban (29.9%) areas. Majority of the agricultural households in the district are into crop farming (84.2%), followed by livestock rearing (46.4%). The livestock comprises of the various species. Chicken is by far the most

reared livestock species in the district with a total number of (52,233), followed by sheep (27,085), guinea fowl (15,934) and cattle (14,413). Inland fishing and snail farming though not very common are practiced in the district (Ghana Statistical Service, 2010).

The Sagnarigu District, like many others in the Northern Region, has a single rainy season, usually stretching from May to October, and this is the period when cropping activities in the district occur. Average annual rainfall ranges from 600mm to 1100mm, the peak being usually between July and August (Ghana statistical service, 2010).

The Sagnarigu district is fairly cosmopolitan and developing at a high rate. The main ethnic groups the Dagombas are the majority. It is also made up of many other ethnic groups such as the Sisalas, Konkombas, Gonjas, Mamprusis, Nanumbas, Akans, Ewes, Gaas and others, The major occupation of the residents is farming, trading and commercial activities. Islam is the most dominant religion in the district with Christian and Traditional religion following as minority.

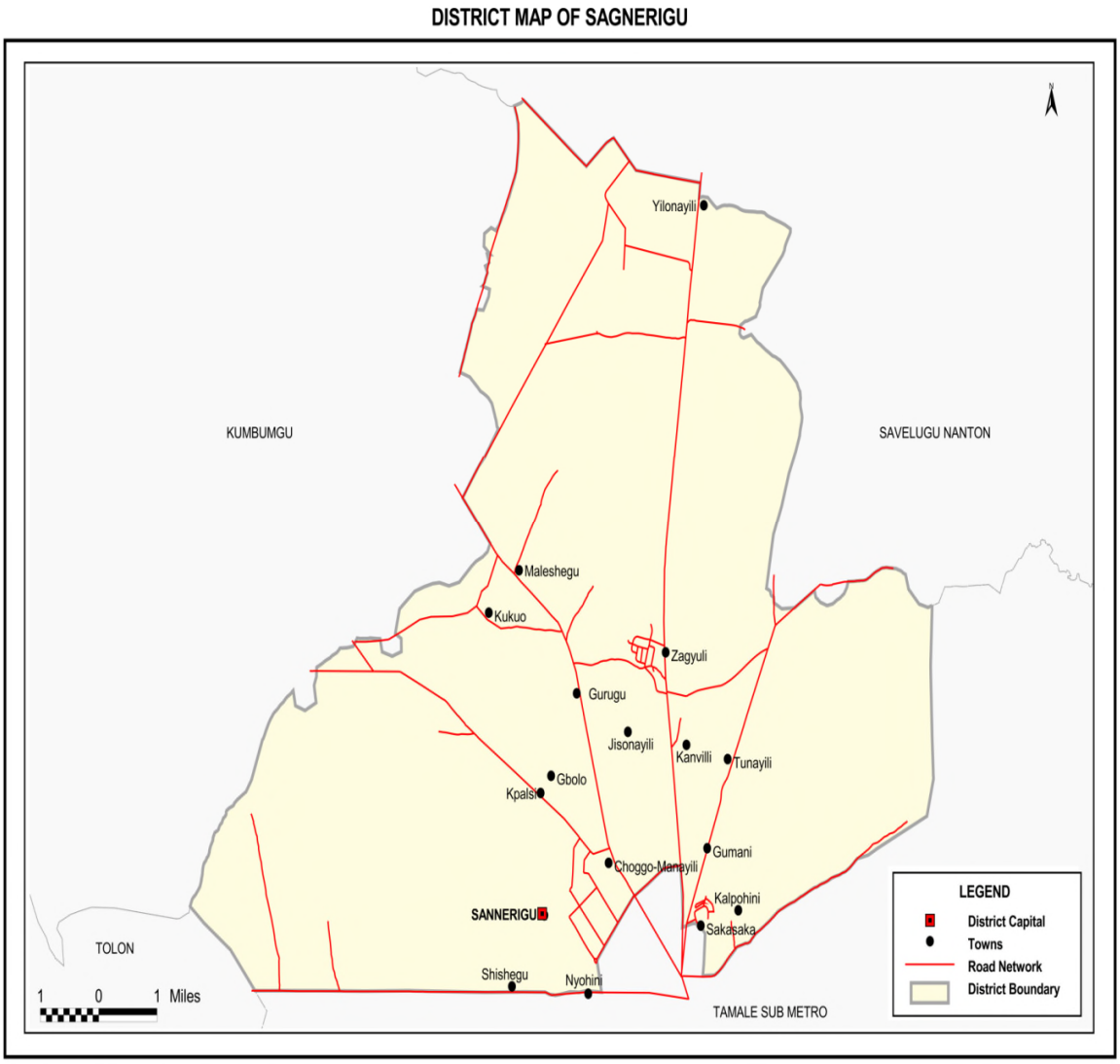

Figure 3.1 Map of Sagnarigu District

Source: Ghana Statistical Service, (GSS)

3.3 Target Population of the Study

According to Babbie (2000), individual human beings are perhaps the most typical unit of analysis for social research. Population refers to the entire set of individuals of interest to a researcher.

The target population for a survey is the entire sets of units for which the survey data are to be used to make inferences. The target population must be specifically defined by the researcher's specific interest. In the terminology of research design, the larger group of interest to a researcher is the population and small set of individuals who participate in the study is called the sample (Gravetter and Forzano, 2006).

The target population was senior high school graduates who completed senior high school from 2005 to 2015 and are not in school and could not go for either further studied or in any gainfully employment. The respondents were between 18 to 35 years of age and selected from five communities in the Sagnarigu District for the study. These communities were selected because they will be suitable for small ruminant production.

3.4 Sampling Procedure

The study implored both probability and non-probability sampling methods to gather data. Probability sampling is a type of sampling which is based on the every member of a population has a known and equal chance of being selected, which gives the best to create a sample that is truly representative of the population (Gravetter & Forzano 2006). A non-probability sampling on the other hand, is a method of sampling in which the population is not completely known, individual probabilities cannot be known, and the selection is based

on factors such as common sense or ease with an effort to maintain representativeness and avoid bias (Gravetter and Forzano 2006).

Sample selection was done using multi-stage random sampling method to sample respondents in the various communities. This method was chosen over others due to the fact that sampling the whole Sagnarigu district would be extremely expensive and time consuming for the researcher.

In the first stage of the sampling, five (5) communities were randomly selected through Microsoft excel. According to Mugenda (2008), 30% sample size is sufficient to represent a population to be used in a social science research hence 30% of the total communities in the Sagnarigu district gave a total of five communities (30% of 20 largest communities in the Sagnarigu) to be involved in the study. The selected communities were Sagnarigu, Katariga, Gurugu, Garizegu and Fuo/Taha. In the second stage of the sampling, thirty (30) households in the various communities were also randomly selected. From thirty household thirty respondents were purposively selected.

The simple random sampling technique was used for this study because of it is convenient, fair and unbiased. Simple random sampling is economical which enables a large number of respondents to respond at a minimum cost (Gravetter and Forzano, 2006).

Purposive sampling technique was also used because the researchers carefully and consciously choose the respondents to be included in the study. According to Alonge (2010), purposive sampling is the judgment of the researcher as to who can provide the best information to achieve the objectives of the study. The purposive sampling technique

was used to select the SHS graduates in each community and it was adopted because it was easy to get SHS graduates and also an easy method to obtain the sample size.

Thus, in all, the sample size was a total of one hundred and fifty (150) of the target population were selected. However, in retrieving the questionnaires only one hundred and twenty were collected, because some respondents had traveled outside their communities and refused to give thinking it was money they were going to be given. This was because some respondents traveled out of town without submitting the questionnaires. The study was conducted from November 2015 to January 2016.

3.5 Pre-testing of questionnaires

There was a pilot survey to pre-test the questionnaires in order to refine and restructure the questions where necessary. The pre-testing was done in two communities, Kalpohin and Gumani. The pre-testing helped to compare the responses with the objectives of the study. Pre- testing seeks to ensure the validity and reliability of the instrument for the study. These two communities were selected for the pre-test because they had socio-ethno-cultural differences. There was also similarity in their youth unemployment features where the youth are always sitting in “Ghettos” idling about. Twenty respondents were used in this pre-test; ten from each community.

3.6 Validity of the Instruments

According to (Gravetter and Forzano 2006), validity of a measurement procedure is the degree to which the measurement process measures the variable it claims to measure. Validity refers to the degree in which the tools, tests or other measuring device are truly measuring what we intended it to measure (Kothari, 2004). The study subjected its

instruments to discussions with the supervisors to ensure that the instruments capture the relevant data to achieve the research objectives as well as answer the research question in this study. To ensure the attainment of validity in this work, the researcher developed the research instruments based on the stated objectives of the study. To ensure content validity of the instrument, the researcher equally ensured that subjects that possess the characteristics of the research objectives were covered and this reflected the real outcome of the findings. The researcher also checked the validity of all the instruments used in this study by reading widely and consulting other experts in the field, as well as seeking help from my supervisor.

The questionnaire comprised both structured (closed -ended) and open-ended questions which was administered to the target population. The questionnaire was designed and validated by the researcher. The variables were obtained through careful review of related literature and were scrutinized by the supervisor. This was to facilitate easy analysis of responses. The respondents were given the questionnaires, and they wrote down the expected answers themselves. There were twenty- one (21) items on the instrument which covered the following themes:

- The socio-demographic status of respondents
- Assessing understanding of small ruminant production as an employment opportunity.
- Investigating the activities/ ways to attract SHS graduates in the various communities to take up small ruminant production as an employment opportunity.

- Exploring the employment opportunities in small ruminant production for SHS graduates in the various communities.
- Ascertaining the challenges preventing SHS graduates to take to small ruminant production as an employment opportunity.

3.7 Data Collection

The data collection methods describe how, when and where to get sample of respondents to provide answers (data) to the research study. The study collected both primary and secondary data. Self-structured and unstructured questionnaire were constructed and administered on appropriate respondents. Furthermore, secondary sources of data gathering were employed. . These sources were textbooks, published journal articles and information from the internet where appropriate. Questionnaires were used to collect primary data and the other sources were used to collect secondary data.

According to Gravetter and Forzano (2006), primary source is the first report of observations or research results written by the individual(s) who actually conducted the research and made the observations, whiles secondary source is a description or summary of another person's work. The questionnaire consists of a set of questions presented to a respondent for answers. Questionnaire allows for collection of a lot of information from respondents within a short time. The questionnaire was used because all the respondents were literates and could read and respond to the items without difficulty. The questionnaire items were carefully designed based on the objectives of the study.

3.8 Data analysis

After data collection, the questionnaires were checked for completeness, cleaned, organized, coded then entered into excel and SPSS for analysis.

The data was entered double, thus, there was a first and second entry of data. The two data sets were compared at the analysis stage which helped in identifying some omissions and discrepancies during the data entry. Data was analyzed using descriptive methods of analysis. Descriptive statistics in the form of frequency distribution, percentages and averages were produced to show relation or association between variables and to give a visual or graphical presentation of issues and trend of event in order to clearly understand and appreciate them using statistical product and service solutions (SPSS) version 21. Microsoft Office Excel was also used for the means and standard deviations.

3.9 Field Problems Encountered

The major problem the researcher encountered was how to get the unemployed Senior High School graduates to answer the research questions. This was quickly resolved by employing the help of some colleagues of these graduates and other people in the communities to link the researcher to respondents, while some were trained on how to administer the questionnaire. It took the researcher three Months before all the instruments were gathered from the field.

3.10 The Ethical Considerations

The researcher is aware that personal information should be kept confidential and hence the participants were allowed their privacy if they so wished. To ensure confidentiality of

data collected from the, anonymous questionnaires were used while the respondents were given a chance to choose if to participate or not.

Further, permit to conduct the study was obtained from the Department of Agriculture and Consumer Sciences Faculty of Education of the University for Development Studies. For the anonymity and confidentiality of information obtained from the study the names of respondents who took part in the study were not provided on the data collection tools and therefore no clues were provided for someone to trace the source of information.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

The chapter presents the data analysis, results and discussions. The information about respondents were analyzed in the following thematic areas; the socio-demographic characteristics of respondents, the perception of SHS graduates on small ruminant production as an employment opportunity, the activities that would attract SHS graduates in the various communities to take up small ruminant production as a source of employment, the employment opportunities in small ruminant production for SHS graduates in the various communities and the challenges preventing SHS graduates to take up small ruminant production as a source of employment.

4.1. The socio-demographic characteristics of respondents

A total number of 120 SHS graduates responded to the questionnaires. Their ages ranged from 18– 35 years with mean age of 21.0 and median age of 22.5. The modal age group was18 – 24 years (55.8%), followed by 25 – 29 years (33.3%). Majority of the respondents (88.8 %) were less than 30 years of age. Also, many (78.3%) of respondents were males compared to 21.7% who were females. This potentially implies that the population was mainly youth as defined by the National Youth Policy (2010). They were therefore at their productive age with energy that could be employed in ventures such as small ruminant production to serve as a potential source of employment.

The respondents pursued different programmes. A reasonable proportion (33.3%) of the respondents pursued General arts. This was followed by 16.7% and 12.5% of the respondents who pursued agriculture science and general science respectively (Table 1). Fifteen percent of the respondents attended Kalpohin SHS, followed by 14.2% in Ghana SHS. Majority (63.3%) of the respondents completed SHS in the period 2010 to 2015, followed by 19.2% of respondents who completed from 2000 to 2005 **(**Table 1**).**

The study revealed that most of the respondents pursued the arts. This is because most students perceived the sciences to be difficult and therefore preferred to pursue the humanities, which they assume, is not difficult as compare to the sciences. This findings confirms the report of 2013 of Ministry of Education where in the 2011/2012 and 2012/2013 academic year a high proportion (38.8%) of students in Northern Region pursued General Arts. This is also in keeping with findings of GSGDA (2010) confirming that "Education and skills development underpin any strategy of human development and productivity as it is through education that the necessary skills, knowledge acquired aptitudes and the creative abilities of individuals released, to open the way to a better life and society ".

In the five communities where the study was conducted, twenty-five percent of the respondents were from .Gurugu. This was followed by 20.8% and 20.0% of the respondent who resided in Sagnarigu and Garizegu respectively (Table1**).**

This reflect the findings of the Ghana Statistical Service, 2010 Population and Housing Census that classified Sagnarigu and Gurugu among the twenty largest communities in the Sagnarigu district. The distribution of the respondents from the catchment area of study in descending order were Gurugu (25.0%), Sagnarigu (20.8%) and Garizegu (20.0%).

respectively, and with the lowest in Fuo/Taha (16.7%). Though the purpose of the study was explained to respondents, most of the senior high school graduates in Fuo/Taha and its surroundings did not want to respond to the questionnaires due one reason and another. This may be because a lot of NGOs and other organization came to these communities to take data promising help that never comes. Also these communities see themselves as less privileged and poor.

Table 4.1: Socio-demographic characteristics of respondents

Socio-demographic Variable	Frequency	Percentage (%)
Sex of respondent		
Male	94	78.3
Female	26	21.7
Total	120	100.0
Age group of respondents		
18-24 years	67	55.8
25-29 years	40	33.4
30-35 years	13	10.8
Total	120	100.0
Communities covered by SHS		
Sagnarigu	25	20.8
Gurugu	30	25.0
Katariga	24	20.0
Garizegu	21	17.5
Fuo/Taha	20	16.7
Total	120	100.0
Year group of students		
2000-2005	23	19.2
2005-2009	21	17.5
2010-2015	76	63.3
Total	120	100.0
Courses offered in SHS		
Agricultural Science	20	16.7
General science	15	12.5
Business	10	8.3
Home economics	13	10.8
General Arts	40	33.3
Visual Arts	15	12.5
Total	120	100.0

Source: Field data, 2015

4.2.1. The employment status of Respondent by age group, year of completion and community

In assessing the employment opportunity in small ruminant production, the current employment status of respondents was examined.

Many (60.8%) of the respondents interviewed were unemployed, whilst 25.0% employed in the public sector. Stratifying by age groups, majority (70.1%) of respondents in the 18-24 year age group were unemployed compared to 16.4% of the respondents who were employed in the formal sector (Table 4.2).

Similarly, majority (73.7%) of the respondents who completed in the period 2010-2015 were unemployed. This was followed by 52.4% of the respondents who completed in the period 2006-2009 (Table 4.2).

In the communities, greater proportions (80.9%) of the respondents in Garizegu were unemployed. This was followed by 70.0% of the respondents in Fuo/Taha who were also unemployed (Table 4.2).

The study revealed that most of the respondents were unemployed reflecting the high level of youth unemployment a factor of poverty in the country. High numbers of youth in employment would bring about development of the nation Ghana and the world at large. The standard of living would be high leading to positive effect on the growth of the economy.

Table 4.2: Employment status of respondents by age group, year of completion and community

characteristic	Employment status				
	Employed	Unemployed	Self-employed	Apprentice	Total
	n (%)	n (%)	n (%)	n (%)	n (%)
Age (Years)					
18-24	11 (16.4)	47 (70.2)	6 (8.9)	3 (4.5)	67 (55.8)
25-30	11 (27.5)	23 (57.5)	1 (2.5)	5 (12.5)	40 (33.3)
31-35	8 (61.5)	3 (23.1)	0 (0)	2 (15.4)	13 (10.8)
Total	**30 (25.0)**	**73 (60.8)**	**7 (5.9)**	**10 (8.3)**	**120 (100)**
Year of Completion					
2000-2005	11 (47.8)	6 (26.1)	1 (14.3)	5 (21.7)	23 (19.2)
2006-2009	6(28.6)	11(52.4)	0(0)	4(19.0)	21 (17.5)
2010-2015	13(17.1)	56(73.7)	6(7.9)	1(1.3)	76 (63.3)
Total	**30 (25.0)**	**73 (60.8)**	**7 (5.9)**	**10 (8.3)**	**120 (100)**
Community					
Sagnarigu	9 (36.0)	14 (56.0)	0 (0)	2 (8.0)	25(20.8)
Gurugu	7 (23.3)	12 (40.0)	5 (16.7)	6 (20.0)	30 (25.0)
Katariga	5 (20.8)	16 (66.7)	2 (8.3)	1 (4.2)	24 (20.0)
Garizegu	4 (19.1)	17 (80.9)	0 (0)	0 (0)	21 (17.5)
Fuo/Taha	5 (25.0)	14 (70.0)	0 (0)	1 (5.0)	20 (16.7)
Total	**30 (25.0)**	**73 (60.8)**	**7 (5.9)**	**10 (8.3)**	**120 (100)**

Source: Field survey, 2015

This finding is in line with World Bank (2010) which stated that the unemployment rate of the youth in Ghana for the age group 20 to 24 years is about two and half times that of the overall rate of the general population. It is a common international trend that youth

unemployment is higher than unemployment for older generations with possible reasons including low overall job creation or labour market inefficiencies in recent times.

4.2.2 Economic Perspective of respondents on small ruminant Production

A cross tabulation of respondents perceptions by their communities were varied.

A cross tabulation of the economic perspective of small ruminant of respondents were examined according to communities.

About one-third (35.7 %) of the respondents in Sagnarigu perceived that small ruminant production would help them gather money to further their education. This was followed by 25.0% of the respondents who perceived that it was for household consumption, (Table 4.3).

In Gurugu, most (36.1%) of the respondents perceived that small ruminant production was for household consumption. This was followed by 22.5% of the respondents who perceived it to as a means of self-employment. However, in Garizegu about a reasonable proportion (30.0%) of the respondents perceived that small ruminant production was a means of self-employment. This was followed by 13.9% of the respondents who perceived it as a means to gain resources from Non-government organizations and government (Table 4.3).

Respondents in the various communities perceived small ruminant production with varied views. More than a quarter 33.3% of the respondents perceived small ruminant production as a means for self-employment and 30.0% of the respondents perceived it as production of animals for household consumption.

This implies that if respondents engaged in small ruminant production it can help solve the unemployment of these youth to serve as a source of employment.

The finding conforms to the study of Kumba, (2002), which states, the rearing of small ruminant contributes to ensuring household food security through improving farm households' income. This finding is also in accordance with the findings of Ehui et al., (2003), which state that small ruminants are particularly important in the household economy particularly in the marginal environments of arid and semi-arid regions.

4.2.3 The Communities and Employment Opportunity in Small Ruminant Production

It is evident from the field survey that different communities have different opinions for employment opportunities and this is indicated in Table 4.3. The table indicates respondents' employment opportunity in small ruminant production in the various communities as follows.

A great proportion (36.1%) of the respondents in Gurugu perceived that economically small ruminant production was for household consumption (food).This was followed by a quarter 22.5% of the respondents who perceived it for self-employment. Meanwhile, in Sagnarigu a reasonable proportion, (37.5 %) of the respondents perceived small ruminant production as a means to gather money to further education. This was followed by 25.0 % of the respondents who indicated for household consumption (Table 4.3).

Exploring the economic perspective of small ruminant production as an employment opportunity in the communities, in Gurugu many (36.1%) of the respondents indicated buying, fattening and selling of small ruminant. This was followed by 30.4% of the respondents who indicated that cutting and selling of feed rearing of small ruminant to sell. However, in Garizegu, a reasonable proportion (31.8 %) of the respondents indicated they would engage in feeding of small ruminant. This was follow by 23.2 % of the

respondents who indicated they would engage in rearing of small ruminant to sell (Table 4.3).

The standard deviation ranging from 2.322 to 1.977 indicates that it is very close to the average. The results was not statistical significant because it has a value greater than the mean 1.951 and significantly higher statistical anomaly that worth investigating (Table 4.3).

There are a lot of employment opportunities in small ruminant production in the various communities. This includes in rearing, buying, fattening and selling of small ruminants. This finding is in line with the findings reported by Peden *et al.,* (2007) which states that there are several benefits in small ruminant production from giving of food and money, through the provision of employment, manure for soil fertility maintenance and draught power for cultivation and transport. This finding is also closely related to what Kosgey *et.al.,* (2006) cited which stated that small ruminants are also seen as savings and insurance against emergencies making them vital food security tools for subsistence farmers faced with unstable crop harvest.

Table 4.3: Responses on Economic Perspective of Small Ruminant production and Employment Opportunity in Small Ruminant Production in the Communities

Small ruminant production	Communities					
	Sagnarigu n (%)	Gurugu n (%).	Katariga n (%)	Garizegu n (%)	Fuo/Taha n (%)	Total
Economic perspective						

For self-employment	5 (12.5)	9 (22.5)	10 (25.0)	12 (30.0)	4 (10.0)	40 (33.3)
For household consumption	9 (25.0)	13(36.1)	3 (8.3)	5 (13.9)	6 (16.7)	36 (30.0)
A means to gain resources from NGOs/Government	6 (20.0)	5 (16.6)	8 (26.7)	3 (10.0)	8 (26.7)	30 (25.0)
A means to gather money	5 (35.7)	3 (21.4)	3 (21.4)	1 (7.2)	2 (14.3)	14 (11.7)
Standard deviation	1.686	1.887	1.887	2.240	2.206	1.951
Employment opportunity						
Rearing of small ruminant to sell	8 (20.5)	8 (20.5)	7 (17.9)	9 (23.2)	7 (17.9)	39 (32.5)
Cutting and selling of feed	4 (17.4)	7 (30.4)	6 (26.2)	3 (13.0)	3 (13.0)	23 (19.2)
Feeding of small ruminant	6 (27.3)	2 (9.1)	5 (22.7)	7 (31.8)	2 (9.1)	22 (18.3)
Buying, fattening and selling	7 (19.4)	13 (36.1)	6 (16.7)	2 (5.6)	8 (22.2)	36 (30.0)
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120 (100)**

Source: Field data, 2015

4.3.1 The factors that would attract the various Age group into small ruminant production

A reasonable proportion (63.4%) of the respondents from the age groups 18-24 years said that earning profit will attract them to go into small ruminant production. However, 23.1% of the respondents from the age group 31-35 years stated that ready source of breeding stock would attract them (Table 4.4).

Table 4.4: Factors that will attract respondents to small ruminant production according to age

Activities	Age (years)			
	18-24	25-30	31-35	**Total**
	n (%)	n (%)	n (%)	n (%)
Earning profit on small ruminant	23 (63.8)	11 (30.6)	2 (5.6)	**36 (30.0)**
Ready source of breeding stock	15 (48.3)	10 (32.3)	6 (19.4)	**31 (25.8)**
Creating of ready market sources	4 (57.1)	2 (28.6)	1 (14.3)	**7 (5.8)**
Assistance in feeding and housing	9 (52.9)	8 (47.1)	0 (0)	**17 (14.2)**
Health delivery by veterinarians	16 (55.2)	9 (31.0)	4 (13.8)	**29 (24.2)**
Total	**67 (55.8)**	**40 (33.3)**	**13 (10.9)**	**120 (100)**

Source: Field data, 2015

There were varied activities to attract the various age groups to take to small ruminant production as an employment opportunity. However, for the senior high school graduates earning profit and getting ready source of breeding stock are the activities that would attract them to go into small ruminant production.

Earning profits from small ruminant production would create an employment opportunity for respondents. This finding is in accordance with Smith *et al.*, (2004) who stated that small ruminants generate a flow of income and employment opportunity throughout the year because they have short generation intervals, adapt easily to a wide range of climatic conditions and with high prolific rate. This finding is also conforms with the study conducted in Kenya which stated that small ruminants production are used for regular cash income from animal, milk and meat sales being the most important and are savings and insurance against emergencies (Kosgey *et al.*, 2006).

4.3.2 Activities that would attract the communities into small ruminant production

In the various communities, there were diverse views: In Katariga, many (41.7 %,) of the respondents indicated that earning more profit will attract them take up small ruminant production as a source of employment. This was followed by 25.5% of respondents who opted for ready source of breeding stock (Table 4.5).

In Gurugu, most (33.3 %,) of the respondents said that health delivery by veterinary services will attract them take up small ruminant production as a source of employment. This was followed by 30.0% of the respondents who stated that earning more profit will attract them take up small ruminant production as an employment opportunity. Also in Garizegu 38.1% of the respondents indicated that ready source of breeding stock will attract them to take up small ruminant production as a source of employment (Table 4.5). This indicates that to make small ruminant production a potential source of employment for SHS there should be efforts to increase productivity simultaneously with the provision of access to credit, improved breeding stock and market facilities.

Table 4.5: Activities that would attract respondents into respondents into small ruminant production at the various communities

Activities	Communities					
	Sagnarigu n (%)	**Gurugu n (%).**	**Katariga n (%)**	**Garizegu n (%)**	**Fuo/Taha n (%)**	**Total**
Earning profit on small ruminant	7 (19.4)	9 (25.0)	10 (27.8)	6(16.7)	4 (11.1)	**36 (30.0)**

Ready source of breeding stock	2 (6.5)	8 (25.8)	6 (19.4)	8 (25.8)	7 (22.5)	**31 (25.8)**
Creating of ready market sources	3 (42.8)	1 (14.3)	2 (28.6)	1 (14.3)	0(0)	**7 (5.8)**
Assistance in feeding and housing	6 (35.3)	2 (11.8)	2 (11.8)	1 (5.8)	6 (35.3)	**17 (14.2)**
Health delivery by veterinarians	7 (24.2)	10 (34.5)	4 (13.8)	5 (17.2)	3 (10.3)	**29 (24.2)**
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120 ((100)**

Source: Field data, 2015

This collaborates what Tweneboah (2001) stated that the establishment and improvement of commercial small ruminant production enterprise requires an integrated approach. This discovery is also in line with the statement made by FAO (2003) that for improvement and commercialization of small ruminant production credit facilities should be made available to farmers.

4.3.3 Activities that would attract respondents (according to year of completion and sex) into small ruminant production

A reasonable proportion (30.9%) of the male respondents stated that earning more profit on small ruminant was an activity that would attract them to take up small ruminant production as a source of employment. This was followed by 23.4% of the respondents who stated that getting assistance from MOFA would attract them into small ruminant production. For the female respondents also, a reasonable proportion 30.8% said that getting support from MOFA was primary to attract them to take up small ruminant

production as a source of employment. This was followed by 23.1% of the respondents who stated that earning more profit was the next attractive thing to attract them to take up small ruminant production as a source of employment (Table 4.6).

For those who completed in the period 2010-2015 many (31.8%) of the respondents indicated that earning more profit would attract them to take up small ruminant production as a source of employment. This was followed by 26.3 % who said getting assistance from MOFA was next. About 38.1% of the respondents from the year group 2006-2009 graduates identified earning more profit as a field condition that would make to take up small ruminant production as an employment opportunity. This was followed by 19.0% of the respondents who said creating of ready market would be their next consideration (Table 4.6).

Table 4.6 Activities that will attract respondents (according to sex and year of completion) into small ruminant production

Characteristics	Earning more profit	Ready source of breeding stock	Creating of ready market	Assist in feeding	Health delivery services	Support from MOFA	TOTAL
Sex	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Male	29(30.9)	14(14.8)	11(11.7)	3(3.2)	15(16.0)	22(23.4)	94 (78.3)
Female	6 (23.1)	2 (7.7)	4 (15.4)	4 (15.4)	2 (7.7)	8 (30.7)	26 (21.7)
Total	**35 (29.2)**	**16 (13.3)**	**15 (12.5)**	**7 (5.8)**	**17(14.2)**	**30 (25.0)**	**120 (100)**

Year of completion	4 (17.4)	6 (26.1)	2(8.7)	2 (8.7)	3 (13.0)	6 (26.1)	23(19.2)
2000-2005	8 (38.1)	2 (9.5)	4 (19.0)	1(4.8)	3 (14.3)	3 (14.3)	21 (17.5)
2006-2009	24 (31.8)	8 (10.5)	9 (11.5)	4(5.3)	11(11.5)	20 (26.3)	76 (63.3)
2010-2015	**36 (30.0)**	**16 (13.3)**	**15 (12.5)**	**7 (5.8)**	**17 (14.2)**	**29 (24.2)**	**120 (100)**
Total							

Source: Field data, 2015

Making more profit, creating of ready market and getting assistance from Government would attract both sexes from the different year group to take up small ruminant production as an employment opportunity. However, to meet these attracting activities, they would require policy and practical support from Government and NGOs to enable them to take up small ruminant production as an employment opportunity. This can be in the form of training, credit facilities, and access to ready market.

The study revealed that earning profit on small ruminant production and getting support from MOFA irrespective of sex and the year of completion stated were the options to attract them to take up small ruminant production as an employment opportunity. The other attracting activities were the availability of source of breeding stock and creating of ready markets.

This finding agrees with the report of Mamabolo and Webb (2005) indicated that Small ruminant production can offer better job opportunity and thus a lucrative business venture

for the masses of the youth unemployed, by helping with capital and giving improved breeds to give high returns on investments. The study is also in line with Aw-Hassan *et al*, (2008) stated that major supply such as improved breeds, improved veterinary services and rescheduling loans by government has led to increased small ruminant numbers and production which will motivate more people to get involve.

4.3.4 The communities and activities attracting respondents into small ruminant production

Many (51.7%) of the respondents said they were ready to take up small ruminant production, whiles 48.3% of the respondents stated that they were not ready to take up small ruminant production (Table 4.7)

In the communities (25.8%) of the respondents in Garizegu stated that they were ready to take up small ruminant production; meanwhile, 29.3 % of the respondents in Gurugu confirmed that they were not ready to take up small ruminant production (Table 4.7).

Table 4.7: Relationship between respondents and attracting activities in the various communities

Ready to take up Small Ruminant Production	*Communities*					
	Sagnarigu n (%)	**Gurugu n (%)**	**Katariga n (%)**	**Garizegu n (%)**	**Fuo/Taha n (%)**	**Total**
Yes	9 (14.5)	13 (20.9)	10 (16.1)	16 (25.8)	14 (22.6)	62 (51.7)
No	16 (27.6)	17 (29.3)	14 (24.1)	5 (8.6)	6 (10.3)	58 (48.3)
Total Activities	25 (20.8)	30 (25.0)	24 (20.0)	21 (17.5)	20 (16.7)	120 (100)

Earning profit	7 (19.4)	9 (25.0)	10 (27.8)	6 (16.7)	4 (11.1)	36 (30.0)
Ready source of breeding stock	1 (6.2)	3 (18.8)	3 (18.8)	5 (31.2)	4 (25.0)	16 (13.3)
Creating of ready market sources	1 (6.7)	5 (33.3)	3 (20.0)	3 (20.0)	3(20.0)	15 (12.5)
Assistance in feeding and housing	3 (42.9)	1 (14.3)	2 (28.5)	1 (14.3)	0(0)	7 (5.8)
Health delivery from veterinary	6 (35.3)	2 (11.8)	2 (11.8)	1 (5.8)	6 (35.3)	17 (14.2)
Support from MOFA	7 (24.1)	10 (34.5)	4 (13.9)	5 (17.2)	3 (10.3)	29 (24.2)
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120(100)**

Source: Field data, 2015,

On the activities that would attract respondents in the various communities to take to small ruminant production as an employment opportunity, 34.5% of the respondents in Gurugu opted for getting assistance from MOFA. This was followed by 33.3% of the respondents who said creating of market sources would attract them to go into small ruminant production as a source employment. However, 25.0% of the respondents in Fuo/Taha indicated that the key activity to attract them go into small ruminant production as a source of employment was ready source of breeding stock. This was followed by 20.0% of the respondents who also said creating of market sources would attract them to go into small ruminant production as a source employment (Table 4.7).

This implied that there are varied activities that would attract respondents to go into small ruminant production as a source of employment. This included, getting assistance from MOFA, creating ready market sources and earning more profit on small ruminant production.

This finding is in line with a study conducted by Akpan (2010) which stated that there are several activities for the youth to engage in the agriculture field. However, the youth engaging agriculture face obstacles due to the lack of access to ready market, credit, and improved agricultural practices. Therefore, to help attract the youth in agriculture ventures to help solve youth unemployment the focus should be to pay attention on getting ready breeding stock ready source of market and provision of assistance.

4.3.5 Motivating activities that will attract respondents to take up small ruminant production as a source of employment

Respondents had different views on the activities that would motivate them to take up small ruminant production as a source of employment. A great proportion (53.3%) of the respondents indicated that ready of market for small ruminants would motivate them to take up small ruminant production as an employment opportunity. This was followed by 24.2% of the respondents who indicated getting monetary and technical support from NGOs (Table 4.8).

The option for respondent to take small ruminant production ranged from was ready market for small ruminants, low start-up cost and to a rising demand for their meat.

This finding conforms to the report of FAO (2008) which indicated that there is growth in market demand for small ruminants and their products. This huge demand for small ruminant products is driven almost entirely by population growth, rising incomes and increasing urbanization in developing countries and this can serve as a source of employment. This finding also agrees with Aw-Hassan et al, (2008) who state that major supply such as improved breeds, improved and veterinary services led to increased small ruminant production and profitability

The finding is also in line with World Bank (2010), which states that in West Asia and North Africa small ruminant production are the most important source of livelihood for the poor. Small ruminant have a considerable significant economic and social value.

Table 4.8 Activities that can motivate respondents to go into small ruminant production as a source of employment

Motivating activities	Frequency (n)	Percentage (%)
Ready market for small ruminant	64	53.3
Rising demand for their meat	7	5.8
Monetary and technical support from NGOs	29	24.2
Support from MOFA (Veterinary Services)	8	6.7
Low start-up cost	12	10.0
Total	**120**	**100**

Source: Field data, 2015

4.3.6 Factors that will motivate the various age groups to take to small ruminant production

Respondents from the various age groups had varied responses when interviewed on factors that will motivate them to go into small ruminant production as a source of employment. The factors identified were; making agriculture lessons more practically oriented in school, getting of assistance form veterinary services, monetary and technical support from NGOs, reliable supply of breeding stock and access to credit.

Majority (70.3%) of the respondents in the age group 18-24 years indicated making agriculture lessons more practically oriented in school. This was followed by 37.9 % of the respondents who stated monetary and technical support from NGOs. Forty percent of the respondents in the age group 25-30 years also indicated that making agriculture lessons more practically oriented in school. This was followed by 32.5% of the respondents who stated monetary and technical support from NGOs (Table 4.9).

However, a great proportion (62.5 %) of the respondents in the age group 25-30 years opted for reliable supply of breeding stock. This was followed by 44.8 % of the respondent who stated financial support from NGOs will motivate them to go into small ruminant production as a source of employment (Table 4.9).

For respondents to take up small ruminant production as a source of employment, the activities that would motivate includes; reliable supply of breeding stock, making agriculture lessons more practical oriented and getting financial support from NGOs a and Government.

Making agriculture lessons more practical oriented will give the skills required for the basis for either further education or for application in a variety of situations or employments. In

the secondary school system, most of skills taught are more general than specific and more theoretical than practical. Making agriculture lessons more practical oriented give learners in all aspect or levels of education firsthand experience and this can motivate them to practice later in future.

The finding agrees with Bello (2011) whose study revealed youth's involvements in agricultural production depend on skills acquired and access to credit. This implies that accessibility to credit in the form of inputs would encourage the youth to participate in agriculture production activities.

Table 4.9 Relationship between age groups and motivating activities

Motivating activities	**Age (Years)**			
	18-24	25-30	31-35	Total
	n (%)	n (%)	n (%)	n (%)
Making agriculture lessons more practical oriented	45 (70.3)	16 (25.0)	3 (4.7)	64 (53.3)
Getting of assistance from Government	5 (71.4)	2 (28.6)	0 (0)	7 (5.8)
Financial support from NGOs	11 (37.9)	13 (44.8)	5 (17.3)	29 (24.2)
Reliable supply of breeding stock and inputs	3 (37.5)	5 (62.5)	0 (0)	8 (6.7)

Access to credit from banks and Government	3 (25.0)	4 (33.3)	5 (41.7)	12 (10.0)
Total	**67 (55.8)**	**40 (33.4)**	**13 (10.8)**	**120 (100)**

Source: Field data, 2015

The finding is also in line with the study of World Bank (2010) which cited that, educational curriculum is to equip the youth with all the necessary knowledge and skills that will make them useful and functional in society in the future.

4.3.7 Factors that would motivate respondents (according to year of completion) into small ruminant production

Respondents were assessed on the factors them to go into small ruminant production as a source of employment. Many (66.7%) of the respondents who completed between the years of 2000-2005 said access to credit by banks would motivate them take up small ruminant production as a source of employment. However, 26.2% of respondents who completed between the years of 2010-2015 said they needed financial support from NGOs as a motivating factor (Table 4.10).

The study revealed that Senior high school graduates need assistance in the form of monetary and technical assistance from NGOs and Government to take to small ruminant production as a source of employment. This implies that government should assist senior high school graduates with “seed money” and technical expertise through MOFA

(Extension Services). In addition, NGOs and Government can support with start-up capital in the form of reliable supply of breeding stock and inputs and technical support. This finding is closely related with what IFAD (2001) cited which indicated that for agriculture ventures to serve as employment opportunity to help reduce poverty there should be increased access to financial support in the form of investment and working capital. The finding is also in agreement with the study conducted by Bello (2011) which indicated that the youth's involvements in agricultural production depend on access to credit and assistance from government (Extension Service).

Table 4.10: Activities that motivate respondents according to year completion

Activities motivating Into Small Ruminant Production	**YEAR COMPLETED**			
	2000-2005	2006-2009	2010-2015	Total
	n (%)	n (%)	n (%)	n (%)
Making agriculture lessons more practical oriented	14 (20.8)	5(12.5)	3 (23.1)	22 (18.3)
Getting of assistance from Government	7 (10.4)	7 (17.5)	2 (15.4)	16(13.3)
Financial support from NGOs	13 (19.4)	9 (22.5)	4 (30.7)	26 (21.7)
Reliable supply of breeding stock and inputs	5 (7.5)	8 (20.0)	1 (7.7)	14 (11.7)
Access to credit from banks and Government	28 (66.7)	11 (26.2)	3 (7.1)	42 (35.0)
Total	**67 (55.8)**	**40 (33.3)**	**13 (10.8)**	**120 (100)**

Source: Field data, 2015

This implies that the provision of more credits and assistance from the MOFA and NGOs would attract more youths to take up small ruminant production as a source of employment. There should be access to credit with low interest and provision of inputs would motivate the graduates to take up small ruminant production as a source of employment.

4.3.8 The factors in the communities that would motivate SHS to go into small ruminant production

The various communities were assessed on the factors that will SHS graduates to go into small ruminant production as a a source of employment. In Sagnarigu, a small proportion (31.3 %) of the respondents opted for making agriculture lessons more practically oriented. This was followed by 26.0% of the respondents who opted for financial support from NGOs. However, in Katariga (34.8 %) of the respondents indicated getting reliable supply of breeding stock and inputs most important. This was followed by 20.0 % of the respondents who said access to credit from the banks and Government (Table 11).

The factors that would motivate SHS graduates in the various communities to take up small ruminant production as a potential source of employment was making agriculture lessons more practical oriented and also accessed to financial support from NGOs. This finding conforms to OECD (2009) which indicated that to succeed in reducing youth unemployment with senior high school education as their highest level of attainment the country must engaged in more vocationally or practically oriented programme. This finding agrees with the report of Mamabolo and Webb (2005) indicated that small ruminant production can offer better job opportunity and thus a lucrative business venture for the

masses of the youth unemployed, by helping with capital and giving improved breeds to give high returns on investments

Table 4.11: Activities in the communities to motivate respondents to go into small ruminant production

Motivational activities	Communities					
	Sagnarigu n (%)	**Gurugu n (%).**	**Katariga n (%)**	**Garizegu n (%)**	**Fuo/Taha n (%)**	**Total**
Making agriculture lessons more practically oriented	10 (31.3)	8 (25.0)	5 (15.6)	3 (9.4)	6 (18.7)	**32 (26.7)**
Getting assistance from veterinary service	1 (12.5)	2 (25.0)	1 (12.5)	2 (25.0)	2 (25.5)	**8 (6.7)**
Financial support from NGOs	7 (26.0)	6 (22.2)	4 (14.8)	5 (18.5)	5(18.5)	**27 (22.5)**
Reliable supply of breeding stock and inputs	3 (13.0)	6 (26.1)	8 (34.8)	5 (21.7)	1 (4.3)	**23 (19.2)**
Access to credit from banks and Government	4 (13.3)	8 (26.7)	6 (20.0)	6 (20.)	6(20.0)	**30 (25.0)**
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120 (100)**

Source: Field data, 2015

4.4 Respondent's perception of small ruminant production as a source employment

Respondents had different perception of small ruminant production. Many (51.7%) of the respondents reported that small ruminant production is the production of animals such as sheep and goat for food and prestige. This was followed by 24.2% of the respondents who reported that the rearing of sheep and goat for food and 16.7% of the respondents who stated it was the production of animals for only prestige. However, only a small proportion 7.5% of the respondents concluded ruminant rearing was used for money, (Table 4.12). Respondent's perception of small ruminant production was rearing small ruminant for food and prestige. This finding is in accordance with Ehui *et al* (2003) who stated that small ruminant production is particularly important in the household economy. The finding also conforms to the study of Kumar (2002) which indicated that the rearing of small ruminant contributes to ensuring household food security through improving income in household.

Table 4.12: Perception of small ruminant production by respondents

Perception of small ruminant production	Frequency (n)	Percentage (%)
Production of sheep and goat for food and prestige	62	51.7
Rearing and selling small ruminant for only prestige	20	16.7
Rearing of sheep and goat for food	29	24.1
Rearing and selling of sheep and goat for only money	9	7.5
Total	**120**	**100**

Source: Field data, 2015

Comparing the perception on small ruminant production according to programme of study, many (55.0%) of the respondents who pursued agriculture science said that small ruminant production was production of sheep and goat for prestige and money. This was followed by 30.0% of the respondents who said small ruminant production is the rearing of sheep and goats for food. For respondents who pursued general science, majority (66.7%) of the respondents indicated that small ruminant production was production of sheep and goat for prestige, which was followed by 20.0% of the respondents who stated that small ruminant production the rearing and selling of sheep and goats for food. For respondents who pursued Home Economic, many (69.2%) of the respondents stated that it was the production of sheep and goat for prestige. This was followed by 15.4% of the respondents who said small ruminant production was the production of sheep and goat for food (Table 4.13).

Majority (51.7%) of respondents agreed that, small ruminant production was production of animals such as sheep and goat for prestige and money. The least (9.2%) of respondent reported that small ruminant production means rearing of sheep and goats for prestige. Irrespective of the programme pursued in senior high school, many (51.7%) of the respondents concluded that small ruminant production was production of sheep and goat for prestige and money. This is in accordance with the findings of Ehui *et al.*, (2003), who state that small ruminants are particularly important in the household economy providing food and cash. The finding is also in agreed with the study of Kumar, (2002) which indicated that small ruminant production contributes to ensuring household food security through improving farm households' income.

Table 4.13 Perception of small ruminant production by respondents according to programme of study

Perception of Small Ruminant production	Programme of study							
	Agric. science (n %)	General science (n %)	Business (n %)	Home Econs. (n %)	General Arts (n %)	Visual Arts (n %)	Technical (n %)	**Total (n %)**
Production of sheep and goat for prestige and money	11 (17.7)	10 (16.1)	6 (9.7)	9 (14.5)	15 (24.2)	5 (8.1)	6 (9.7)	**62 (51.7)**
Rearing and selling animals for only money	2 (8.0)	1 (4.0)	2 (8.0)	1 (4.0)	12 (48.0)	1 (4.0)	6 (24.0)	**25 (20.8)**
Rearing of sheep and goat for food	6 (27.3)	3 (13.6)	0 (0)	2 (9.1)	10 (45.5)	1 (4.5)	0 (0)	**22 (18.3)**
Raising of small ruminant for only prestige	1 (9.1)	1(9.1)	2 (18.1)	1 (9.1)	3 (27.3)	0 (0)	3 (27.3)	**11 (9.2)**
Total	**20 (16.7)**	**15 (12.5)**	**10 (8.3)**	**13(10.8)**	**40 (33.3)**	**7 (5.8)**	**15 (12.5)**	**120 (100)**

Source: Field data, 2015

This finding also conforms to FAO (2008) which indicated that small ruminant production can provide immediate daily food particularly in the form of milk and its products. Small ruminants not only provide food security through ready accessibility, but they also increase the diversity of food and cash sources and thus reduce the risk that might otherwise be

associated with limited food and cash supplies. Small ruminants also improve household assets by providing fuel, clothing and additional sources of income.

4.5 The challenges and factors preventing SHS graduates to take to small ruminant production as a source employment

There are different challenges preventing respondents to go into small ruminant production as a source of employment. These ranges from getting start-up capital as results of limited availability of credit facilities and high cost of borrowing and feeding during the dry seasons. Respondents believe they could easily establish this business enterprise once they are given enough resources with business idea, in terms of the existing and future demand for products or services.

4.5.1 Factors preventing senior high school graduates to go into small ruminant production according to programme of study

There were varied responses on challenges preventing senior high school graduates in their engagement in small ruminant production based on their programme pursued. Forty percent of the respondents who pursued agriculture science stated that, the lack of capital to start was a disincentive preventing them from taking up small ruminant production as a source of employment. However, inadequate technical skills and health care practices were not challenges that would prevent them to go into small ruminant production as a source of employment. For respondents who pursued technical education a greater proportion (80.0 %) also stated that the lack of capital to start was a disincentive preventing them from taking up small ruminant production as a source of employment. This was followed by

13.3% who said feeding and watering of small ruminant was a negative factor that prevented them from taking to small ruminant production as a source employment (Table 4.14a).

Respondents from the various programmes of study stated various challenging factors that would prevent people from taking to small ruminant production. A reasonable proportion (37.5%) of respondents stated that the lack of capital to start and feeding and watering of small ruminant were disincentives preventing them from taking up small ruminant production as a source of employment.

This corroborates the findings of GSGDA (2010) which states that the education one received provided the necessary skill, knowledge and creative ability to open the way to a better life and development. The finding is again in line with Anarfi and Appiah (2012) work who indicated that agriculture education is to promote the acquisition of practical skills and self-reliance in farming.

This finding also agrees with Oppong-Anane (2013) and Awuma (2012) who state that the challenge of feed and watering during the dry season contributes significantly to low livestock productivity. There is also shortage of feed and diminishing of the grazing fields for small ruminant production due to urbanization, increases in cropping land and overgrazing.

Table 4.14a: Challenging factors preventing respondents to go into small ruminant production as a source of employment according to the programme of study

Programme of study	Challenging Factors					
	Lack of capital to start	**Inadequate technical Skills**	**Feeding and watering**	**Housing challenges of animals**	**Health care practices**	Total
	n (%)	**n (%)**	**n (%)**	**n (%)**	**n (%)**	**n (%)**
Agric. Science	8 (40)	0 (0)	6 (30.0)	6 (30.0)	0 (0)	20 (16.7)
General science	5 (33.3)	0 (0)	6 (40.0)	3 (20.0)	1 (6.7)	15 (12.5)
Business	3 (30.0)	3 (30.0)	3 (30.0)	1 (10.0)	0 (0)	10 (8.3)
Home Econs.	1 (7.7)	4 (30.8)	6 (46.1)	2 (15.4)	0 (0)	13 (10.8)
General arts	13 (32.5)	7 (17.5)	15 (37.5)	5 (12.5)	0 (0)	40 (33.3)
Visual arts	3 (42.9)	1 (14.2)	3 (42.9)	0 (0)	0 (0)	7 (5.8)
Technical	12 (80.0)	1 (6.7)	2 (13.3)	0 (0)	0 (0)	15 (12.5)
Total	**45(37.5)**	**16(13.3)**	**41(34.2)**	**17(14.2)**	**1(0.8)**	**120 (100)**

Source: Field data, 2015

4.5.2 The challenging factors preventing communities to go into small ruminant production as a source of employment

Assessing the negative factors in respect to the various communities, lack of capital to start and inadequate technical skills were some of the factors preventing them to take up small ruminant production as an employment opportunity.

In Katariga, half (50.0 %) of the respondents stated that lack of capital to start was a challenge preventing them to take up small ruminant production as an employment opportunity. This was followed by 25.0% of the respondents who said an inadequate technical skill was a challenge (Table 4.14b).

More than quarter (36.0%) of the respondents in the Sagnarigu community went for lack of capital to start. This was followed by 24.0% of the respondents who went for feeding and watering as a challenge preventing them to take up small ruminant production as a source of employment (Table 4.14b).

Meanwhile in Garizegu, many (47.6%) of the respondents indicated that feeding and watering of small ruminant during the dry season was a challenge preventing them taking up small ruminant production as an employment opportunity. This was followed by 33.3% of the respondents who chose that lack of capital to start (Table 4.14b).

The common challenges in all the community of the respondents that prevented them taking up small ruminant production was lack of capital to start, feeding, watering of small ruminant during the dry season and inadequate technical skills whiles health care practices and housing of small ruminants were the least challenges identified (Table 4.14b)

About half of the respondent agreed that lack of start-up capital and inadequate access to credit would prevent them from taking up small ruminant production as an employment opportunity. High cost of credit with difficult conditions such as the need for collateral is

a major negative factor that would prevent them from taking up small ruminant production. The lack of start-up capital and inadequate access to credit would prevent them from taking up small ruminant production as an employment opportunity. Therefore, they would need assistance in the form of monetary and technical assistance. This implies that government should assist this senior high school graduates with "seed money" and technical expertise through the MOFA (Extension Services). In addition, financial institutions should help these graduates with financial assistance under easy terms for them to break even in other to repay the credit facility.

This finding confirms the findings of World Bank, (2012) from (Ghana Agribusiness Indicators Survey) which reported that access to agricultural finance in Ghana is difficult to obtain, and where it is available, it is usually expensive. The finding also agreed with the study conducted by Egbunike and Nworgu (2006) which indicated that small ruminant production is being aggravated by high cost feeding during the dry seasons and access to loans is problematic for farmers with little or no collateral because high Bank interest rates. This finding is also in accordance with what IFAD (2001) stated that the youth needs access to productive resources, if they are to engage in small ruminant production as a source of employment. These needed resources are access to land, credit facilities, technical expertise and training in business and entrepreneurship.

Table 4.14b: Challenging factors preventing respondents to go into small ruminant production as a source of employment according to the communities

	Challenging Factors

Communities	Lack of capital to start n (%)	Inadequate technical Skills n (%)	Feeding and watering n (%)	Housing challenges of animals n (%)	Health care practices n (%)	Total n (%)
Sagnarigu	9 (36.0)	4 (16.0)	6 (24.0)	2 (8.0)	4 (16.0)	25 (20.8)
Gurugu	7 (23.3)	9 (30.0)	5 (16.7)	6 (20.0)	3 (10.0)	30 (25.0)
Katariga	12 (50.0)	6 (25.0)	2 (8.3)	2 (8.3)	2 (8.3)	24 (20.0)
Garizegu	7 (33.3)	4 (19.1)	10 (47.6)	0 (0)	0 (0.0)	21 (17,5)
Fuo/Taha	5 (25.0)	4 (20.0)	8 (40.0)	1 (5.0)	2 (10.0)	20 (16.7)
Total	**40 (33.3)**	**27 (22.5)**	**31 (25.8)**	**11 (9.2)**	**13 (10.8)**	**120 (100)**

Source: Field data, 2015

4.5.3 Major challenges and problems encountered in communities in small ruminant production

The major challenges in communities as enumerated by respondents were varied.

In Gurugu half (50.0%) of the respondents indicated inadequate access of credit which was followed by 23.3% who indicated lack of improved breed as a major challenge. In Katariga, many (41.7%) of the respondents also indicated inadequate access to credit followed by 20.8% indicating weak extension and veterinary service as the major challenges. However, in Garizegu more than a quarter (33.3%) of the respondents went for weak extension and veterinary service and followed by 28.6% indicating inadequate Therefore, to guarantee small ruminant production as a source of employment for respondents, there should adequate access to credit, improved breeds and assistance from extension and veterinary services. The possibilities of accessing support to increase incomes from a high turnover on their production should not be overlooked (Table 4.15).

In totality the factors restricting small ruminant production as an employment opportunity in the various communities were inadequate access to credit, the lack of improved breeds and weak extension and veterinary services to farmers (Table 4.15).

The negative factors restricting small ruminant production were ranged from inadequate access to credit, to the lack of improved breeds and weak extension and veterinary services to farmers.

This finding agrees with the report of IFAD (2001) which indicated of lack of access to basic financial services, as well as weak institutions in small ruminant production is restricting the youth in engaging in small ruminant production as a source of employment. This finding also conforms to the study of FAO (2008) which stated that to improve small ruminant production strategically included the following: prioritizing the development of the small-scale and traditional sector, continuing to re-orient the role of governments in creating an appropriate enabling environment, making more appropriate

production technology available through research and extension, continued investment in human resources development (especially farmer), improving resource management by smallholder farmers and increasing beneficiary participation in efforts and rewards.

Table 4.15 also shows the problems encountered in the various communities in small ruminant production. In Sagnarigu 36.0% of the respondents said the problem encountered was lack of water and feed during the dry season. This was followed by 28.0% of the respondents who stated theft as the problem.

In Gurugu many (33.3%) of the respondents stated that the problem encountered was tethering of small ruminants during rainy season. This was followed by 26.7% of the respondents who said theft was a big problem encountered. However, in Fuo/Taha 40.0% of the respondents indicated theft was the major problem encountered in small ruminant production. This was followed by (25.0%) saying lack of water and feed during the dry season were next in the line (Table 4.15).

Table 4.15: Distribution of challenges and problems encountered in the communities preventing respondents to go into small ruminant production as a source of employment

Challenges	Communities					
	Sagnarigu n (%)	Gurugu n (%).	Katariga n (%)	Garizegu n (%)	Fuo/Taha n (%)	Total n (%)

Inadequate access to financial support	10 (19.2)	15 (28.9)	12 (23.1)	6 (11.5)	9 (17.3)	52 (43.3)
High mortality rate and disease outbreak	3 (16.7)	5 (27.8)	4 (22.2)	5 (27.8)	1 (5.5)	18 (15.0)
Weak extension and veterinary services	5 (20.8)	3 (12.5)	5 (20.8)	7 (29.2)	4 (16.7)	24 (20)
Lack of improved breeds	7 (26.9)	7 (26.9)	3 (11.5)	3 (11.5)	6 (23.1)	26 (21.7)
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120 (100)**
Problems encountered						
Tethering of small ruminant in rainy season	5 (17.8)	10 (35.7)	5 (17.8)	4 (14.3)	4 (14.3)	28 (23.3)
Lack of water and feed in dry season	9 (29.0)	5 (16.1)	7 (22.7)	5 (16.1)	5 (16.1)	31 (25.8)
Inadequate market information	2 (11.1)	4 (22.2)	4 (22.2)	7 (38.9)	1 (5.6)	18 (15)
Poor management systems	2 (18.2)	3 (27.3)	2 (18.2)	2 (18.2)	2 (18)	11 (9.2)
Theft	7 (21.9)	8 (25.0)	6 (18.8)	3 (9.4)	8 (25.0)	32 (26.7)
Total	**25 (20.8)**	**30 (25.0)**	**24 (20.0)**	**21 (17.5)**	**20 (16.7)**	**120 (100)**

Source: Field data, 2015

Feed in the various communities were not accessible in the rainy season as a result of confining the free movement of small ruminant to prevent damage to crops planted. The lack of water and feed of small ruminant during the dry season, tethering of small ruminants during the rainy season and theft of these small ruminants were the major challenges preventing the various communities from taking up small ruminant production as a potential source of employment.

This finding agrees with the report of Egbunike and Nworgu (2006) who stated that tethering during the rainy season, free-range management and lack of water during dry season is a big problem in small ruminant production. There is also minimum investment in feeding and health, high mortality reflecting on low input in veterinary services and theft. More so, the subsistence level of small ruminant production is being aggravated by high cost of feeding during the dry seasons.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The chapter covers the summary of major findings and conclusion based on the findings and the recommendations arising from the conclusions of the study, also, recommendations for further studies.

5.1 Summary

The livestock sector in Ghana, contributes about six percent of agriculture Gross Domestic Products. Small ruminant farming is emerging as an important source of livelihood particularly for landless labourers and marginal farmers across Ghana. The rearing of small ruminants is useful to farmers in Northern Ghana. Up to 70% of the rural people in Northern region of Ghana are engaged in rearing of small ruminants.

The contribution of small ruminant and employment opportunity are enormous; contribution in alleviating poverty in arid regions serving as a living savings account and an insurance against emergencies or financial reserve for a period of economic distress and crop failure as well as a primary source of cash income.

There is therefore, the need for the youth to participate in agriculture which is necessary and vital for employment creation and also to facilitate food security in the country. Assessing the factors that would motivate young people to enter into farming would therefore be of tremendous benefit to the country as most farmers are now falling within that age barrack. It is in the light of all these that, this study assessed the potential of small ruminant production as a source of employment for senior high school graduates in the Sagnarigu district.

The study was conducted to assess the potential of small ruminant production as a source of employment for senior high school graduates in the Sagnarigu district of the northern region. The study looked at the socio-demographic status of senior high school graduates. The understanding of respondents in small ruminant production as an employment opportunity was examined. The activities that would attract senior high school graduates in the various communities to take up small ruminant production as a source of

employment, the employment opportunity in small ruminant production and the challenges (negative factors) preventing senior high school graduates from taking up small ruminant production as a source of employment..

The study adopted the descriptive survey design. The multistage sampling procedure was implored using simple random sampling and purposive sampling to select a sample size of one hundred and fifty (150) senior high school graduates from five communities in the Sagnarigu district of the Northern Region. However, one hundred and twenty (120) senior high school graduates responded for the study out of the one hundred and fifty (150). The instrument of the study was questionnaire and results analysed in descriptive statistics in the form of frequencies, percentages, means and standard deviation to classify the data using the statistical package for social sciences (SPSS Version 21).

The study revealed that the population was mainly youthful. They were therefore at their productive age with energy that could be employed in ventures such as small ruminant production and hence an employment opportunity. Respondents' understanding of small ruminant production was for money and food. Therefore, there was the need to look at the activities that would motivate the respondents to take to small ruminant production as a source of employment. The activity that would motivate SHS to go into small ruminant production as a source of employment was the profitability of the venture. The other activities attracting respondents to go into small ruminant production as a source of employment were the availability of source of breeding stock and creating of ready markets, making agriculture more practical oriented and getting support MOFA. This implies that government should assist senior high school graduates with "seed money" and technical expertise through the MOFA (Extension Services). In addition, financial

institutions should help these graduates with financial assistance under easy terms for them to break even in other to repay the credit facility if they are to engage in small ruminant production as an employment opportunity. They need access to land, credit facilities, technical expertise and training in business and entrepreneurship.

5.2 Summary of Findings

The major findings of the study were organised in line with the research question. These are presented as follows:

The study revealed that irrespective of sex and the year of completion respondents stated that good profitability of small ruminant production and getting support from MOFA were to take up small ruminant production as a source of employment.

The activities that would attract respondents to take up small ruminant as a source of employment were; getting assistance from MOFA, earning of profit as a small ruminant farmer and the availability of source of breeding stock and creating of ready markets.

The other activities that would motivate the senior high school graduate to take to Small ruminant production as a source of employment were getting the needed assistance in the form of monetary and technical assistance from Government and NGOs, making agriculture lessons more practically oriented and reliable supply of breeding stock and inputs.

On the employment opportunity in small ruminant production, majority of respondents perceived small ruminant production as a means for self-employment, a means to gather money to further education, for household and a means to gain resource from NGOs and

government. The employment opportunity in small ruminant production in the communities were ranged from buying, fattening and selling of small ruminant, rearing of small ruminant, cutting and selling of feeds and feeding of small ruminants.

The challenges (negative factors) preventing respondents from taking up small ruminant production as a source of employment were ranged from inadequate access to credit to start, inadequate feeds and feeding during the dry seasons. The high cost of credit with difficult conditions such as the need for collateral was a major negative factor that would prevent them from taking up small ruminant production. The lack of start-up capital and inadequate access to credit would prevent them from taking up small ruminant production as a source of employment. Therefore, they would need assistance in the form of monetary and technical assistance.

5.3 Conclusions

The study aimed to answer this specific research questions.

The first research question which was: what are the employment opportunities in small ruminant production for SHS graduates in the various communities revealed that there were a lot of employment opportunities in small ruminant production in the various communities which included: rearing of small ruminants buying, fattening and selling of small ruminants and feeding with a standard deviation ranging from 2.322 to 1.977.

On the second research question on what activities can be used to attract SHS graduates in the various communities to take up small ruminant production as a source of employment opportunity, The study revealed that earning profit on small ruminant production and getting support from MOFA would attract them to take up small ruminant production as an employment opportunity with an average score of 63.4%.The other attracting activities were the availability of source of breeding stock, creating of ready markets and making agriculture lessons more practical oriented.

Making agriculture lessons more practical oriented will give the skills required for the basis for either further education or for application in a variety of situations or employments and this can motivate them to practice later in future.

The third research question seeking to find out the perception or level of understanding of small ruminant production as a source of employment, with the average score of 51.7%, the study established that small ruminant production means rearing of sheep and goats for prestige and money. The study also perceived that small ruminant production can provide immediate daily food particularly in the form of milk and its products

The final research question was what are the challenges preventing SHS graduates to take up small ruminant production as a source of employment? The study revealed that common challenges in all the community of the respondents that would prevent them to taking up small ruminant production as a source of employment were lack of capital to start, feeding, watering of small ruminant during the dry season and inadequate technical skills.

The study concluded that the potential of small ruminant production as a source of employment for senior high school graduates in the Sagnarigu District includes the following:

I. Making agricultural science lessons more practically oriented.

II. There should also be monetary support from parents, government and NGO's.

III. MOFA should also give technical support in the form of breeding stock and education on good husbandry practices. There should adequate access to credit, improved breeds and assistance from extension and veterinary services.

5.4 Recommendations

Based on the findings of this research, it is recommend that

1. The curriculum of senior high school agriculture should be revisited to make it more practically oriented including agricultural activities such as small ruminant production skills that will attract youth to seek long-term employment in the sector and also to include entrepreneurship skills.

2. Government should assist senior high school graduates with "seed money" and the provision of technical expertise breeding stock by MOFA through the Extension Services.

3. In addition government and financial institutions should help these SHS graduates with financial assistance under easy terms for them to break even in order to repay the credit facility. The government need to get involved by reviewing credit facilities and

assistance in order to help them get credit as initial capital to start too as there is mostly help only for farmers who cultivate crops. This could be done by taking a comprehensive review on the financial and technical assistance already available

4. Parents can help with breeding stock or start-up capital as a loan to their wards. There should also be investment in small ruminant production by saving little money or loan from friends and relatives.
5. The present study focus on SHS graduates. A further study to be conducted could use the final year senior high students especially those who are pursuing agriculture, animal husbandry as an option to assess their readiness to go into small ruminant as a source of employment.

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APPENDIX

QUESTIONNAIRE

GRADUATE SCHOOL

UNIVERSITY FOR DEVELOPMENT STUDIES, TAMALE

FACULTY OF EDUCATION

DEPARTMENT OF AGRICULTURE AND CONSUMER SCIENCES

QUESTIONNAIRE:ASSESSEMENT OF THE POTENTIAL OF SMALL RUMINANT PRODUCTION AS SOURCE OF EMPLOYMENT FOR SENIOR HIGH SCHOOL GRADUATES IN THE SAGNARIGU DISTRICT

This schedule is designed to solicit your views on small ruminant production as employment opportunity for senior high school graduates in the Sagnarigu district

The views shared are only to support academic research and confidentiality is completely guaranteed.

SECTION'A'

Socio –Demographic Data.

Tick the following boxes and fill in where applicable.

1. Age: …….

2. Gender: Male [ ] Female [ ]

3. Community: ……

4. When did your complete SSCE: ……..……

5. Give the name of the senior High School attended……

……

6. Programme of study: ……..

7. Choice of career/job/occupation: ……...

8. Did you have career guidance in school? Yes [ ] No [ ]

SECTIONB: Respondents perception of small ruminant production

9. What do you understand by the term small ruminant production? Please choose one option among the following:

Small ruminant production is about ……..?

a. Production of animals such as cattle, pigs sheep and goat [ ]

b. Rearing and selling animals for prestige [ ]

c. Rearing of sheep and goat for food [ ]

d. Rearing and selling of sheep and goats for money [ ]

e. Any other? Please specify ……...

SECTIONC*:* What activities would attract senior high school graduates in the various communities to see small ruminant production as an employment opportunity?

10. Which of these activities will attract you most to engage in small ruminant production as an employment opportunity?

Tick appropriately.

S/N	Attracting Activities	
A	Earning of more profit as a fresh small ruminant farmer	
B	Ready source of breeding stock	
C	Getting ready market for small ruminants	

D	**Assisting in feeding and caring of small ruminants**	
E	**Health delivery services by veterinary officers**	

11. Which of the following is the major activity to attract you to take up small ruminant production as means of employment opportunity?

Mark (√) if you agree and do not tick more than one

a. [ ] creating market centres for small ruminant

b. [ ] setting up of meat processing factories

c. [ ] monetary and technical support from Non-governmental Organizations

d. [ ] Support from Government (MOFA Veterinary and Extension Services)

e. [ ] making Small ruminant production a major component in the youth in Agriculture

12. Which of the following motivational activity would make you to take to small ruminant production as an employment opportunity?

Tick appropriately.

S/N	**motivational activity**	

A	**Making agriculture lessons more practical oriented**	
B	**Getting of assistance form veterinary services**	
C	**Financial support from Non- Governmental Organizations (NGO's)**	
D	**Reliable supply of breeding stock and inputs**	
E	**Access to credit from banks and Government**	

SECTION D: What are the employment opportunities in small ruminant production in the communities?

13. What is your employment status?

Tick [√] appropriately

a. Employed [ ] **b. Not employed [ ]**

c. Self -Employed [ ] d. Apprentice [ ]

14. If not employed, are you ready to undertake small ruminant production as your source of employment? Yes [ ] No [ ]

15. How do you senior high school graduates perceive small ruminant production?

Tick [√] appropriately

a. [ ] as a means of self-employment

b. [ ] as a source of meat for household consumption (food)

c. [ ] means to gain resources from Non-governmental Organizations or the Government

d. [ ] as a means to gain some money to further education or to do business

e. [ ] any other reason, please state it. ……...

16. What are some of the reasons to make ready to undertake small ruminant production as a means of employment?

Tick [√] appropriately

[ ] Ready market for small ruminants

[ ] Rising demand for their meat

[ ] Low start-up cost

[ ] Low labor requirements

17. Which of these will you engage in as an employment opportunity in small ruminant production?

Tick [√] appropriately

a. [ ] Rearing of small ruminant

b. [ ] Cutting and selling of feeds of small ruminant

c. [ ] Feeding of small ruminant

d. [ ] Buying and selling off small ruminant

SECTION E: What are the challenges preventing senior high school graduates to take to small ruminant production as an employment opportunity?

18. Which of the following factors would prevent you to take to small ruminant production as an employment opportunity?

[ ] Lack of capital to start

[ ] Feeding and watering of small ruminant

[ ] Health care practices of small ruminant

[ ] Housing of small ruminant

[ ] Inadequate technical skills in small ruminant production

19. What are some of the challenges preventing you to take up small ruminant as an employment opportunity?

Tick [√] appropriately

[ ] Inadequate access of credit to financial support

[ ] High mortality rates and outbreak of diseases

[ ] Weak extension services and Low input in veterinary services to farmers

[ ] Lack of improved breeds (local breeds)

[ ] any other reason, please state it……...

20. What are some of the problems encounter by some ruminant farmers in your communities?

Tick [√] appropriately

[ ] Tethering of during the rainy season and lack of water during dry season

[ ] High cost of feeding during the dry seasons

[ ] Inadequate market information and lack of access to market

[ ] Inadequate information on management systems

[ ] Theft