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UNITE DE RECHERCHE ET DE
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THE UNIVERSITY OF YAOUNDE I
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POST GRADUATE SCHOOL
FOR THE SOCIAL AND
EDUCATIONAL SCIENCES
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DOCTORAL RESEARCH UNIT
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DEPARTEMENT DE GEOGRAPHIE
DEPARTMENT OF GEOGRAPHY

RURAL EXODUS AND IMPACT ON RURAL DEVELOPMENT IN NONI, NORTH WEST REGION- CAMEROON.

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AUGUST, 2021

DEDICATION

To my dear parents Mr and Mrs Nkwah Frederick.

&

To my lovely wife Mrs Dimla Flora

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF PLATES AND PHOTO

Plates

Photo

LIST OF ABBREVIATIONS AND ACRONYMS

ANCO	:	Agriculture and Nature conservation Organization
BDU	:	Bamti Development Union
BVUDA	:	Bvugoi Development Association
CAMGIS	:	Cameroon Geographic Information System
CDP	:	Council Development Plan
CIG	:	Common Initiative Group
CREAM	:	Children's Reassurance Ministry
DADA	:	Djottin Area Development Association
DIDA	:	Din Development Association
FADA	:	Febweh Area Development Association
GT	:	Global Tax
HEIFER	:	Project International
LADA	:	Lassin Development Association
LADA	:	Laan Development Association
LDT	:	Local Development Tax
LL	:	Liquor Licence
MBIDA	:	Mbinon Development Association
MBIDA	:	Mbinon Development Association
NC	:	Nkor Council
NDA	:	Nkor Development Authority
NDA	:	Nkor Development Authority
NVPA	:	Ngeptang Development Association
PNDP	:	National Community Driven Development Program
RE	:	Rural Exodus
SADU	:	Shiew Area Development Union

ABSTRACT

The study "Rural exodus and impact on rural development of Noni Sub-Division seeks to investigate on the nature, causes and consequences of rural exodus on development, evaluate the various existing strategies, evaluate the role of GIS and Cartography as a Potential decision making tool in reducing the effect of rural exodus and finally to propose possible measures to address the negative impact of rural exodus in Noni Sub-Division. These objectives were investigated in the field using four hypotheses. In order to verify the hypotheses, primary and secondary data were collected using qualitative and quantitative techniques. Primary data were gotten through field observation, administration of questionnaires, focus group discussion and interviews. The sample used to collect primary data was selected using systematic-random sampling technique. Secondary data were collected through the exploitation of published and unpublished documents from the libraries of the University of Yaounde I, Internet sources were also consulted to constitute secondary data. Data analysis was done using softwares such as ArcGIS for mapping and EXCELL for production of tables and figures. Mostly the descriptive, quantitative and qualitative approaches were used.

 The results of the research revealed that the human factors are more responsible for the massive movement of people out from Noni Sub-Division, than physical. From questionnaires administration 88.8% of respondent agreed to the fact that rural exodus is caused by human factors while 11.2% were for physical factors. The results also revealed that rural exodus in Noni has greatly affected rural development especially in the domain of agriculture, socio – economic sector and culture. However, the recurrent of these problems is an indication that the strategies used are flawed by lapses and thus require more effective strategies to solve the problems in Noni. The application of the GIS and Cartography as a decision making tool can help to unveil some of the hidden resources which when exploited can improve on the level of development in Noni Sub Division.

The research proposes the need for integrated rural development strategy to increase agricultural production by increasing rural labour productivity, by improving farm technology, increasing farm inputs such as fertilizers, construct more roads to facilitate movement of goods and persons, apply GIS and Cartography as a potential decision making tool to improve on revenue of it council.

Key words: **Rural Exodus , Noni, Rural development, Noni Sub division, Migration, GIS.**

RESUME

L'étude « Exode rural et impact sur le développement rural de l'Arrondissement de Noni a cherché à enquêter sur la nature et les causes, les impacts sur le développement rural, évaluer les différentes stratégies existantes, évaluer le rôle du SIG et de la Cartographie comme outil potentiel d'aide à la décision. réduire l'exode rural et enfin de proposer des mesures possibles pour faire face à l'impact négatif de l'exode rural dans l'Arrondissement de Noni. Ces objectifs ont été investigués sur le terrain selon quatre hypothèses. Afin de vérifier les hypothèses, des données primaires et secondaires ont été recueillies à l'aide de techniques qualitatives et quantitatives. Les données primaires ont été obtenues grâce à l'observation sur le terrain, à l'administration de questionnaires, à des discussions de groupe et à des entretiens. L'échantillon utilisé pour collecter les données primaires a été sélectionné à l'aide d'une technique d'échantillonnage aléatoire systématique. Les données secondaires ont été collectées à travers l'exploitation des documents publiés et inédits des bibliothèques des Universités de Yaoundé I. Les sources Internet ont également été consultées pour constituer les données secondaires. L'analyse des données a été effectuée à l'aide de logiciels tels que ArcGIS pour la cartographie et EXCELL pour la production de tableaux et de figures. La plupart du temps, l'approche descriptive et qualitative a été utilisée. Les résultats de la recherche ont révélé que les facteurs humains sont plus responsables du mouvement massif de personnes hors de l'arrondissement de Noni que les facteurs physiques. D'après l'administration des questionnaires, 88,8 % des répondants ont convenu du fait que l'exode rural est causé par des facteurs humains, tandis que 11,2 % l'ont été par des facteurs physiques.

 Les résultats ont également révélé que l'exode rural dans Noni a considérablement affecté le développement rural, en particulier dans le secteur socio- économique et culturel. Cependant, la récurrence de ces problèmes est une indication que les stratégies utilisées sont viciées par des lacunes et nécessitent donc des stratégies plus efficaces pour résoudre les problèmes de Noni. L'application de l'outil d'aide à la décision SIG et cartographie peut aider à dévoiler certaines des ressources cachées qui, lorsqu'elles sont exploitées, peuvent améliorer le niveau de développement de la Noni.

 La recherche propose la nécessité d'une stratégie de développement rural intégré pour augmenter la production agricole en augmentant la productivité du travail rural en améliorant la technologie agricole, en augmentant les intrants agricoles tels que les engrais, en construisant plus de routes pour faciliter la circulation des biens et des personnes. appliquer le SIG et la cartographie comme outil potentiel de prise de décision pour améliorer les revenus de la commune.

Mots clés : Exode Rural, , Noni, Développement rurale,

GENERAL INTRODUCTION

Introduction

In spite of headlines, migration is not a new phenomenon. It is rooted in world's history, and movements between and across continents and regions spread long before the general development of nation and states. It is fully part of the permanent process of change of every society and it has always been an inherent contributor and result of structural transformation. The progressive shift of mankind from rural societies to cities has been fueled by a continuous process of rural−urban migration which accelerated over the last two centuries and developed worldwide.

Migrants are very common in Sub-Saharan African countries, be it internal migrants within the country or from other countries. These sub-Saharan African countries have a long history of internal and international migration, by choice or by constraint.. According to available statistics, about 33 million Africans were living outside their country of nationality in 2015. This represents 2.8 percent of the total population of the continent and only 14 percent of international migrants worldwide (UNDESA, 2015). This reality of international migration is underestimated due to the importance of undocumented migrants across borders. However, the focus on international movement of people masks the massive internal migration, within countries, for which accurate information is even more scarce and estimated globally to be six times greater than international migration world Bank, 2015).

In Cameroon rural exodus is more intense and specifically in Noni Sub division .This movement is mostly toward specific zones of attractions .These zones include urban areas like Douala ,Yaoundé, Bafoussam , Zones of big plantations farms like the CDC in the South West and Littoral regions. These movement from the rural areas to the urban centres contributes enormously to socio economic development of these areas of destinations while the areas of departure suffers from under development ,though a few who return may have a positive impact on rural development . It should be noted that this number increased in the last four years because of the socio-political upheavals in the Anglophone regions of Cameroon which acted as a push factor.

The origin of the Noni ethnic group can be traced from the Tikar people. According to records and oral history, they were part of the great Bum migration that passed through Tang, Nkor, Din

and Djottin to Bum. The villages of Mbinon, Lassin and Dom are said to be offshoots of Nkor, Djottin and Din. Other oral sources hold that, the first settlers of Noni were part of the Njukuns who migrated from the Wukari Division, Benue Province of Northern Nigerian, Jeffreys (1945). This school of thought is buttressed by Noni dual chieftaincy institutions and their radically unique language compared to other Tikar languages in the Western Highland like Lamnso, Mbessa, Oku, Mugaka and Wirbuum, Nfi J., (2014).

0.1.   Context and justification of the Study

Rural - Urban migration or better still rural exodus in most parts of Cameroon is so intense and there still exist a knowledge gap on the impacts of such massive movement on the development of the rural areas of departure and on who these migrants are .The results of this study will create awareness on the extent to which the level of development in rural areas is being affected and on how if the causes of rural exodus in Noni Sub division are solved, the level of development be it economic or social, will be improved upon. The study is intended to specify both general and specific objectives. The general Objectives of the study are to assess the causes and consequences of rural-urban migration in Noni Sub Division .Regarding the area of investigation, this study is delimited to the study on assessment of the causes and consequences of rural-urban migration in Noni Sub Division .With regard to its significance, the findings of this Study are expected to make modest but important contributions to policy and planning issues, because it may be helpful in tackling the problems that force people to leave the Noni Sub Division and narrowing the development gap between urban and rural areas through the introduction of sound rural development strategies and effective Urban management. It also contribute to fill the gap concerning migrant informal sector participants and the giving information related to rural urban migrant which has a direct relation to planning and implementation agencies as well as institutions because rural-urban migration has a direct and indirect effect on the geographical as well as social, cultural and economic aspects. Furthermore, this study will help to support and inspire other researchers who want to deal with the cause and consequence of rural- exodus. To conduct further research on the issue, policy makers can use this study to strengthen policy issues related to rural-urban migration and its impact on rural development and it will help to widen the knowledge base in relation to rural-exodus.

0.2 Delimitation of study area

0.2.1 Thematic Delimitation

This work focuses on Migration specifically rural exodus and impact on rural development in Noni. Migration is considered as the movement of people from one geographic region to another, which maybe on temporary or permanent basis. The reasons for it vary from one Person to another depending on the situation that brought about the decision (Adewale, 2005)Rural exodus refers to the migratory pattern of peoples from rural areas into urban area It can also be define as the intensive movement of people from the countryside   to the city. Rural Exodus is the massive movement of people from the rural areas to the urban centres caused by a number of factors ranging from push factors like unemployment, natural disasters, inter- tribal wars and pull factors such as search for higher education, desire to enjoy social amenities etc. This movement of people from the rural areas of Noni is as a result of two major factors which are The Pull factors and push factors.

The push factors are those which cause people to move against their will. Such factors include drought, an epidemic outbreak, a natural disaster such as earthquakes , landslide or war situation. The pull factors are those that attract people into an area without any pressure. Movement is done at will. Such factors include the search for jobs, the desire to pursue further studies in urban areas etc.

The impact of rural exodus on rural development of Noni Sub Division simply refers to the effects which result from the massive movement of people out of Noni Sub Division .The impact are both positive and negative. though the negative impacts are more, reason why they have an effect on the rural development of Noni Sub Division.

0.2.2 Temporal Delimitation

This study covers the period spanning from 1980 to present. This time frame is chosen because it is within this period that Noni experienced rapid population growth that has caused a high demand for arable land, (Council Development Plan, 2012). In effect, it is within this period that the level of scholarisation increase and the need for higher educational institutions equally increase pushing many young people out of Noni Sub –Division for educational purposes. This

period equally marks the beginning of economic crises in Cameroon and the Anglophone crises that began in the English-speaking regions of Cameroon where most of the migrants migrated to regions such Yaoundé Bafoussam and Douala. Today, the activities of these migrants are at the and attracting public attention due to its increasing influence in the society.

0.2.3 Spatial Delimitation

The study was carried out in Noni Sub Division, which is found in Bui Division, North West Region of Cameroon. Bui Division is located between longitude 10''30' East to11''00' East of the Prime Meridian and latitude 6''00 North to 6''30' of the Equator. Noni has an estimated total surface area of about 325.7 km^2 with an estimated population of 63487 inhabitants; made up mostly of peasant farmers **(Nkor Council CDP, 2012).** This population is sparsely settled across the area under study and concentrated along the Noni Ring Road.These villages include; Djottin, Nkor, Din, Mbinon, Lassin and Dom. These villages are often divided into Lower Noni that include Lassin, Nkor, Dom and Mbinon and Upper Noni that include Din and Djottin.Noni is surrounded by a number of tribes; These are, Nso to the South East, Oku and Kom to the West and Bum to the North. Noni is situated between latitudes 6°38` and 6°.48`north of the equator and longitudes 10° 49' and 10° 69' east of the Greenwich meridian.
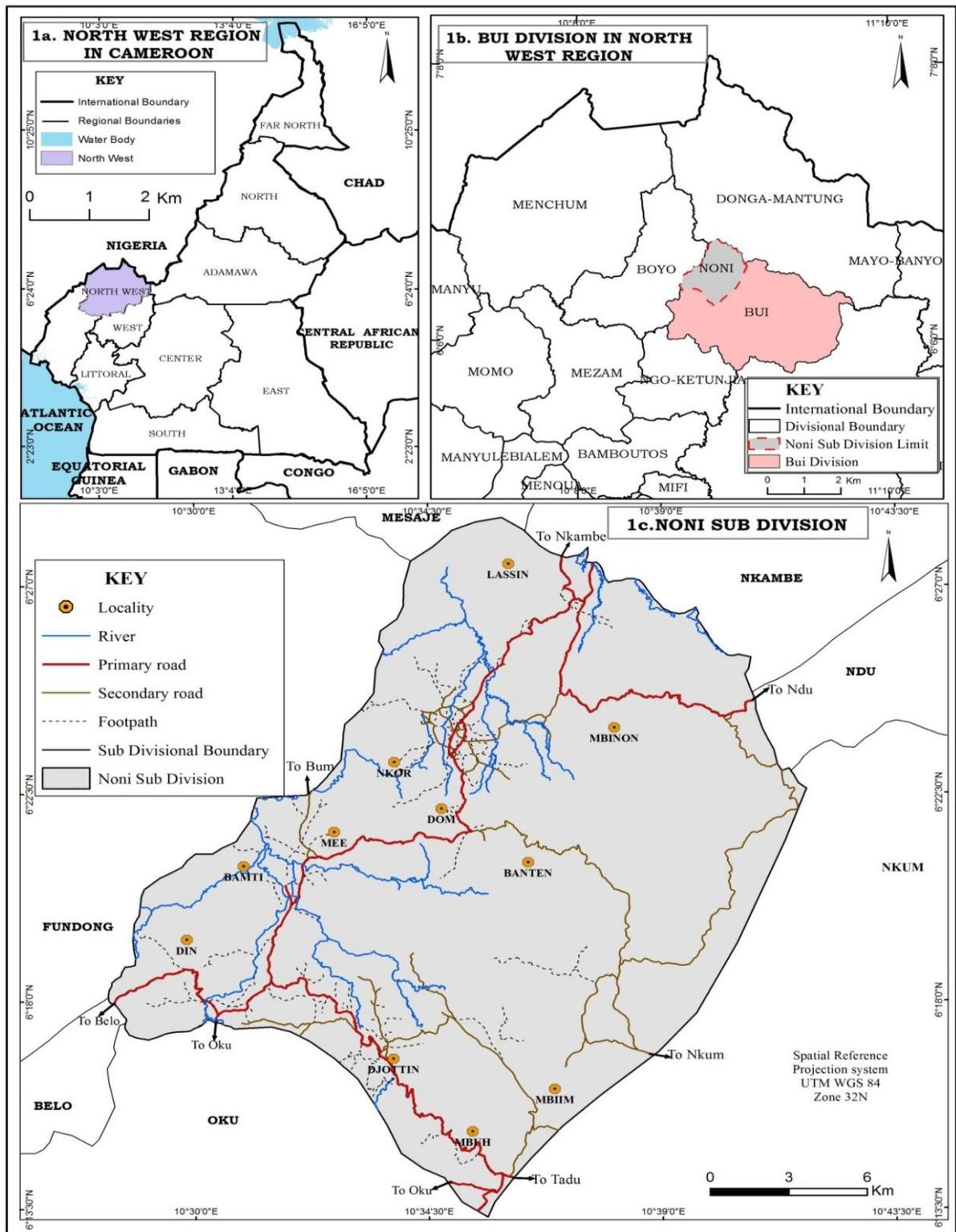
Figure 1: Location map of study area

Source: N.I.C Database & Digital globe map 2014.

0.3   Statement of the Problem

The problems posed by rural exodus in the Noni Sub Division are both demographic and socio economic.

Rural exodus in Noni Sub Division has led to rural depopulation as many people only leave the area to urban Centre for various reasons ranging educational, economic as well as social reasons. Rural depopulation has also resulted to low birth rate in the noni sub division. This is because the youth who migrate are the most reproductive group.

Rural exodus in Noni Sub Division has also led to high dependency ratio. Most of the young migrate leaving behind the aged and the enfant who are solely dependent. this phenomenon often led to high death rate amongst these dependent population who cannot properly take care of themselves.

Rural exodus in Noni Sub Division has equally led to imbalance in the age sex structure of the population. This is because the males are the most migrant group leaving behind more of the females who cannot really defend themselves.

Rural exodus has also led to a fall in the labour force. this is greatly felt in the domain of agriculture as mostly the young and energetic leave the village living behind the aged and the enfant who cannot be very productive. This has led to low productivity, food shortages, poverty and misery hence slowing down economic growth.

Rural exodus has led to Social decline in the Noni Sub Division. This is a situation where as people are moving out of the sub division it makes the area scanty and attract less attention of the state. As a result, there is lack of tarred road , electricity ,efficient health services and pipe borne water within Noni Sub Division.

Rural exodus in Noni Sub Division has led to the Abandonment and dereliction of land. People have abandon their homes and properties ,land remains uncultivated and sometimes primary and secondary schools decline because children have gone with their parents to urban areas. This has negatively affected socio economic development.

0.4 . Research Questions

0.4.1 General Research   Question.

❖ What are the impact of rural exodus on rural development in Noni Sub-division?

0.4.2 Specific Research Questions.

❖ What is the Nature of Rural exodus in Noni Sub-division?
❖ What are the causes of Rural exodus in Noni Sub-division?
❖ What are the Impacts of Rural exodus on the   development of Noni Sub- division ?
❖ What are the strategies used in managing rural exodus within the Noni Sub division?
❖   How can GIS and Cartography as a potential decision making tool help to reduced the situation?

0.5 Research Objectives

0.5.1 General Objective

❖ This work seeks to determine the Picture, Causes and Impacts of Rural Exodus on the Development of Noni Sub-division ,and the various strategies put in place to manage the Situation.

0.5.2 Specific Objectives.

❖ To investigate on the Picture of Rural Exodus in Noni Sub- division.
❖ To investigate on the causes of Rural Exodus in Noni Sub- division.
❖ To determine the impact of Rural Exodus on the development of Noni Sub- division.
❖ To evaluate the strategies used in managing Rural Exodus in Noni Sub-division.
❖   To evaluate the role of GIS and Cartography as a potential decision making tool in reducing rural exodus in Noni,.

0.6   Research Hypothesis

0.6.1 General Hypothesis.

❖ Rural Exodus caused more by human factors has slowed down development in Noni Sub division, due to the ineffective strategies used to fight against it.

0.6.2 Specific Hypothesis

- ❖ The Males are the most migratory age group in Noni Sub-division.
- ❖ The human factors are responsible for Rural Exodus in Noni Sub- division.
- ❖ Rural Exodus has slowed down the Development of Noni Sub-division.
- ❖ The Nkor Council has played a greater role in reducing rural exodus in Noni Sub-division.
- ❖ The application of GIS and cartography as a potential decision making tool can help reduce rural exodus through enhancing council revenue.

0.7. Literature Review

Rural exodus has preoccupied many authors and researchers in different parts of the world. The highest illiteracy in the 21st century is to proceed with a research work without reading to uncover knowledge that has been written and stored by various authors in the related domain of research. It is in this light that ,a wide range of texts ,journals, conference papers ,published and unpublished documents, dissertations and Phd thesis were consulted to build a rich and befitting literature to proceed with this study. This permitted the researcher to have some additional ideas on rural exodus and their impact on socio economic development of the rural areas and equally to avoid the duplication of work that has already been carried out elsewhere.

0.7.1 Approaches Based on Picture of rural exodus.

Migrants' journeys are increasingly diverse, complex and fragmented. Research on the dynamics of migration is very distinctly split, with limited connection, between studies on internal and on international migration, characterised by different concepts and methods (King and Skeldon, 2010). In particular, there is limited awareness about two−stage migration patterns, whereby journeys encompass internal − and − international migration. Further, there is still limited knowledge about the different nature of drivers according to migration patterns (international/internal/mixed; short/long term). This constitute a strong bias because of the selectivity of the migration process, drivers of migration being likely to differ across locations (Mora and Taylor, 2006).

Herrera (2013) exemplify the diverse nature and drivers of internal mobility, by differentiating between temporary and permanent migrants, their rural or urban origins and destinations. In short, the lack of a comprehensive framework of migratory patterns, which integrates more or less complex step−wise and circular trajectories, is a strong limitation for analysing the determinants of migration .This research intends to analysed the different type of drivers and types of age groups which are more migratory and the reasons behind such movements within the Noni Sub-division

There is general consensus in the literature on migration that migrants are primarily young people (Lee 1966; Lloyd 2005). Based on migration patterns during the 1970s,Todaro (1980) suggested that migrants are 'disproportionately young, better educated, less risk averse, and more achievement-oriented and have better personal contacts in destination areas'. More recently, using demographic household surveys from 65 developing countries, Young (2013) provided sound evidence that most migrants between 25 to 49 years old moved in their early to mid-twenties. Different theories provide distinct explanations for this stylized fact. According to the human capital model of migration led by Sjaastad (1962), migration is seen as an individual investment and, thus, the sooner the migrant moves, the greater the benefits of migrating. Nevertheless, Stark (1985) argued that migration decisions are often made jointly by the migrant and by a group of non-migrants, generally the family, in order to mitigate income risks. Rosen Zweig (1989) provided an example of this strategy by analyzing marriage and migration patterns in India. He claimed that movement for marriage is the result of an implicit inter-household arrangement aimed at smoothing consumption in the presence of spatially covariant risks. However, during late adolescence the decision to migrate becomes more complex as young people are also experiencing biological, cognitive, psychosocial and interpersonal changes that will shape their future as adults (Rice and Dolgin 2005). Furthermore, transitions into adulthood are characterized by decision-making about education, labour force participation, and family formation, and these are closely linked to the decision to move. This document will be useful in this piece of work as it examines age-sex structure and the aims of rural exodus .In the context of Noni Sub Division, this research seek to examine all the age groups involve in rural exodus not only the young.

According to Kley (2011) he explains that the intention to migrate relies on the perception that accomplishing important life goals may be more achievable in a different place than the current one. Therefore, migration decision-making would be highly influenced by life-course events, especially during life-course transitions. Thus, understanding the patterns, determinants and effects of youth migration is important not only because this phenomenon is prevalent, but also because they are very different from those of other age groups as youth migration greatly overlaps with other transitions to adulthood (Zenteno et al. 2013). Despite this, little is known about the migration of youths in the context of transition to adulthood, since existing research on the causes and consequences of migration mainly focuses on adult males (Curran et al. 2006).In the case of the Noni Sub Division apart from specific factors responsible for rural exodus, involuntary factors will be examine like political instability or better still socio-political crisis.

0.7.2. Approaches Based on Causes of rural exodus

According to Moses Lomoro (2017). Working on causes of migration explained that migration is the movement of people from one ecological region to another; it may be on temporary or permanent basis. This research studies focused on the causes and consequences of rural-urban migration in Juba Metropolitan, Republic of South Sudan as a case study. The study also reveals that males migrate more than the females in Juba and migration is high within the age cohorts of 30-39 years and 40-49 years old. Furthermore, the study revealed that the propensity to migrate is directly related to educational attainment. It can be inferred from the findings of the study that the majority of migrants in Juba Metropolitan migrated in search of employment while others migrated to continue their education while others migrated in search for basic amenities, to join relatives and get married. The author dwells on the causes of migration and age selectivity. This research investigates the causes rural exodus in Noni Sub-division. These authors limited their work on the causes of and consequences of rural exodus. This research examines the impact on rural development of Noni Sub-division.

Bakewell, (2010): said progresses in research on migration drivers are constrained by data issues and division between economics and other social sciences, as well as between qualitative and quantitative approaches (Boswell, 2008; de Haas 2011). As a result, "although there is consensus that macro−contextual economic and political factors and meso−level factors, such as networks, all play some role in starting or sustaining migration, there is no agreement on their relative

weight and mutual interaction" (Haas, 201). This study goes ahead to study the trends of migrants, and their impacts on the socio-economic development of Noni Sub-division.

Momtaz (2012), looks at Rural urban migration as the principal component of rapid and unplanned growth of towns and cities in the developing countries. Gross disparities in socio-economic opportunity between urban and rural areas and frequent natural disasters in some regions encourage large flow of migrants from rural Bangladesh to the large cities. For various reasons Dhaka is an attractive destination for the rural migrants. The impact of migration is diverse both at the urban destination and at the rural origin. At both ends there are economic, demographic, environmental and socio-cultural impacts. This paper focuses on the urban end. It examines the overall conditions of the underprivileged, poor migrants and the consequences of migration on the physical and social environment on their choice of destination. This research examines mostly the impacts of rural exodus on the area of departure which is on the rural development on the Noni Sub –division.

Hussain *et al.* (2004) made an attempt to study the major factor behind the migration of 120 respondents of Faisalabad city in Pakistan. It revealed that a majority of the respondents were agreed with the non- availability of job was the main reason for their migration. Besides, the absence of educational facility, poor health institutions, low paying jobs, poor rural settings, labour intensive agriculture production, family disorganization and polluted environment were found as the factors that pushed them to migrate. The outcome of the analysis indicated that better education and better employment were the pulling factors for their migration. The study also mentioned the other pull factors which attracted the migrants were better health institutions and facilities, high paying wages, better housing, public entertainment and better sewerage system. Hussain *et al.* (2004) in his work analysis the causes of rural exodus mixing both pull and push factors without a clear distinction between the two. Secondly only few of the push factors were mention like unemployment in the rural areas without mentioning push factors like wars and natural disasters. This research work intend to look at both the pull and push factors of rural exodus in the Noni Sub-division.

Misra (2008) attempted to study the determinants of migration among 300 migrated labourers in Alang Ship Breaking Yard (ASBY) in Gujarat. The study found that both 'push' and 'pull' factors

influenced migration. It was revealed that 35 per cent of them mentioned 'pull factors' were the main cause of their migration and 65 per cent cited 'push factors' were the leading cause for migration. The non- availability of work in the native places, not enough property, social and family disputes were identified as push factors of migration. The significant pull factors were the presence of friends and relatives and the availability of finance in the destination place. The study further found that relatives and friends of the migrants were not only providing information about the employment opportunities in the destination area but also assisting in getting jobs and to reduce the cost of migration by arranging for the migrants' initial stay with them. Misra work will be of great importance as it has dwell on the push and pull factors, but this research intends to lay more emphasis on both the causes, consequences and impact of rural exodus on rural development of the Noni Sub-division and equally examines the patterns of movement.

Kebede (1994:10) writing on push factors of rural exodus argued that land scarcity due to increasing population pressure,unfavourable land tenure system, stagnation caused by faulty government policies,environmental crisis and the consequent famine have in single or combination acted as forces pushing people from the rural areas in poor countries. Breese (1969:326) states that over urbanization caused by rural outmigration is mainly the result of the "push" factors from the countryside rather than the demand for labor in the cities, or what is called their "pull". Bell (in White and Woods, 1980:88) ,This researcher emphasis on the push factors of migration ,but this work examines both the pull and push factors of rural exodus In the Noni Sub division.

Cloete (2002) describes the relationship between infrastructure and migration as being Twofold: infrastructure and services as pull factors for migration ("migration attractors"), and infrastructure and services as reasons for moving again. While people may migrate to better Infrastructure and services, this is not independent of economic and employment concerns. It became apparent in Cloete's (2002) research, looking at the influence of education and health facilities on migration into the Western Cape, that "a poor household may well up and   leave their present dwelling if household members remain unemployed and hear about job opportunities elsewhere" and "that the promise of work opportunities is the main reason for Migrating" (Cloete, 2002). This work is relevant in this research as it examines the causes of migration, but in the context of Noni ,it is not only the promise for job that cause people to move

out to urban areas. Other factors or reasons such as need for education, insecurity etc. Ravenstern (1889), in his push –pull factors suggests that people move out of their location because they are pushed out, while others move because of forces pulling them from their location to a new one. Ravenstern further concluded that pull forces were more important than push factors. In the context of the Noni Sub Division the push factors are more important in causing rural exodus.

0.7.3. Approaches Based on Consequences of rural exodus.

According to Haan (1999),working on the consequences of rural exodus, analyses the contention emerges that most of development studies are based on the wrong assumption that sedentary pattern within the society are the norm, instead of considering that migration is often the rule rather than the exception. These debates are also directly related to the increasing acknowledgement of the significance and contribution of population movements to diversified livelihoods (Cramer and Pontara, 1998; Ellis, 2003; Ellis and Freeman, 2004), and to the insufficient visibility of livelihoods diversification in theories of agrarian change (Ellis, 2000). However, our study concentrates on the impact of rural exodus in the Noni sub division in Cameroon.

Chandra (2002) studied the consequence of internal migration in Fiji. The data were collected in 1992- 93 among 2416 migrants and found that rural to urban migration and more importantly inter- urban migration had been most pronounced. The study examined the social and economic conditions at their destinations on the view of heads of migrant households. After migration, professional, technical and related occupational groups, sales personnel showed a slight growth in employment and that indicated a positive marginal change relating to salary and wage earners. The economic consequences of migration provide unambiguous support for the notion that migration in Fiji is economically beneficial for migrants. This work lays more emphasis on the economic consequences migration which will be of help to my research work. But this research will go further to examine the social .political and cultural consequences of rural exodus on the development of the Noni Sub-division.

Kumar (2003) examined how far the extent of settlement problems and adjustments among un-married rural migrant men in a new urban environment. The study emphasized the changes in the

economic status of migrants in the process of migration. A household survey was conducted among 81 un-married men in the age group of 24-39 years in Krishnagiri municipality. A notable proportion of the rural migrants moved in to the town when they were in their early and late childhood age groups. The main reason for moving in to the town among the rural migrant youths were their parents transfer and to do business in town. Economic status of the selected respondents showed that both the working status and income of many of the respondents were improved after migration.

Gorodzeisky (2008) based is impact of migration on income and the standard of living of the migrant's households in Philippines. The analysis was made among 2388 households to estimate the contribution of remittances between the households with and without overseas workers. The result of the multi- variate analysis showed that the income of households with overseas labor migrants was higher by 30 per cent than the income of households without labor migrants. The effect of overseas employment on income was positive and highly significant. The analysis also displayed that household with labour migrants enjoyed higher standard of living than households without overseas. It implied that households with overseas workers were able to purchase more goods than the households without overseas migrants. The study demonstrated that the money that labour migrants send back home was mostly used by members of the households for consumption and to support education. He laid more emphasis on remittance but this research goes a long way to look at the impact of rural exodus on the area of departure that is the development of the Noni Sub-division.

Sundari (2005) has made a study to find out the quality of life of women migrants of Chennai city. The primary data was collected among 50 migrant women coming from various parts of Tamil Nadu. The study underlines that migration has solved the problem of unemployment among women but failed to improve the quality of employment. Workers who were in unprotected, non-regular category of employment obtained the lowest income and hence poverty incidence was more pronounced among these households. About 40 per cent of migrant households were living on roadsides, 30 per cent did not have access to safe drinking water, 65 per cent had no sewerage facilities and around 79 per cent did not have latrine facilities. The study specified that the pressure of unemployment and poverty caused by drought in the place of rural origin pushes the rural labour force towards urban centers in search of survival. A low level

of economic, social, human and political capital drives the migrant work force to over crowd in to the informal sector.

Roy *et al.* (2006) studied the impact of rural urban migration on female migrant fertility in Bangladesh by using the data from 1999-2000 Bangladesh demographic and Health Survey. It was evident from the study that rural urban migration had significant effect on fertility in the selected area. There was poor rate of utilization of health care among the children of urban migrant compared with urban natives and their standard of living was very low. The significant impact found by the study is that the household poverty also was more prevalent among the migrants particularly long time migrants. The result showed that total fertility rate for rural urban migrants were lower than rural non- migrants and was higher than urban non migrants since they were adopted smaller family size norm.

0.7.3.1 Approaches Based on the application of GIS and Cartography as a decision making tool to help curb rural exodus through revenue enhancement.

Dekolo et al (2001) elaborated on the use of GIS and Cartography in providing a database of all land transaction document alongside a cadastral geographic database. The primary application was revenue generation, i.e. effective collection of land base charges. This same idea will be applied in this work in order to enhance revenue collection in Nkor Council. This work envisages a data base creation for the Nkor Council from which taxes will easily be collected and projection done to ease evaluation and follow up. This is exactly in line with Sommer 1991 in which he analysis conceptual model for local government GIS. He further identifies three types of GIS that can be implemented at the local government level; automation GIS, problem solving GIS and multipurpose GIS. The problem solving GIS will be relevant in this work base on the conditions in Nkor Council.

The application of GIS in local government management especially in rural council will certainly encounter a lot of difficulties given the low literacy level of ICTs. The introduction of such new ideas will be seen parallel to the old one though will greatly reduce the risk of failure (Grim Shaw, 1994). This is a very similar case in the Nkor Council of Noni Sub Division where most of the workers are conservative and prefers to stick to the old method of managing council affairs despite the loopholes associated to the old order. In this manner, it is hoped that after

sensitization and the adoption of the GIS and Cartography in tax collection, it will greatly enhance the revenue collected in the council area from the present situation.

(Olima and McCluskey, 1999) dwells on extreme flexibility in defining the tax base. Rating authorities may use an area rating, an agricultural rental value rate, a site value rate or a site value rate in combination with an improvement rate. For area rating, The Rating Act (Section 5) again provides flexibility to use one of five different options, including the use of a flat rate or a graduated rate upon the area of land, differentiated flat or graduated rates according to land use or any other method of rating upon land or buildings that the rating authority may resolve. The use of GIS and Cartography in enhancing revenue collection in the Nkor Council can be applied in this manner discriminately. In this light, areas identified to be very inaccessible may be rated low in terms of tax collection while the accessible areas rated higher.

Caroline J.C.(2010) describes how the world has gone digital in its operations and many complex social and scientific tasks can easily be manipulated by computer software depending on the task. He explains that Geospatial Information System (GIS) has proved application in many fields in human life i.e. medicine, social science, engineering etc. A good number of sectors and many local government authorities have not taken the use of new technology serious. This is a very important tool that enhance implementation of policies in a more efficient and effective manner. In a nut shell, this work can enable and facilitate the Nkor Council in which work is still manual to go digital and consequently enhance revenue collection for the council.

Geographical Information System (GIS) has been rapidly adopted by many organizations as an effective tool for managing, organizing and analyzing spatially related data. A large percentage of decisions made by Local Authorities are spatial in nature. The decision largely involves spatial objectives such as land lots, buildings, roads, storm drains, planning zones, rivers, parks and management of markets. The management of these spatial objects can be facilitated with the use of GIS (Mitullah, 2005). This in line with this work though GIS and Cartography can specifically be used for the enhancement of revenue collection in the Nkor Council.

According to Dillinger (1988) municipalities that conducted tax-mapping operations have shown that their revenues remained stagnant because problems associated with collection administration and enforcement was not addressed. GIS merely provides a tool for efficient tax collection

through expedited billing and collection processes as well as a check on delinquent tax payers. The enforcement of necessary measures in order to collect taxes through administrative or judicial processes still remains in the hands of the local government. In effect, GIS and Cartography can effectively be used to enhance revenue collection in the Nkor Council.

Dilinger (1992) again postulated that property tax is apotentially attractive means of financing Municipal Governments in developing countries. Dilinger believes that property tax, as a revenue source, can provide Local Governments with access to a broad and expanding tax base, and can promote broader efficiency objectives by linking the provision of municipal services with price. He therefore suggested reforms which include improvement in the system used to discover and identify property and improving collection efficiency by establishing a system of collection monitoring that readily identify major delinquents. He further argued that the yield of urban taxes in developing countries is extremely low and its contribution to municipal revenue is less than 20%. He noted that the low yield could be attributed to failure in its administration. He agreed with Ntamere (1982) who is of the view that a large proportion of properties are missing from the tax rolls, properties on the tax rolls are inaccurately valued and collection efficiency is extremely poor. The implementation of GIS and Cartography in the Nkor council will therefore promote greater efficiency and improves on the system of identification of tax payers and other potentials that can be developed to provide council revenue.

Malme (1990 and 1991) suggested the use of tax maps and property data among others as a tool for location and valuation of property. The author stressed further that these would enable identification and description of property characteristics for accurate measurements. In the same way, with the use of GIS and Cartography in Nkor Council, it will ease the location of the various tax payers.

Ayeni (2003) defines GIS as a computerized database management system for the capture, storage, retrieval, analysis and display of spatial data. This tool has the capacity to inter-relate data sets and assist in their analysis as well as in the presentation of the results.

Ajala, 2000). Ndukwe (2001) defined a database as an organized collection of integrated and logically related non redundant data stored so as to be capable of use by relevant application software with data being accessed from different logical paths. Ayeni and Adewale (2006), in a

recent study carried out in Lagos Mainland Local Government Area Nigeria, used GIS tools to evaluate tenement rate administration but focused mainly on residential properties.

Oluwadare (2010) also applied GIS tools in property rate administration with a focus on commercial properties in another geographic setting. This can be applied in the Nkor Council given that this work focus on revenue tax collection mainly from commercial activities.

Caroline J. C. (2010) dwells on how administration and management of Local Authorities are associated with many geographical data such as land lot, buildings, roads, drainages, hydrology, geology, planning zone and topography. The implementation of a GIS would provide an efficient way of storing and managing the data. A Geographic Information System (GIS) would enable management of Local Authorities to have access to numerous data and information from one computer location. Data that were physically scattered at various units and departments are now stored in one place and information that were formally difficult and time consuming to generate can now be obtained in a matter of seconds. Thus GIS and Cartography can be an invaluable tool in revenue enhancement collection in Nkor Council .

0.8   Theoretical and Conceptual Framework.

A number of concepts and theories are examined and reviewed in order to show their significance in the domain of migration and Rural development. In a whole, two theories and two concepts are used in this study. The concepts of migration and that of rural development which are well defined. The theories include; the theory of spatial diffusion of innovations and Everret Lee's Theory of migration.

0.8.1 Conceptual Framework

This write-up is guided by the link that exists between the migrants and its impacts on the socio-economic development of Noni Sub-division. Some concepts were identified and defined to guide the understanding of this research. Concepts such as migration and rural development which are directly linked to the topic have been carefully defined and conceptualised.The intention is to articulate these terms around the context and background of the research questions vis -à -vis the perception of the local population of Noni Sub-division so as to give them their meanings and significance through a cumulative development in knowledge.

0.8.2 Concept of Migration.

Migration can be considered as a significant feature of livelihoods in developing countries to pursuit better living standards. Central to the understanding of rural-urban migration flow is the traditional push-pull factors. "Push factor" refers to circumstances at home that repel; examples include famine, drought, low agricultural productivity, unemployment etc. while "pull factor refers to those conditions found elsewhere (abroad) that attract migrants. There are many factors that cause voluntary rural-urban migration, such as urban job opportunities, housing conditions, better income opportunities etc. There is no doubt that, apart from these factors, urban areas also offer a chance to enjoy a better lifestyle.

The provision of services such as electricity, piped water supply and public services make urban areas attractive. While the motives for rural movement are important in themselves, the means of movement are also of important. Improvements in transport systems and increasingly awareness of the urban areas through media, helped by improved educational standards are equally important factors to be taken into account when dealing with rural to urban migration.

In the context of this work, migration will be examined under two dimensions, as internal migration which involve the movement of people within the same geographical region. Internal migration will depend on the following variables; rural-urban migration which is the movement of people from the rural areas to the urban centres, Rural exodus which refers to the massive movement of people from the villages to towns and Inter–regional migration which is the movement of people form one region to another region within the same geographical area. These movements are usually motivated by economic, social-cultural ,religious and political indicators.
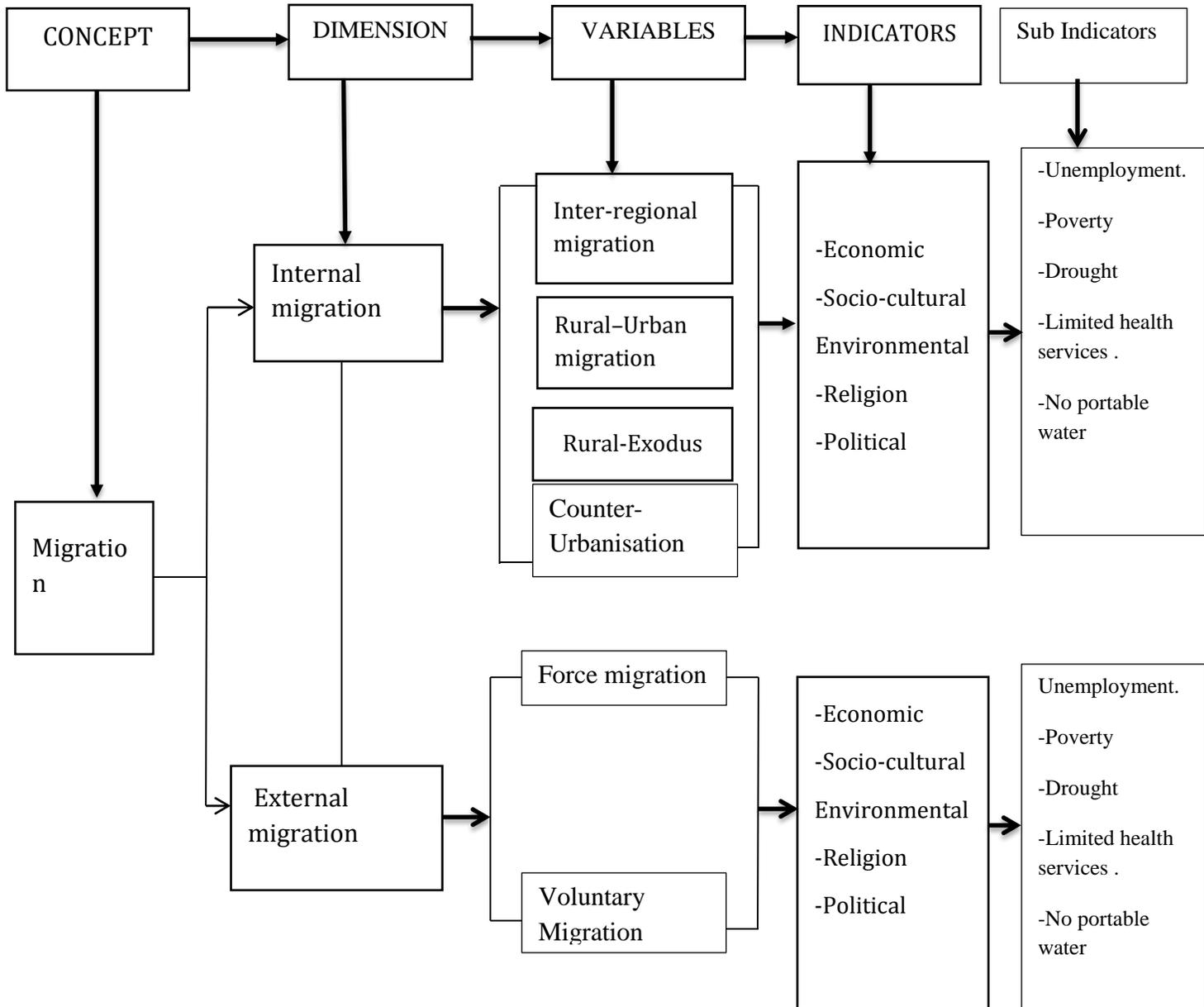
Figure 2:   Concept of Migration.

Source: Field work, 2021 and inspiration from class work.

0.8.3   Concept of Rural Development.

The term socio economic development is complex just like the term development. To better apprehend the understanding of this term, the term "Development" is first reviewed while integrating social and economic aspects. Development is a complex term and does not have unequivocal criteria in defining it. As a concept, there are still severe difficulties in attempting to

understand what development actually mean. Contemporarily, the definition of development varies depending on the problem and the purpose for which it is intended to be used.

The Cambridge Advanced Learners sees development as growth, change and more advancement. From the above perspectives, development can be in the political, cultural, economic, social and many other dimensions

In another light, development can be understood as an improvement, growth or a positive change in the society. It involves social, technological and economic transformation focusing on economic prosperity. If a community or people have the capacity to satisfy the basic needs of a larger portion of its people or population, we talk of a developed society.

According to Irish (2006), development refers to the actions and activities in which individuals and communities participate. It occurs in the social, economic, political and geographical areas where these individuals and communities exist. The local population of any given geographical area influences the outcome of development of that area. The local nature defines who participate and does what and at which level. In order to clearly define the concept of development, we spell out the level where this development is taking place which in the context of our study is in the social and economic domains induced by the migrants activities.

The term development can equally be defined from two view points; from the view point of the local community and their needs and from the view point of changes taking place within the local, Alicia (2002). In the context of our study, we will take the two aspects into consideration.

The study looks at development as improvements implanted in Noni Sub-division by migrants in creating jobs, enhancing agriculture, easing mobility and reducing poverty and a general livelihood improvement.

According to the Basic Needs approach, rural economic development is defined in terms of progress towards reducing the incidences of poverty, unemployment and income inequalities.

According to Human Development Report, (1996 p.1), economic development is the measurement of life expectancy, adult literacy, access to all levels of education as well as people's average incomes which creates freedom of choice.

This study examines Rural Development as an improvement in the domain of job creation, agricultural improvement and mobility provided by migrant's activities that can result from proper organisation of migrants and enabling a conducive environment to effectively carry out their activities.

According to the Copenhagen Social Summit, (1995), social development is defined in three terms; poverty reduction, employment generation, and social harmony.

The study looks at social development as an improvement in the welfare and access to social facilities not leaving out poverty reduction in the community. In another dimension, social development here will also consider measures geared towards mobility, and education as tools for economic growth. The impact of rural exodus on rural economic development is spearheaded by the massive movement of migrants' out of the Noni Sub-division is conceptualised (figure 4). Three major dimensions are given a close look notably the social, economic and institutional with major variables and indications of change. This is illustrated in figure 3.
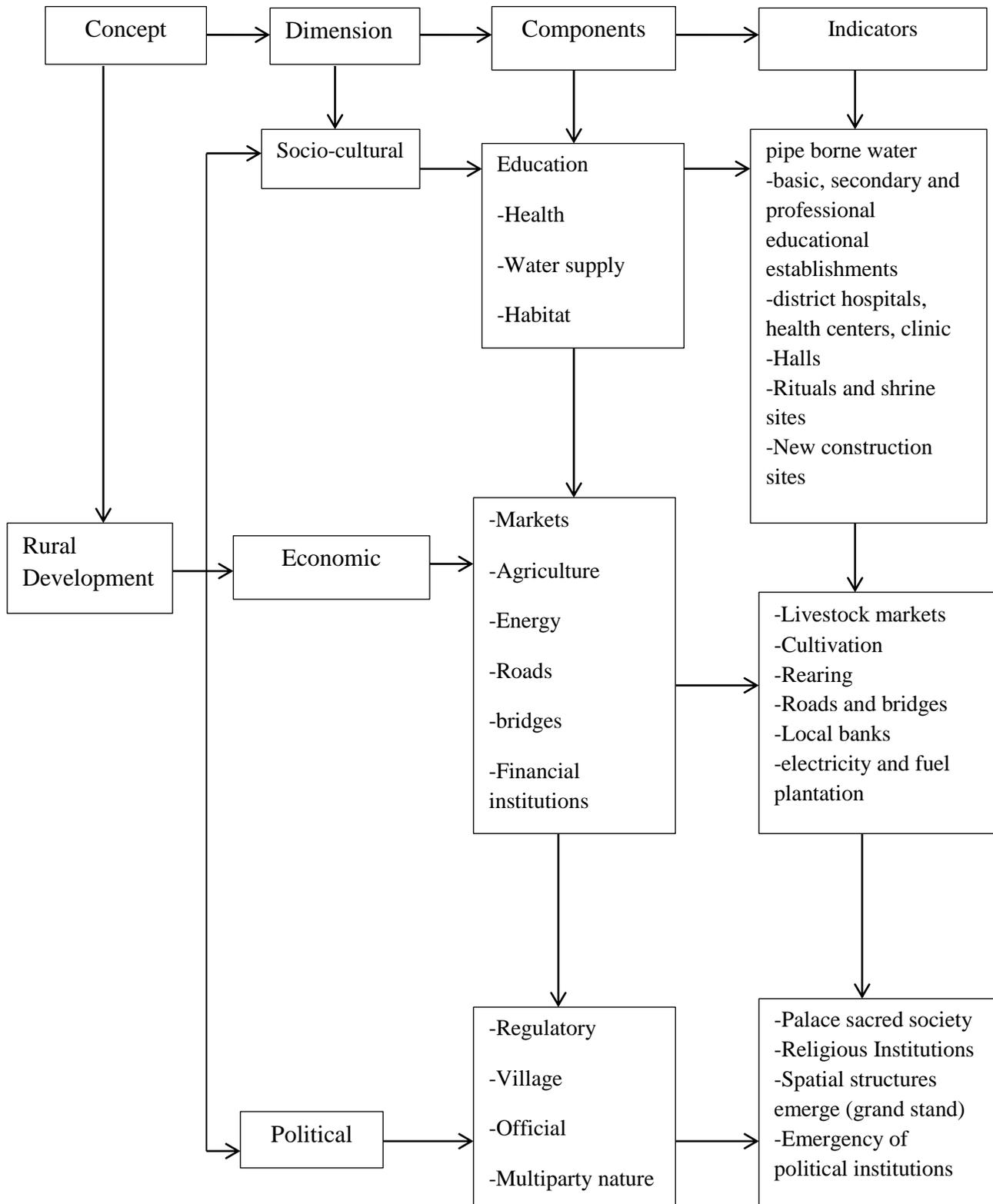
Source: Concieved by Author.

Figure 3: The Concept of Rural Development

0.8.4. Theoretical Framework

This study is integrated in the problematic in relation to migration and Rural development. This study is inscribed in the framework of the theory of spatial diffusion of innovations and Everret Lee's Theory of migration. This was in a bit to give the work a scientific base and to use the theories as a point of reference.

0.8.4.1. The theory of spatial diffusion of innovations of E.M. Rogers (1962)

The general theoretical position of the theory of spatial diffusion of innovations consist of proposing a partial explanation as well as prediction possibilities about the state and probable evolution of geographic entities on basis of knowledge of their situation with respect to other geographic objects. It postulates ideas and technologies spreading across cultures. http://www.hypergeo.eu/spip.php?article187. The theory thus bases on aspects of typical spatial diffusion which suggests six elements: an environmental space; a diffusion time, in two or more intervals; an innovation or "message" to be diffused; a set of message holders and message receivers in the initial time interval; an interaction path between message holders and message receivers. These six elements are indirectly suggestive of other elements that should be considered in examining spatial diffusion in any culture and economy which in turn depend in the culture and type of innovation. Innovations are developed in the course of interactive process depending on the actions of actors located in the centre. This action may be creation, anticipation and attempt to take a profit from it or imitation of an innovation that has registered success elsewhere, both attitudes representing adaptation strategies.

These processes of ideas and technologies spreading through cultures are however affected by barriers like culture and physical environment (Paul and Robert, 1973). This theory will be applied in this work in order to examine how rural exodus in the Noni sub division will affect the implementation of the innovations like transport modes, which could enhance economic development in the area. This process relies heavily on human capital. The innovation must be widely adopted in order to self-sustain. Adoption means that a person does something different than what they had done previously (purchase or use a new product, acquires and performs new behaviour or practice). Within the rate of adoption, there is a point at which an innovation reaches critical mass. The categories of adopters are: innovators, early adopters, early majority,

late majority, and laggards. Researchers have found out that people who adopt innovation early have different characteristics than those who adopt it later.

Rogers equally argued that the key to adoption is that the person must perceive the idea, product or behaviour as new or innovative. It is through this that diffusion is possible. Adoption of new idea, behaviour, or product, does not happen simultaneously in social system. Rather, it is a process whereby some people are more apt to adopt the innovations than others. Diffusion manifests itself in different ways in various cultures and fields and is highly subject to the type of adopters and innovation-decision process (figure 4).
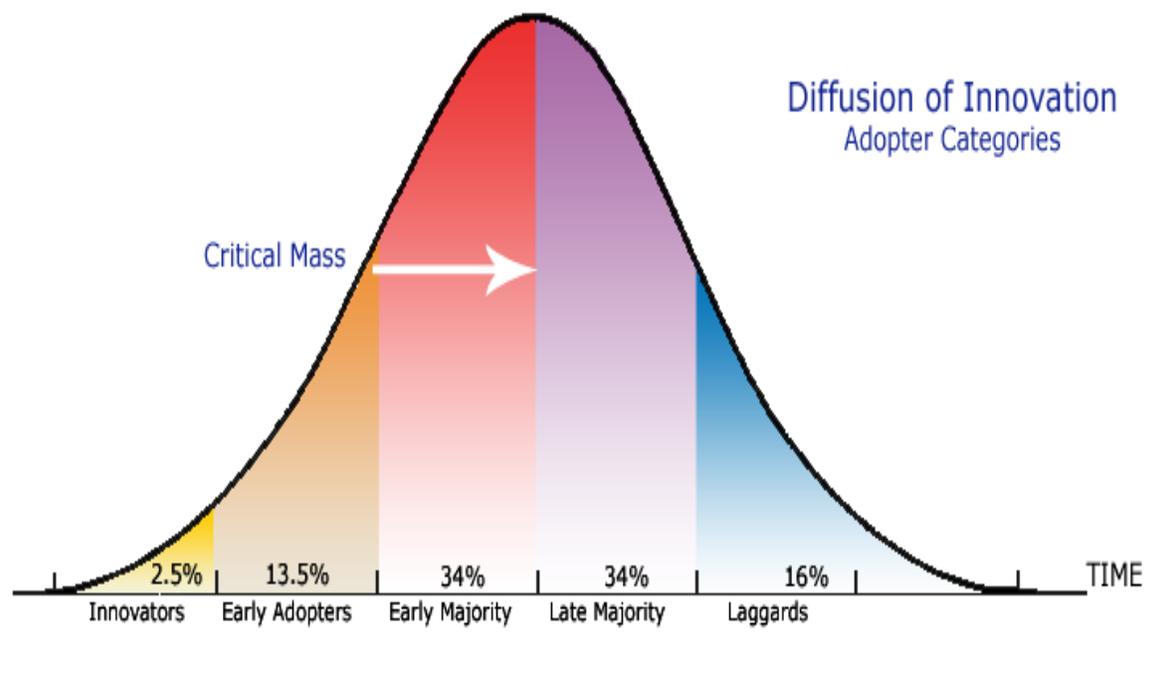
Source: *Ngwega (2007)*

Figure 4: Adoption process of agricultural innovations

Figure 4. illustrates the different adopter categories; the innovators, early adopters, early majority, late majority and laggards. These categories follow a standard-deviation curve. Very little innovators adopt the innovation in the beginning (2.5%), early adopters 13.5%, shortly later, the early majority 34%, the late majority 34% and after some time finally the laggards make up 16%.

This theory will be applied in this work to examine how if the negative effect on rural exodus in Noni sub division are handled, it will open up way for the diffusion of new developmental innovations in Noni sub Division which will further give a push to rural development of the area.

The relevance of the theory to this work is that, Innovation as the mother of necessity, improvement in diffusion of innovation is in conformity with hypothesis two which read" Human factors are responsible for rural exodus in Noni Sub-Division. When there is a change in the means of passing information and improved transportation, migration trends has to change. The innovation through transport mode like the construction of roads linking Noni to other parts of the country through Oku and kumbo have actually boosted the migration patterns in Noni Sub-Division. The majority of rural migrants now move over short distance or daily migration as a result of innovation through the diffusion of information which help to change people's attitude. New ideas set in as well as the drastic change in people's behavior toward moving. This manifestation is witnessed at the level of culture, Economy, Environmental and social means through improvement in transportation. Therefore diffusion innovation is the equilibrating force that reduces the differences between places and promote the rate of movement depending on the will of the migrant.

0.8.4.2. Everret Lee's Theory of migration.

This theory of migration was proposed in 1966 and has long withstood the test of time. According to Lee, each place posses a set of positive and negative factors that determine the decision to migrate and the process of migration. This factors were divided into four categories: Factors associated with area of origin, Factors associated with area of destination, Intervening obstacles and Personal factors.

Lee elaborate all these four categories by pointing out that in each area there are numerous factors which act to drive away people from the area, hold them or attract people to it. In this respect there are significant differences between the factors associated with the area of origin and those associated with the area of destination. Migration may take place after both of these factors are properly weighed. Usually, a person has a better and more realistic knowledge about the place of origin, while his knowledge about the place of destination is somehow superficial and inexact. Intervening obstacles also have to be overcome before migration finally takes place. This include

distance and transportation or technological advances ,which however have lessened their importance in modern times.

Finally , the personal factors are of the utmost importance because instead of the actual factors associated with the place of origin and or destination, the individuals perception of these factors is found to influence the actual act of migration. This theory also examine the motivation for migration by considering how the relationship between origin and destination are affected by push and pull factors. Push factors exist at the point of origin and act to motivated out migration. On the other hand ,Pull factors are present at the destination which attract migrants.
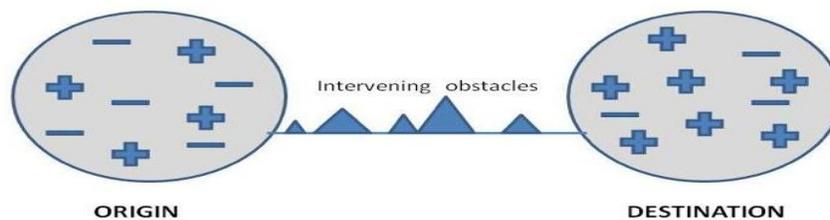
Figure 5: Lee's push – pull theory of migration.

According to figure 5 .migration flow between two places; origin and destination, depending also on the intervening obstacles. These are the distance between the two places. lack of transport facilities, inaccessibility because of the topography(rugged mountains and physical barriers),and restrictive immigration laws. The flow may not be strong in the presence of such intervening obstacles.

The number of migrants is directly proportional to the opportunities (the pull factors) available at the destination and inversely proportional to the intervening obstacles. The potential migrant may equally consider the intervening obstacles as intervening opportunities, that is ,the presence of other places between an origin and destination point. Therefore ,the volume of migration from one place to another is associated not only the distance between places and number of people in the two places.It is also associated with the number of opportunities and obstacles between each place.This assumption is related with the study area where people have been migrating from different areas for several economic,social and political reasons.Never the less not all persons migrate on their own decision such as children and wives who move with families.

0.8.4.6. Conclusion

The migration theories discussed in this chapter originated from a variety of disciplines. Different disciplines approach migration in different way. A major criticism applicable to most migration theories is that no single theory offers a complete explanation for all migration phenomena (Viljoen, 2005). The above migration theories ,Models and laws were considered as social, economic and other features of the migrants based on the western experiences. Regardless of this, the theories noted so far shall be used as a basic theoretical frame work for this research and they will be evaluated based on empirical observations whether or not the western model of migration is applicable for this research.

0.9. Research Methodology

The study focuses on the causes and impact of rural-urban migration in Noni Sub division. In order to address the stated objectives and research questions of the study, this chapter outlines sources of data, method of data acquisition and analysis.

0.9.1.Research Design

Research design is considered as the blue-print and cornerstone of any study since it facilitates various research operations. In this regard, **Kothari (2006)** argues that research design helps the researcher plan in advance of the methods to be adopted for collecting the relevant data and techniques to be used during .The nature and objectives of the problem to be studied and the means of obtaining information are the most important factors to be considered in order to choose the appropriate research design. Regarding the selection of the research design, Kothari (2006:33), and Brown and Dowling (1998:37) noted that, if the major emphasis of the study is on discovery of ideas and insights the appropriate research design is found to be exploratory (experimental) while if the purpose of the study is on the accurate description of a situation the appropriate research design is descriptive. According to Teshome (1998), using of both quantitative and qualitative methods at the same time is more advisable. Because quantitative data provides precise summaries and comparisons, while the qualitative data provided general elaborations, explanations, meanings and relatively new ideas. Taking all these into account, multiple approaches which combine both descriptive e and qualitative

methods are used for this study. These methods are believed to be more appropriate to investigate the topic under discussion - Impacts of rural exodus on rural development of Noni Sub-Division. Moreover, the qualitative approach is useful to look carefully for flaws and inadequacies that might be induced un-intentionally in this study.

0.9.2 Methods of Data Collection

Based on the research problem and objectives, both primary and secondary data sources were used. Multiple data collection strategy is more advantageous than data collection strategy in research work. As Teshome (1998) stated, there are strengths and weakness to any single data collection strategy and using more than one data collection approach give opportunity to the researcher to combine the strengths and correct some of the deficiencies of any one source of data. More specifically, the selected methods to collect the necessary data are questionnaire, focus group discussion, interview, personal observation and secondary sources.

❖ **Secondary sources**

The data gotten here was largely qualitative data and was gotten mostly through literature review. This involved the consultation and systematic exploration of textbooks, theses, dissertations, research reports, periodical journals, conference papers, published and unpublished documents on migrants' activities and related websites on migrants activities. Internet materials were downloaded in a flash disk and later exploited. These documents were exploited by analysing ideas of existing authors and research works on the topic and making some adjustments and amendments. These consultations were realised from libraries, research institutions and internet exploration.. Nkor Council Development Plan was also consulted to get some statistics on the evolution of these migrants in this Sub-division. Data gotten from the National Institute of Cartography (NIC) included shape files of Regions, Divisions and Sub divisions, shape files of some localities and roads. This data helped in the realisation of maps.

❖ **Primary Sources**

This involved data gotten through field work which was largely constituted of quantitative data. This data was gotten through visits to the study area during which council authorities, related offices and resource persons were contacted. From these visits, information was collected by

direct field observation, administration of questionnaires and granting of interviews to resource persons.

❖ **Interviews**

Interviews were used to capture data that could not be gathered by way of direct observation and or questionnaires. This involve information with a technical, and a professional background that could be provided only by specialized institutions or organizations. It also involve data whose quality reposes more on prolonged experience and observation of facts and phenomena on the spot and could be provided only by some elements of the elderly class in the various localities of Noni Sub-Division. Interviews were conducted with the traditional authorities of Noni, Nkor Council, the Noni Elite group, the local population and the Missions(ie Baptist ,Catholics and the Presbyterian). The interviews were conducted in grammar and Pidgin English depending on the stakeholder. Each interview lasted for 20 to 30minutes beginning with self-introduction, description of the research process and the process equally gave room for suggestions at the end of the events. A tape recorder was used to record the interviews in order to save time and to capture every bit of information that was given by the interviewee.

❖ **Administration of Questionnaires**

To complement the data through other instruments and to collect primary data on individual house hold heads, the questionnaire which includes open-ended and closed ended types and that consisted of five main sections has been prepared .The first part was Demographic characteristics of migrants at present that helps to secure information about the personal profile of the respondents including their age, sex, marital status, and educational attainment. The Second part on information on nature and evolution to test hypothesis One on the nature of migration in Noni Sub Division. The third part deals with the causes of rural exodus which test hypothesis Two. The fourth part is on the impacts of rural exodus on rural development to test hypothesis Three and the fifth part is based on the existing strategies to test hypothesis Four and lastly other information on spatial mobility and activities .The researcher developed the interest of pursuing questionnaires guide as instrument of this study while reviewing the research literatures on rural urban migration. The development of questionnaires, an interview and group discussion guide is also useful to triangulate the

responses of sample migrants. The interview guide that was set for migrants was directly linked to some of the items set in the questionnaires. The researcher considered responses obtained from migrants on the same item through questionnaire, interview and group discussion guide to reveal consistency of responses. This triangulation of responses helped the researcher to avoid the threat of bias that might be induced unintentionally .In order to achieve the stated objective, the items of the questionnaire are developed using simple and clear words that were appropriate and helped migrants to respond to the questions with understanding. The questionnaire was prepared in English

Table 1: Distribution of households sampled in Villages.

Village	Sample household	0.04% sample Scale	Percentage (%)	Effective respondents	Percentage of effective respondent
Nkor	1315	52	14.36	45	86.5
Din	4823	192	53.03	125	65.10
Djottin	1468	58	16.02	51	87.93
Dom	119	5	1.40	4	80
Lassin	657	26	7.18	19	73.07
Mbinon	728	29	8.01	26	89.65
Totals	**9110**	**362**	**100**	**270**	

Source : Field work (2021)

❖ **Focus Group Discussion**

In addition to questionnaires, focus group discussion was also conducted to substantiate the responses acquired using questionnaires. The group discussion was conducted with migrants in the village and town such as young, adult, elderly people of both sex and others who have expected to have accumulated knowledge about the causes and consequences and impacts of rural exodus in the study area. Focus discussion was limited to Nkor, Lassin and Din Djottin the villages with the highest population and located at sub divisional boundaries The group size was limited to five participants per group as recommended by Flick (2009). Focused group discussion lasted for half an hour. Data was recorded also through an auditory recording device in order to save time and to capture every bit of information that was given by the interviewee.

0.9.3. Sample methods.

The sample method use in this study is known as random sampling. In this method, individuals are picked randomly from the total population. The selection of the method was done using the household approach. from 9110 household sample following BUCREP population census. To have the best household proportion, a 0.04% sample size of the total number of household per village was more convenient with the regard to the view of NWANA(1982) which stipulate that;

- If the population of the study area is in hundreds, a 40% sample should be used
- If the population is in many hundreds a 20% is used
- If in a few thousands ,a 10% is used and if in several thousands a 5% is chosen

Therefore .with a total household of 9110,using the 0.04% size enabled us to sample a total of 362 households.

0.9.4. Sampling Technique.

Given the difficulty encountered in working with every household head and the time allocated for this research, it made it necessary to reduce the households using the random sampling technique. To better appraise the situation, the researcher ensured the even distribution of questionnaires according to the various villages by using the 0.04% scale. This scale was implemented in the 6 villages sampled and the sample size for the distribution was selected using the formula below;

$$\frac{X \ * \ sample\ scale\ or\ size}{100} = \sim$$

Where X = Household number

Sample scale =40%

* = multiplication sign

~ = round up figure.

The samples were chosen randomly while considering the nature of the area. This facilitated the administration of questionnaires and eventually enhanced data processing and analysis.

0.9.5. Data Processing and Analysis

For us to be able to appreciate ,criticize, adjust, or reject unjustified hypotheses guiding this work, it was necessary to process and analyzed the data collected for this study.   Haven defined the methodology and data justification, the data was processed. This process was divided into different stages. It started with the exploitation of topographic maps of the area, satellite images visualization, interpretation, processing and digitalization to extract the different land use elements. The GPS data collected on the field was also downloaded, processed and integrated on data extracted from the satellite images to have an update of the land use activities of the Noni Sub Division Photos taken with digital cameras were equally integrated to have a view of ground truth. Data collected from questionnaires and other sources were treated using Microsoft Excel, Excel spreadsheet, Microsoft word. To present the research findings, the T-Test statistics was used to test hypotheses as well as other tools as showed on table 2

Table 2: Research tools, their functions and results

Tools	Purpose	Output
Questionnaires and research guide	Field investigation	Primary data
Thesis ,dissertation, texts books and the internet	Literature review	Secondary data
Microsoft Excel Software	Statistical data treatment	Tables and graphs
Camera	Direct observation	Pictures intergrated in the work.
Arc GIS / Erdas imagine	Geo-referencing and mapping	Maps
USB key and printer	Data storage and printing	Data printed
Pen,pencil,and bloc note	Note down of information.	Data collected
T-Test statistics	Test Hypothesis	Research findings

Source : Field work 2021
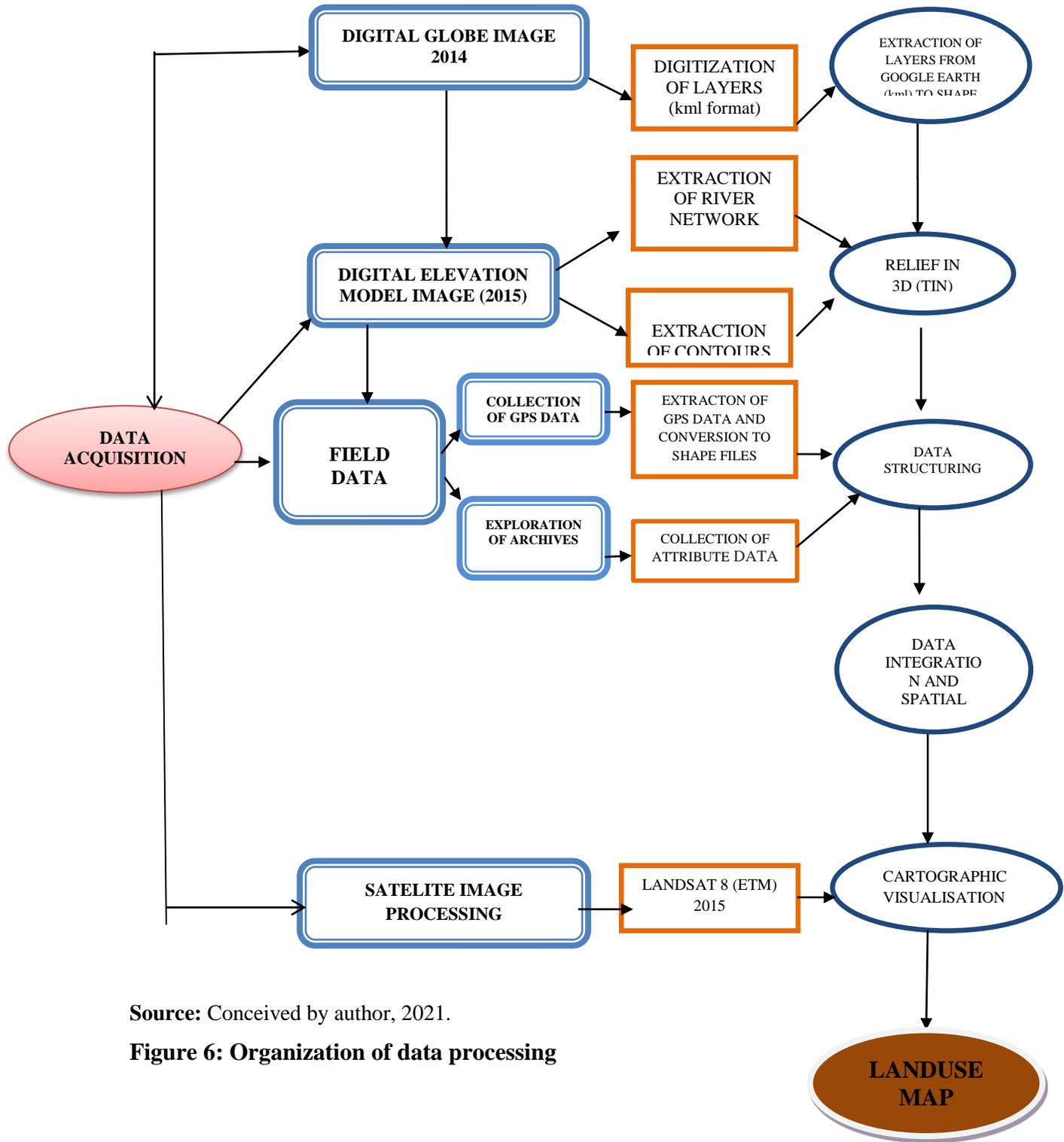
Source: Conceived by author, 2021.

Figure 6: Organization of data processing

The principal software used in treatment of satellite images were ERDAS IMAGINE 2014 specialized in the processing of remotely sensed imagery and ARCGIS 10.2.1 a Geographic Information System platform that enhances the layout quality of images treated by ERDAS. The images were each clipped to correspond to their areas of interest. This was followed by a supervised and an unsupervised classification see figure 6. Unsupervised classification was carried out for spectral discrimination whereby cluster zones were created from the statistical properties of image pixels. Pixels with similar statistical properties in multivariate space were grouped to form clusters. Four groups of clusters were created from each Land sat image. This was followed by field work to verify the characteristics of the features with respect to ground truth. Based on the characteristics of these features, a supervised classification was carried out using a false colour composition of the images into four classes of interest in terms of land cover and land use variability. This was done by selecting training sites with respect to different land use elements. The results of classification were later exported to ArcGIS 10.2.1, where the different land use elements were converted to shape files and grouped into their categories. This was followed by the calculation of surface areas of these land uses to produce the map.

Research questions	Research objectives	Research hypothesis	Research methodology	Corresponding chapters
What is the nature of rural exodus in Noni Sub Division	To investigate the nature of Rural exodus in Noni Sub Division	The males are the most migratory age group in Noni Sub Division	Questionnaires, Interviews	Chapter One
What are the causes of rural exodus in Noni Sub Division	To investigate the causes of Rural exodus in Noni Sub Division	The human causes are responsible for rural exodus in Noni Sub Division	Questionnaires, Interviews	Chapter Two
What are the impact of rural exodus in Noni Sub Division	To determine the negative impacts of rural exodus on rural development.	Rural exodus has slowed down development in Noni Sub Division.	Questionnaires, Interviews, Photographs	Chapter Three
What are the strategies put in place to reduce this situation.	To evaluate the various strategies put in place to curb rural exodus in Noni.	The Nkor council has played a greater role in reducing rural exodus in Noni.	Questionnaires, Interviews	Chapter Four
How can the application of G I S and Cartography assist as a decision making tool to reduce rural exodus in Noni.	To evaluate the role of GIS &Cartography as a decision making tool in reducing rural exodus in Noni.	Application of GIS & Cartography can help reduce rural exodus through enhancing council revenue in Noni.	Questionnaires, Interviews GPS Points	Chapter Five

Figure 7: Synthetic matrix of the study

Source: Field work 2021,

0.9.6. Dissertation Layout

The dissertation will consist of 5 chapters ,structured as follows

Chapter One: The Picture of rural exodus in Noni Sub-division. This chapter gives the historical and the physical background of the study area. The population of the different villages ,migration flows and the characteristics of migrants from Noni sub-division.

Chapter Two: Causes of rural exodus in Noni Sub Division. This chapter examines the various causes of rural exodus in Noni ranging from the push and pull factors. This factors are examined under ,physical , social , economic and political causes.

Chapter Three: Impact(negative) of rural exodus on rural development in Noni. This chapter begin by examining some positive impacts of rural exodus on the development of the Noni Sub Division. Then it further examine to a greater extend the negative impacts which is the key or main focus of this piece of work. The negative impacts are examined under three sub headings ,that is, On agriculture ,socio-economic development and on the culture of Noni.

Chapter Four: Evaluation of existing strategies and use of GIS and Cartography as a potential decision making tool to curb rural exodus. This chapter examines the role of the different stake holders such as the Missions, VDA, Elites NGOs and the local council in trying to curb rural exodus in Noni.

Chapter Five : The role of GIS and Cartography as a potential decision making tool to enhance council revenue.

The general conclusion focuses on the verification of hypothesis, summaries of findings and suggestions or recommendations and finally references.

CHAPTER ONE :

THE PICTURE OF RURAL EXODUS IN NONI SUB-DIVISION

1.1 Nature of Rural exodus.

The nature of rural exodus in the Noni Sub-division will be examined in terms of the evolution of out migration from Noni Sub-division, Age –sex structure and marital status of these migrants.

1.1.1. Spatial distribution of population in Noni Sub-Division

The estimated surface area of Nkor Council is 325.7 Sq.km. The population of this Council area in 1987 stood at about 17,700 inhabitants. During the surveys the population obtain from all the communities summed up to approximately 63487 inhabitants see Table 3.2 below. This population is predominantly of the Noni ethnic group, sparsely settled across the Council area under ten (10) traditional Fondoms, with six (6) principal concentration zones along the Noni Ring Road at Mbinon, Lassin, Nkor, Dom, Din and Djottin. In addition to the indigenous Noni population, there is a growing trend for settler populations in the Council Area: a significant Fulani population, grouped into some eight (8) ardorates, is scattered across the entire council area, while a small colony of Nso extraction migrated from the neighbouring Kumbo subdivision and settled in Dom around Banten and Fofueng, and in some areas of Djottin around Buh, Mbiim, and Kerri (commonly referred to as Djottin-Nso).The spatial distribution of population in Noni Sub Division can be seen on the table 3.

Table 3: Population distribution in Noni Sub Division 2011.

ID	Village	Population 2011		ID	Village	Population 2011
1	Asha-Nkor	3151		24	Gofung-Din	775
	Awi-Nkor	1015		25	Jeng-Lassin	708
3	Bamti-Din	4800		26	Kibavuke-Nkor	475
4	Bandiv-Djottin	1661		27	Kicha-Nkor	249
5	Bunti	1286		28	Kinengti-Djottin	538
6	Bvugoi-Dom	698		29	Kochi-Nkor	1547
7	Chamkfung-Djottin	2850		30	Lafele-Djottin	860
8	Chaw-Dom	650		31	Mbam-Dom	230
9	Diwile-Din	819		32	Mee-Nkor	2100
10	Ebanya-Mbinon	708		33	Meyessi-Djottin	350
11	Ebwuewe-Lassin	3000		34	Muntale-Nkor	303
12	Egow-Djottin	387		35	Nchini-Mbinon	3586
13	Ejungu-Lassin	1400		36	Ngaa-Lassin	1864
14	Enjong-Mbinon	526		37	Ngai-Din	2000
15	Enkowe-Nkor	700		38	Nganganghe-Din	285
16	Entanghe-Lassin	380		39	Ngeptang-Din	2929
17	Nkali-Din	2300		40	Nkali-Din	5407
18	Etakum-Nkor	510		41	Nyalin-Nkor	2017
19	Fibweh-Din	1357		42	Nsusiy-Dom	150
20	Fonti-Djottin	725		43	Ntfum-Mbinon	3000
21	Gaggi-Djottin	1615		44	Ntoh-Lassin	708
22	Gbenbvule-Nkor	585		45	Vun-Din	738
23	Gii-Mbinon	1545				

Source: Nkor Council Communities Field Surveys.

The table above shows the different quarters and their population within the major villages of Noni. There are 45 quarters within Noni Sub Division with an estimated total population of 63687 inhabitants.
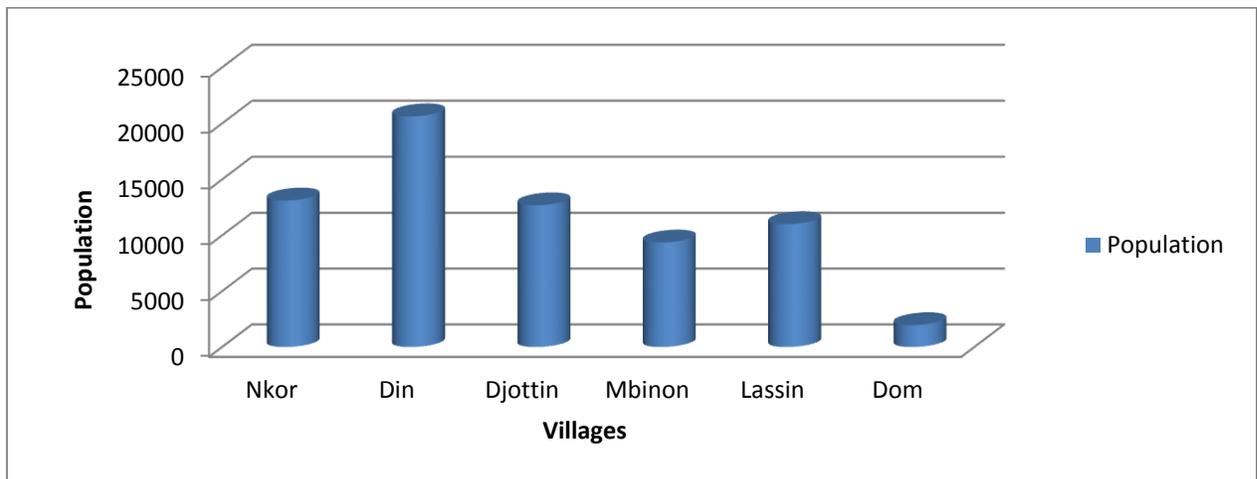
Figure 8: Population distribution of Noni.

Source: Derived from table 5.

Figure 8, clearly shows the distribution of population within the six villages of Noni Sub Division. From the bar gragh, Din record the highest population, followed by Nkor and Djottin, Lassin, Mbinon and Dom respectively. Dom which record the smallest population is the smallest both in terms of size and population. The spatial distribution of population in Noni Sub Division is presented on figure 9.
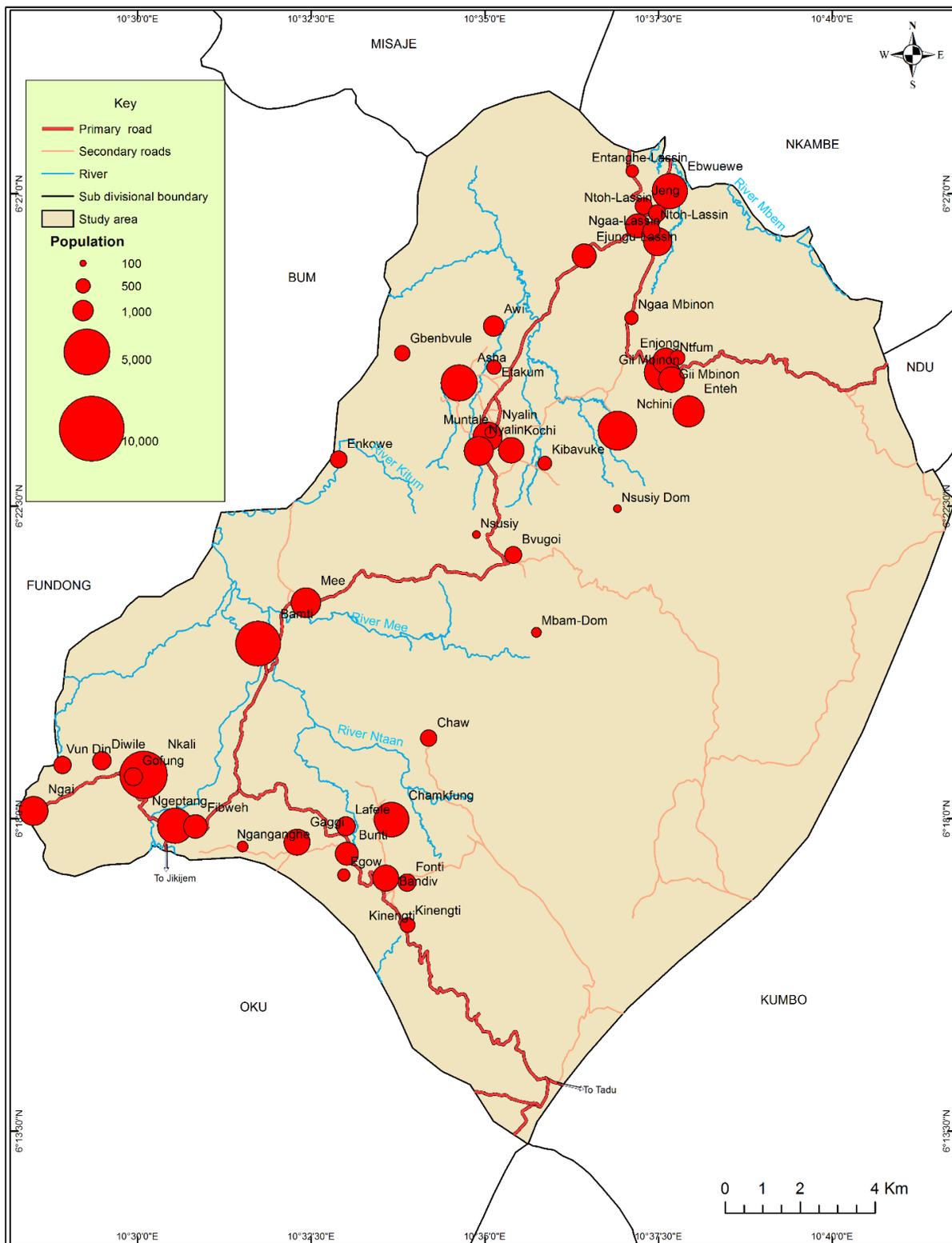
Figure 9: Population Distribution in Noni Sub Division (2020).

Source: Natioanl Institute of Cartography and Field work 2020.

1.2.   Characteristics Of Migrants From Noni Sub Division.

1.2.1.   Age and Sex Structure of Migrants

Among the demographic characteristics, age and sex compositions are the one which have influence on migration process. As far as age is concerned, the result of this study, shows that most migrants are young adults aged 15-39. Migration in Noni Sub Division is not only age selective, it is also sex selective. The result of this survey shows age and sex selective nature of migration. Most surveyed migrants were found between ages of 15 and 29 years. Out of the total surveyed migrant population from Noni Sub-Division 58.3 percent were between the age 15 and 29. 25percent were 30-45years .12.5 percent were 45-64years and lastly 4.2percent represented the age above 64 years. .Hence, migration from Noni is age selective. They are people of young age who migrated to town. This may be explained by the fact that young people decide to move as they characteristically get easily bitten by the rising ambition; they who get more restless about the deteriorating socio economic situation in Noni Sub Division and also about searching out newer environment and better chance of life; by their age; they also enjoy the capacity to learn new trends, acquire new skills, change jobs, get education and work harder to achieve their goals in the newer environment and enjoy life. Moreover, the young age group migrated because they have more access to information than the other age group of population. This young age groups are less satisfied with the rural agricultural system and are more ambitious to test urban life.
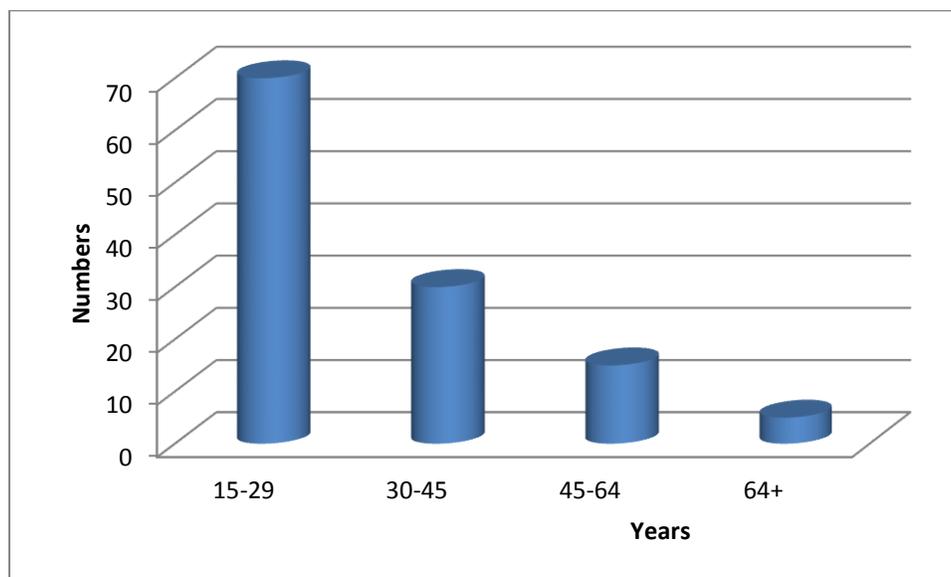
Figure 10: Age composition of migrants in Noni.

Source : Field work 2021.

Furthermore, the males from Noni Sub Division are more migratory than the females. The survey showed that the dominant male migratory groups are between the age of 20-24 and 25-29; however, the corresponding dominant age groups for female migrants are between 20-24. Therefore, from the data collected, one can understand that rural exodus in Noni is age and sex selective. That is, young people and males are the dominant migrant groups to town.

1.2.2. Marital Status.

Marital status is another important characteristic influencing the propensity to migrate. Migration propensities change with marital status. That is, the matter of being married, unmarried (single), divorced and widowed has an effect on the decision to migrate. Single persons generally have less responsibility than married ones. As such, in Noni Sub Division, the propensity to migrate is highest among the singles than married people. Similarly, the response given by the respondents strengthen this idea. As shown in figure 13, the majority of migrants which accounts for 82 percent of surveyed total population were either single, divorced, or widowed at the time of migrating out of Noni Sub Division.
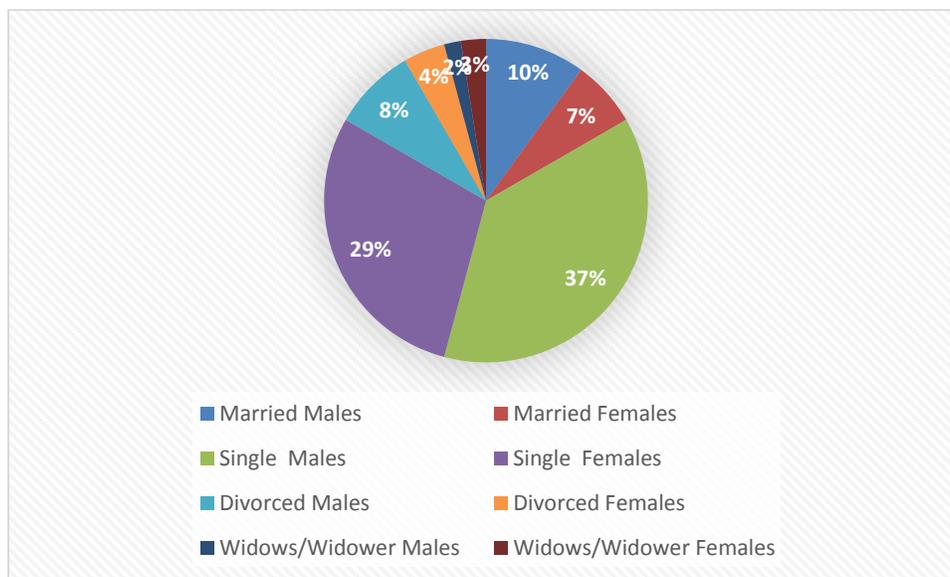
Figure 11: Variation in marital status of migrant in Noni.

Source : Field work survey 2021..

Figure 11 shows that about 66 percent of the surveyed migrants out of Noni were single,17 percent married.12 percent divorced and 5 percent represent widows and widowers. Out of the

single migrants, 56.30% were male while 47.70 % represent the female sex group. It was equally found that, out of the married proportion 60 percent were males and 40percent females. This shows that less married females migrate out of Noni Sub-Division as compared to the males. This can be justified by the fact that the males are the bread winners of most homes and so will move out for better opportunities to enable them take proper care of their families.

1.2.3. Educational Characteristics

Education is one of the significant characteristics inducing rural-urban migration. The decision to migrate is also more likely influenced by educational attainment . This means that those who are better educated are relatively more involved in different migration streams than those who are not. Those who have completed secondary education and higher are more migratory than those who have completed primary education. This is mainly because of the fact that educational attainment increases the chance to get employment and other opportunities. Strong association between the propensity to migrate and level of education is observed within the context of Noni. However, an increase in the migration of illiterate persons to the urban informal sectors of the major towns in Cameroon and other developing regions may reduce the generality of education as a factor of selection The survey result of this research also shows that the propensity to migrate is directly related to educational attainment. As illustrated in figure 12, majority of the respondents (about 75 percent) had primary and above educational level when they migrated to towns.
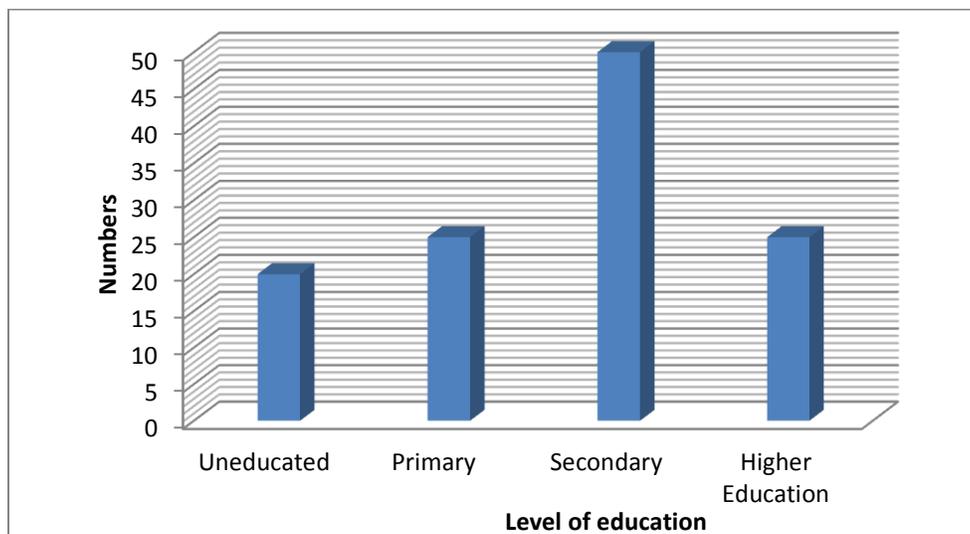
Figure 12: Educational status of migrants from Noni.

Source : Field survey 2021..

1.2.4 Occupational Status

One of the determinant factors for the decision to migrate is occupational status of migrants they had before migration. That means pre- migration occupation plays an important role for the decision to migrate. Thus, in Noni Sub Division many people for example farmers as a result of crop failure as well as the need for other better opportunities, and students as a result of limited number of educational institutions in rural areas and lack of employment opportunities for the others ,need to move to urban areas. The occupational status of most rural migrants from Noni Sub Division include Pensioners ,unemployed, students, and the employed.

Table 4: The occupational status of most rural migrants from Noni Sub Division

	Pensioners	**Unemployed**	**Students**	**Employed**
Number	15	35	65	05
Percentage	12.5	29.16	54.16	4.16

Table 4 shows that a maturity of the migrants (about 54.16%) is made up of students who wish to pursue higher education in urban areas. This is followed by the unemployed who constitute 29.16 % of the total surveyed population, with 12.5% of those following their pension and lastly by those employed who are looking for better job opportunities. The above data is presented on the bar chart or figure 13.
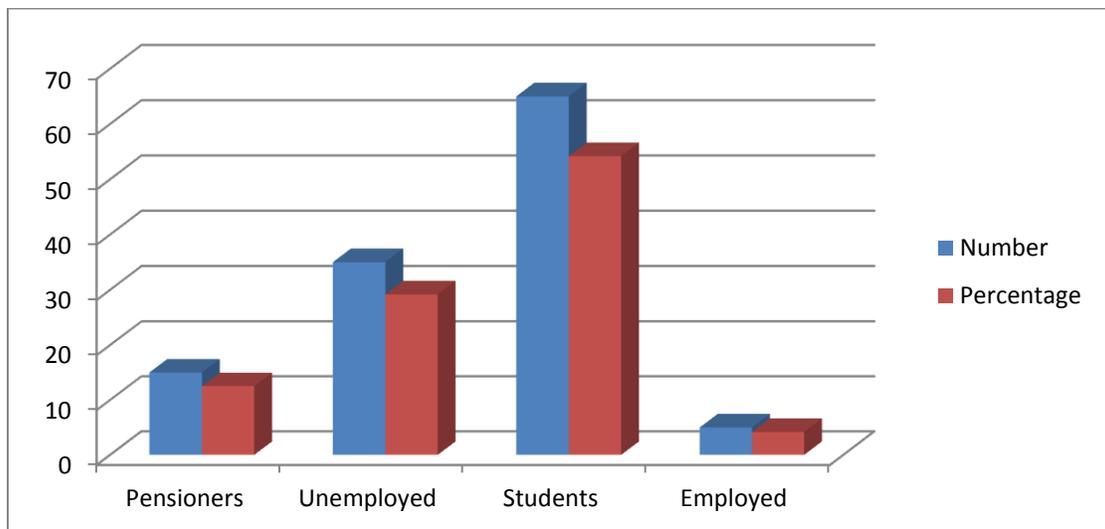
Figure 13: Occupational Status of migrants before Migration

Source: Field Survey, 2021

Figure 13 shows the occupational status of migrants before migration. The highest number of migrants as observed in figure 15 are students seeking to improve their level of education. This is closely followed by those seeking jobs. pensioners and then the few employed persons. The massive movement of persons for educational purpose can be justify by the absence of higher institutions of learning within Noni Sub Division and limited number of secondary and high schools in Noni Sub Division.

1.2.5. Migrant activities.

As a result of the push and pull factors of migration, many people find themselves away from their area of departure. While at the destination, they are involved in various activities to enable them earn a living.

The migrants from Noni are spread over the national territory. The different activities involved in by these migrants include; commercial activities like bike riding, taxi driving, trade. Bike riding is mostly carried out by the males migrants. Some of the migrants serve as house helps security guards, farming and others involve in studies. Thes migrant from Noni are mostly concentrated in urban areas like Yaounde, Douala, Bafoussam, Bamenda, Buea, Maroua and Ngaoundere.The in formation on migrant activities can be seen on figure 14.
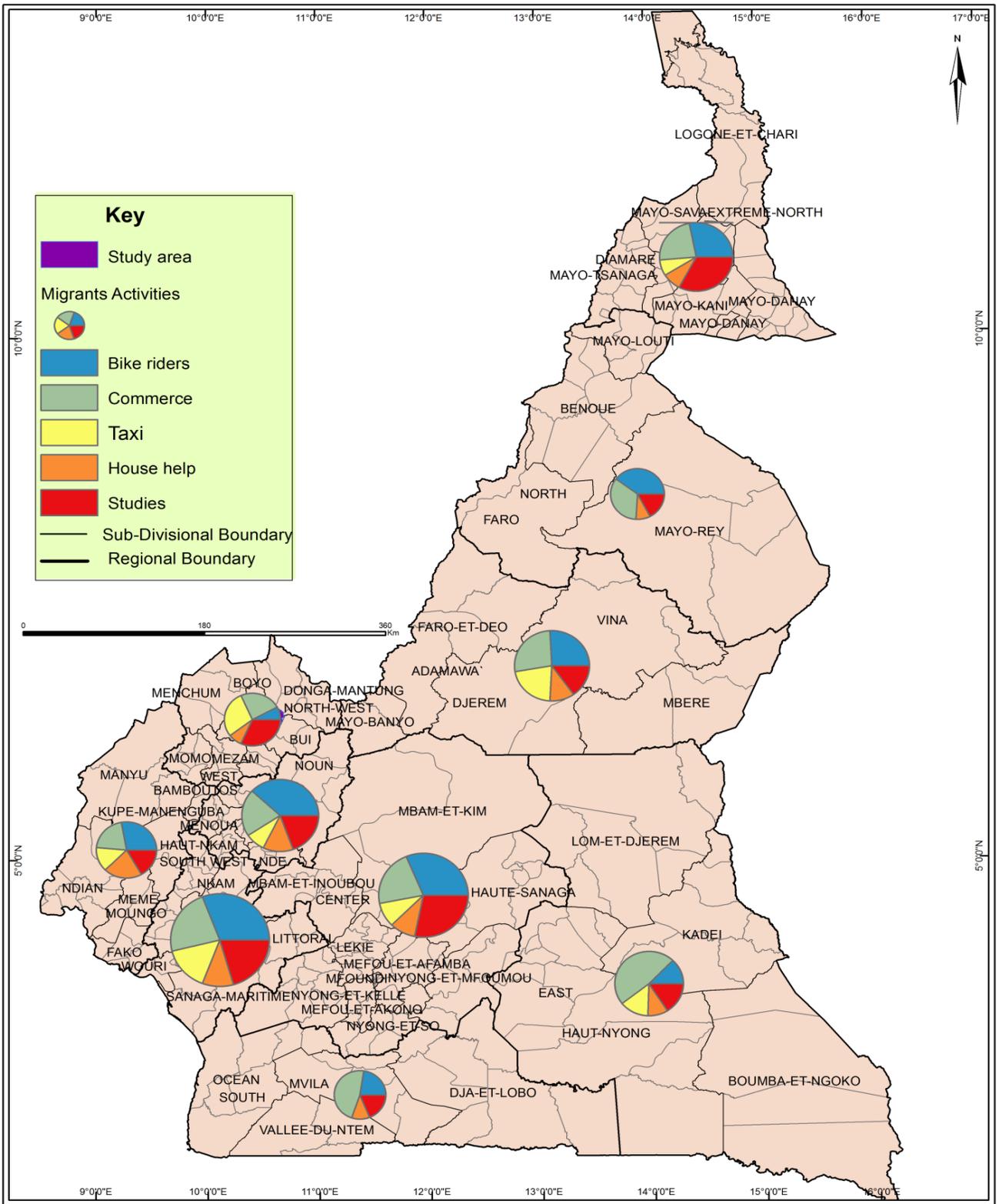
Figure 14: Migrant activities within the major towns of Cameroon.

Source NIC and field survey 2021

Figure 14 shows the activities carried out by migrants from Noni Sub Division within their different areas of destinations. Some of these activities include bike riding , taxi, commerce house help, and education purpose. The majority of migrants are concentrated in the centre region, Littoral and the west region.

1.3.   Analysis of Flow Destinations

The evolution of Rural Exodus will be examined in four sections ie Between 1980 t0 1990, 1990 to 2000, 2000 to 2010 and lastly 2010 to 2020.There has been a great variation in the volumes of out migration from Noni Sub Division. This has been accounted for by a good number of reasons amongst which are political, social and Economic.

1.3.1. Evolution of migrant from 1980 to 1990.

The migration trends out of Noni Sub Division within the 1980 and 1990,was characterised by mostly students who went out for secondary education .This is because between this periods (1980 to 1990),there was no secondary school in Noni Sub Division. Few were those who went for higher education studies out of the regions. This movement were over short distances especially to neighbouring towns like Kumbo, Nkambe, Ndu and Oku.Amongst these four major areas of destinations,the greater volumes travelled to the towns of Kumbo Ndu to attend secondary schools like the prestigious Joseph Merick Baptist College in Ndu.

Apart from educational reasons ,some people travel out of the region to the coastal areas to work in the plantations like CDC SOCAPALM and HEVECAM. Some of these movements were stimulated by the stories of the coast with good social amenities like electricity.The volume of movement within these periods was low due to poor transport network leading to high transportation cost.

 Another direction of movement within this period was tilted toward Nigeria .This was for commercial purposes specifically trading in colanut in the town of Yola in Nigeria. Others equally went down to buy drugs.

Figure 15: Estimation of migration flow in Noni between 1980 and 1990.

Source: NIC and digital globe image 2014.

1.3.2. Evolution of migration from 1990 to 2000.

Between the 1990 to 2000, the number of people who moved out of Noni Sub-Division for educational reasons slightly dropped. There was a kind of Rural–Rural migration as the first Government secondary school was created in Nkor Noni in 1991.Many students from Noni migrated to Nkor for their secondary education. Few who had to attend high school were still obliged to move out of Noni as can be seen in figure 16.

Away from education ,there were equally other reasons why people moved out of the Noni Sub division like family ties, whereby people were moving out to visit their love ones living in urban areas. Equally stories from the coast also caused some people to go and experience the urban life style. Within this period too many people were already aware of modern life style would desire to have a test of it. All these movements were facilitated by the improvement in transport infrastructures especially roads. The movement toward Nigeria was gradually reducing due to the discovery of other forms of trade and the drop in the production of cola nuts which consisted the main trading item.
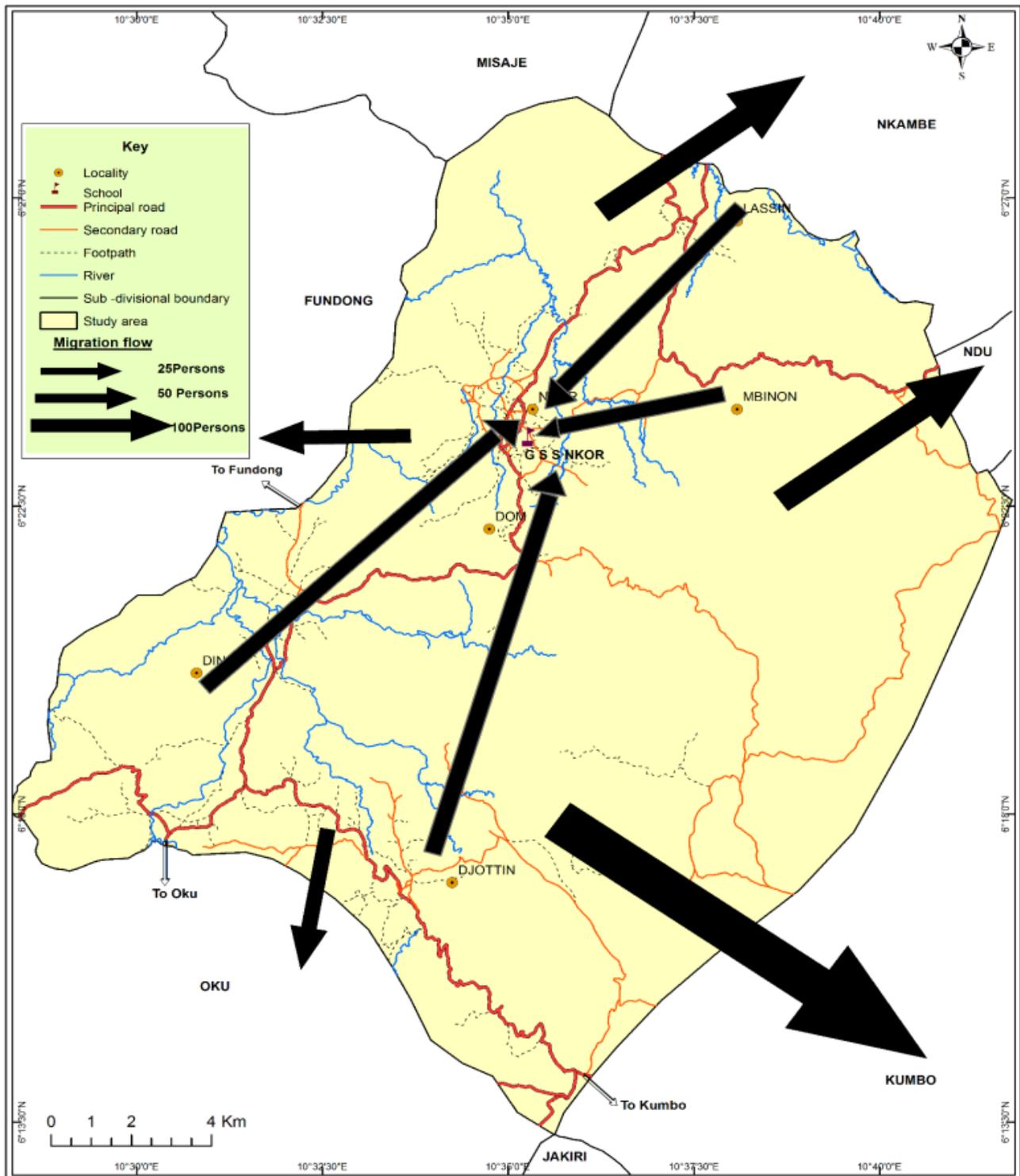
Figure 16: Evolution of migration movement between 1990 and 2000 within the Noni Sub Division.

Source: NIC and field work.2021.

1.3.2. Evolution of migration from 2000 to 2010.

Between 2000 to 2010, out migration was more, with many people travelling to nearby urban areas like Bamenda ,Bafoussam and to a lesser extend to towns like Yaoundé ,Douala Buea Limbe etc. These movements were facilitated by slight improvement in roads network. Most of these movements were voluntary as many desired a better standard of living , access to higher education they could not find in Noni Sub-division, family ties etc .The influence of distance on the volume could easily be witnessed as many people ended up in Bamenda and Bafoussam.

1.3.3. Evolution of migration from 2010 to 2021.

Between 2010 to 2020, there was a remarkable increase in the rural exodus within Noni Sub-division. From 2010 to 2015, the movement was more of voluntary than involuntary. Movement was more, over short distances and fewer over longer distances. The reasons for these movement vary greatly from those responsible for movements within the period of crisis ie 2015 to 2021.

1.3.4. Migration in periods of crisis.(2016 t0 2021)

But between 2016 and 2020, with the outbreak of socio political crisis in the two English speaking regions of Cameroon, the movement became more of involuntary with people travelling over longer distances as compared to 2010.Within these periods the major receiving towns were Yaoundé in the centre region , Bafoussam in the west region, Douala and Nkongsamba in the Littoral region, Buea, Limbe town in the south west region, that seem stable. Within these periods, the number of registered Internally Displaced People (IDPs) from noni stood at approximately 243 for Yaounde in the centre, 3400 for Bafoussam in the west , over 2500 people in Douala in the littoral, over 450 persons in Bamenda town, and 250 in Buea town. A majority of those who moved to the centre region concentrated more within the Mfoundi Division especially in Yaounde town.The reason being that a majority of those who migrated were youth that have abandon schools and seeking refuge to study. Some are teachers and business men who stay around the town were their activities can be facilited. Few of those who move to areas like Ntui, Mengang Mbanjock and Bafias are mainly for farming activities.

In the littoral region, most of these Internally Displaced Persons are more concentrated in the town of Douala where they exist more opportunities to study,teach and equally do business. These migrants are equally settled in the mungo,HEVECAM in kribi and Nkongsamba for

agricultural reasons and equally as a result of low cost of life in this areas .Some equally visit these areas on the request of family members.

In the west region settled in hot spot areas like Mbounda ,Bagante and Babadju.This can be represented on figure 17.
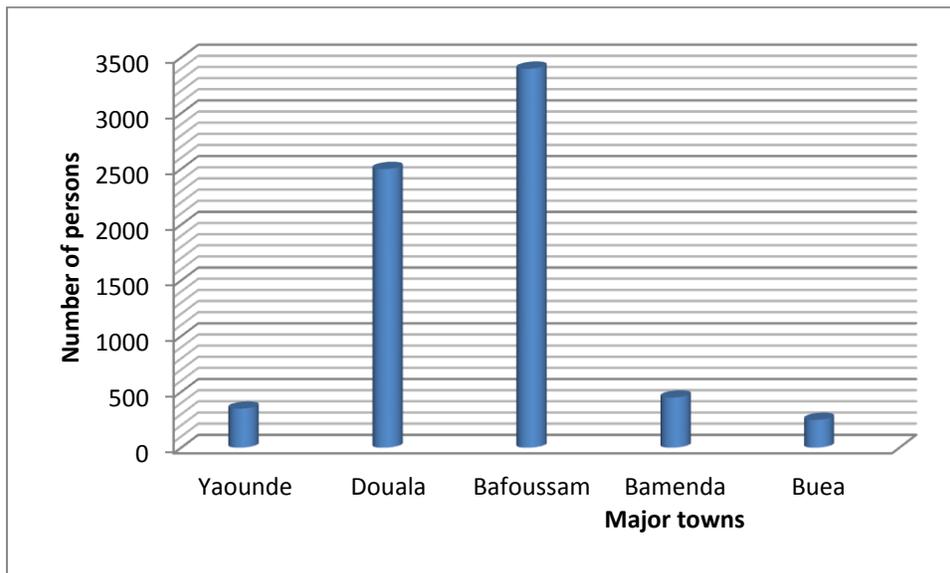
Figure 17: Variation of IDPs within some major towns of Cameroon.

Source: Field work 2021.

From the figure 17, the west region receives the greater number of internally displaced (IDPs) persons followed by the littoral region, Northwest ,South west and then the centre region. The distance factor and the intervening opportunities play a very important rule in this case. Most people move over short distances due to limited financial ability and others are caught on the way by some opportunities which can occupy them and satisfy their basic needs. Most of those who travel over long distances are those whose incomes can sustained them and family ties. The information on the number of IDPs in some major towns of Cameroon can be represented on figure 18.
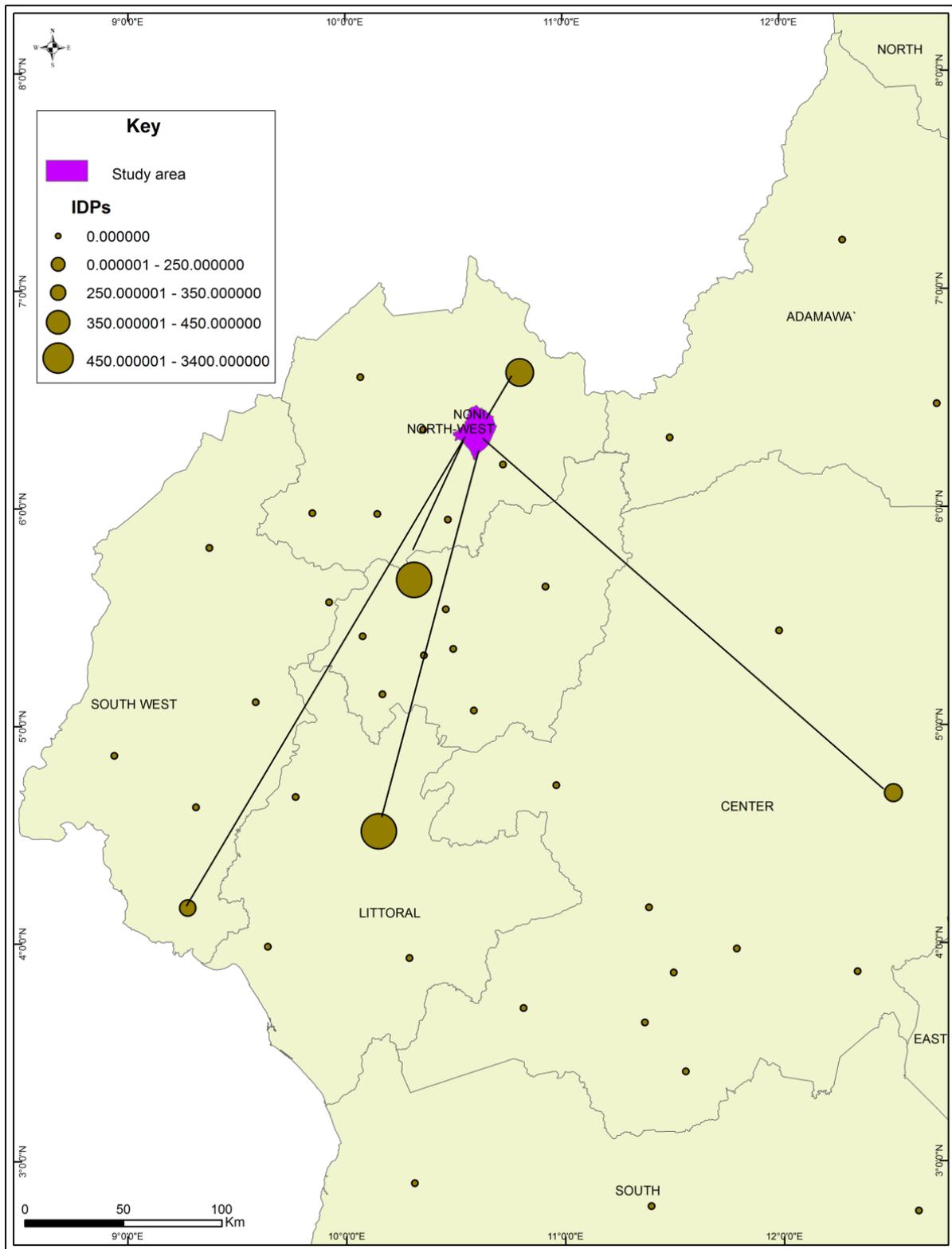
Figure 18: Migration flow in crisis periods (2016 t0 2021)in Noni.

Source: NIC and field work 2021.

Figure18 shows movements from Noni Sub Division during crisis periods. The figure shows some major destinations of these Internally Displaced Persons (IDPs) which include the Centre region, West region, Southwest region, North West region and the Littoral region.

Table 5: Evolution of migration between 1980 and 2021.

	1980-1990	1990-2000	2000-2010	2010-2021
Low	30	28	03	02
High	05	08	09	03
Very High	03	02	26	33

Source: questionnaire respondent.

From the table 5 between 1980 to 1990,the movement of people out of Noni Sub Division was very small. The few who migrated were mainly for educational purposes and to visit the urban centres in search of jobs especially in the plantations. From 1990 the trend was still same though with little increase. With the improvement in infrastructural development like roads and increase population, with greater need for higher education ,the numbers increased. Between the periods of 2015 to 2021,the has been a rapid increase in the number of people leaving Noni Sub Division, mainly as a result of the political motivated crisis plaguing the English speaking regions of Cameroon. This can be seen on Figure 19.
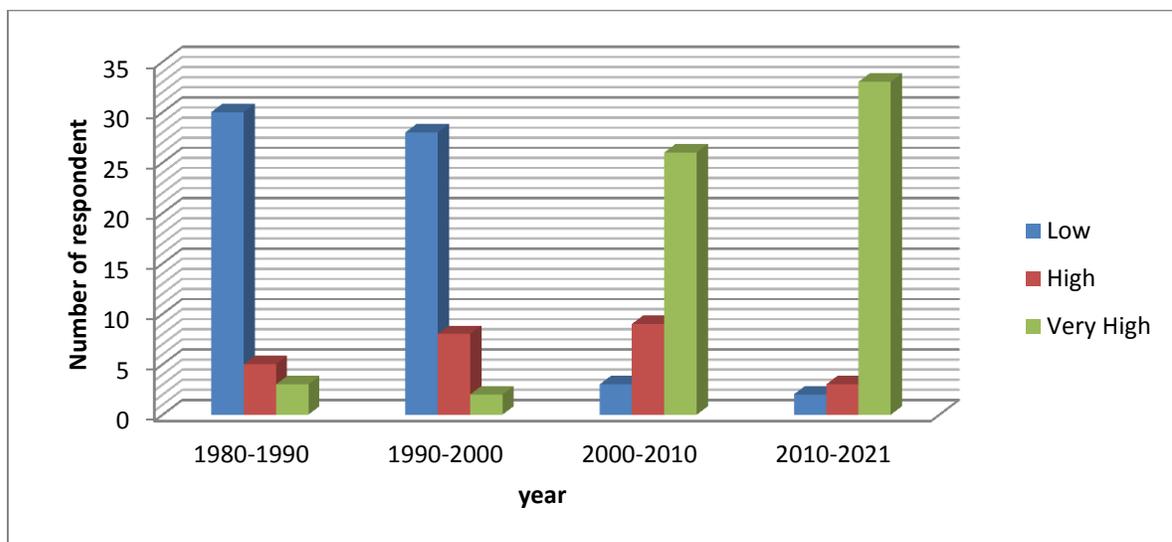
Figure 19: Evolution of migrants from 1980 to 2021 in Noni.
Source: Derived from table 5..

Figure 19. measures the evolution of migrants from the Noni Sub Division from 1980 to 2021.This study on evolution was examine in four intervals of 10years.It shows that the movement of people from the Noni was low between 1980,1990 to 2000.After 2000 the number of people moving out increase drastically. This could be explained by the improvement in infrastructure and the level of scholarisation within and out of the Noni Sub Division.

CHAPTER TWO
CAUSES OF RURAL EXODUS IN THE NONI SUB DIVISION

2.0. Introduction

The causes of rural exodus are those things that can cause some one to move out of the rural area either voluntarily or at will. The causes of Rural Exodus in Noni sub Division will be examined under the social reasons, economic reasons, natural or physical reasons, political reasons and cultural reasons.

2.1. Physical causes.

The physical or natural causes here include the nature of topography and insecurity from infertile soils types.

2.1.1.0. Rugged Topography

The Nkor municipality stands out as an area of irregular relief characterised by a configuration of highlands and lowlands. Plains, deeply grooved valleys and rolling hills, which give a distinctive relief feature to the area, interrupt the highlands. There are areas as high as 3 011meters around the Nyuiy hill in Dom village, and as low as 1050meters above sea level around the Bamti and Mee stretch of road, which lowlands are suitable for maize cultivation. The rugged and mountainous range of the Nyuiy hill that stretches right to the Kilum and Ijim Mountain ranges, almost completely circumscribe Noni Sub division, opening the circumcircle a bit only to the north towards the Lassin end of the Nkor council area. This irregular relief have greatly affected agriculture in the Noni Sub Division. Despite the importance of agriculture to the economy of the area many farmers still carry out subsistence farming. Mix cropping is very common here as farmers seek to maximize land use. Farm sizes are generally small and 37% of the population farm less than 3 hectares. The farms are usually made up of two to three small plots located in different places and this led to low production and productivity. Cash crop production is limited to Arabica coffee, with the beans produced of low quality, resulting in very low prices. This can partly be explained by the limited flat land suitable for cash crop farms. The rough topography equally makes construction of farm to market roads very difficult leading to low farmers income. All these makes the young and energetic youth to have no option than living for the urban area for greener pastures.This can be seen on figure 20.
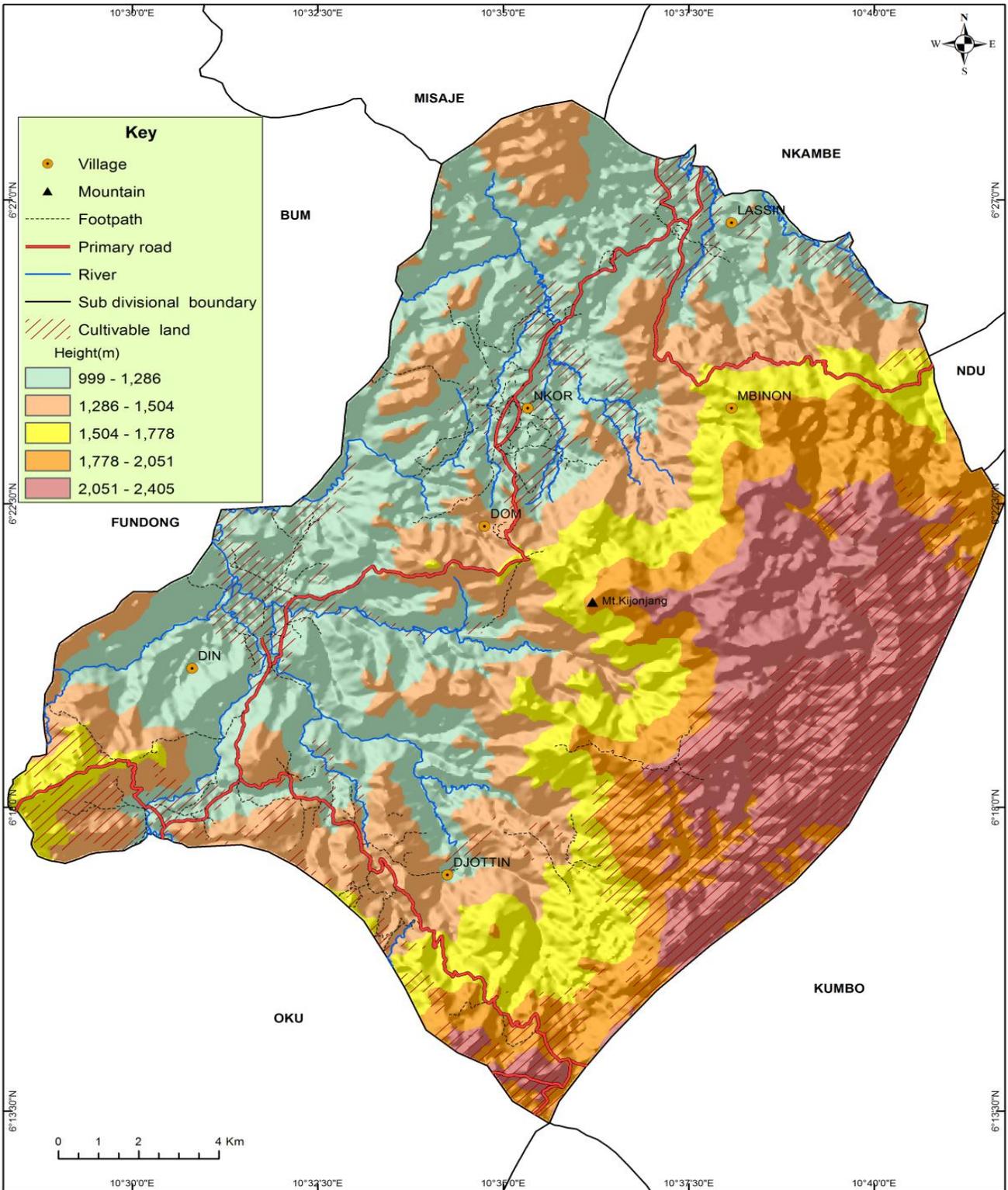
Figure 20: Relief map of Noni Sub Division.

Source: NIC, Aster dem 2011,digital globe map

Figure 20 clearly shows the limited surface areas for cultivation of crops.The cultivable land cover about 20% of the total surface area of Noni Sub Division.This makes agricultural productivity very low and thus affect a good number of people who depend solely on farming for their livelihood.
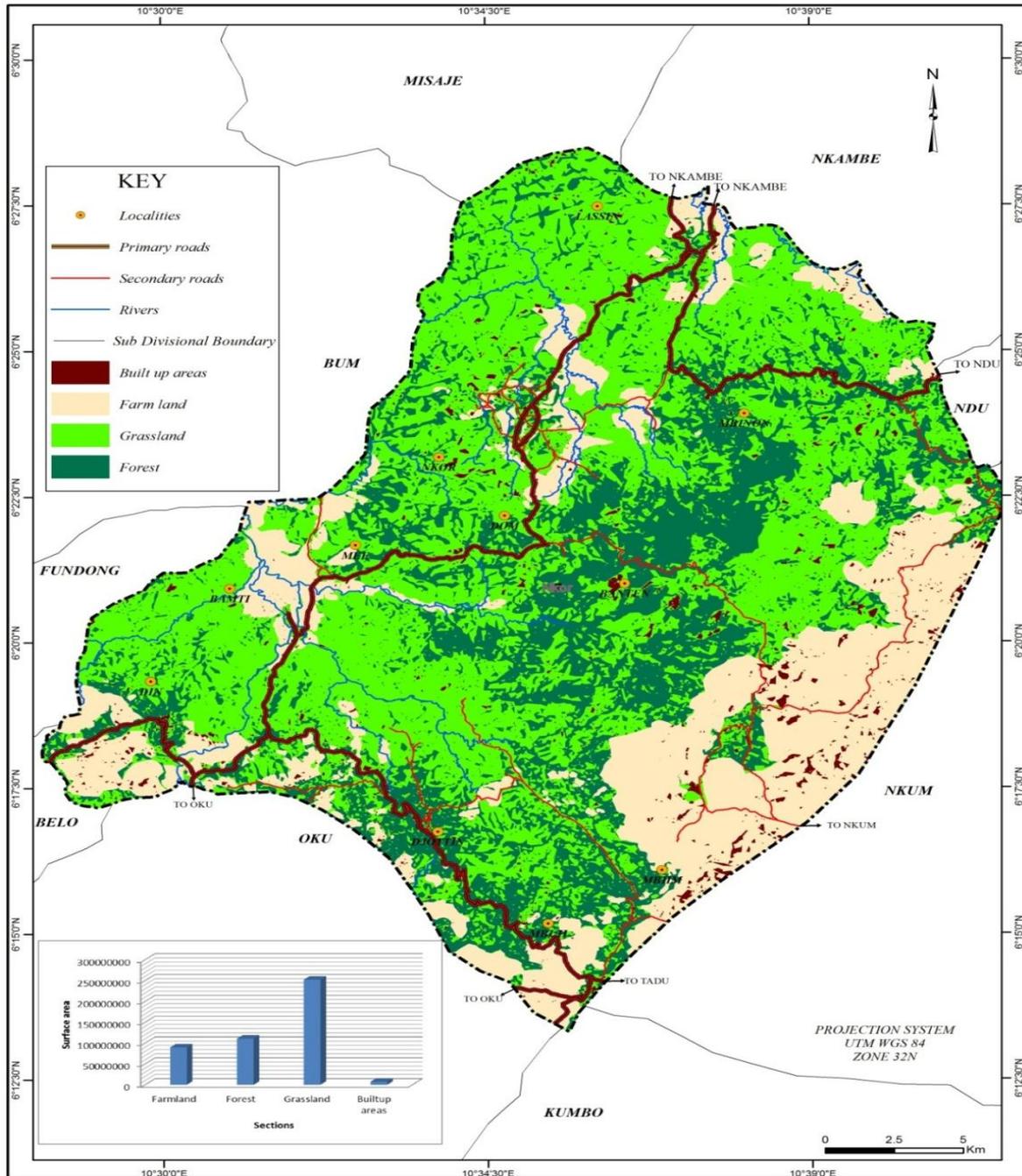
Figure 21: Land use map of Noni Sub Division.2020.

Source: NIC, Aster dem 2011,digital globe map

Fig 21 is the land use map for Noni Sub-Division 2020.It has four different classes namely, Build up areas, Farm lands, Grassland vegetation and Forest vegetation. Grassland occupied the largest surface area ,followed by forest, farmlands and build up areas respectively.

The map is relevant to this work as it shows the proportion of the land that have been exploited for agriculture comparatively to the total population who depends mostly on farming for survival. This information can be represented on figure 22.
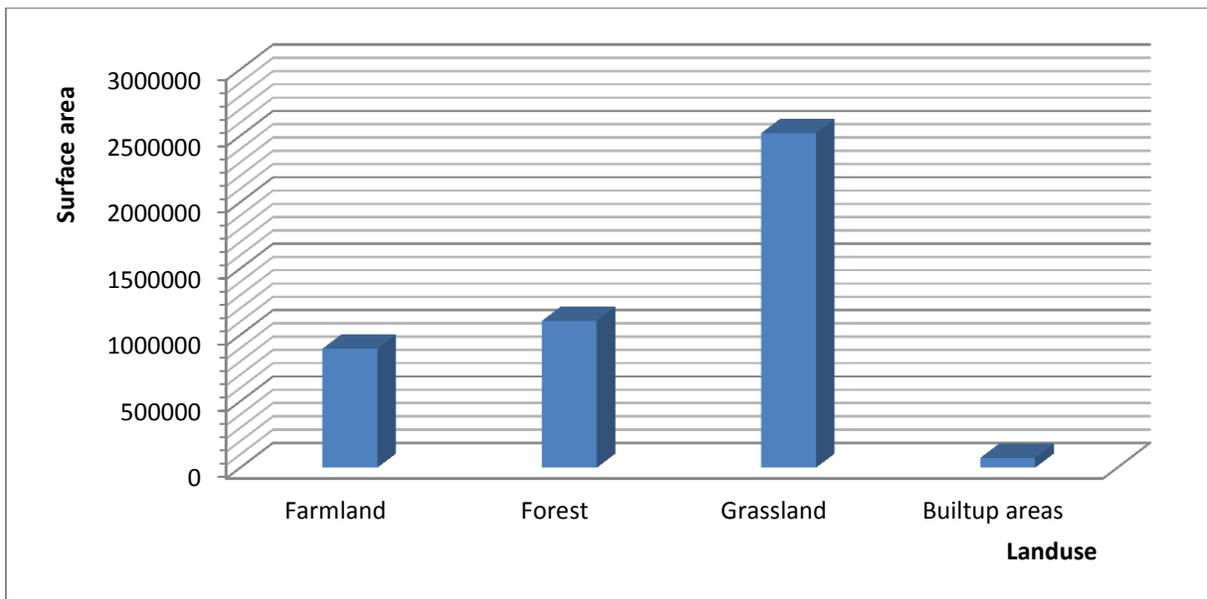
Figure 22: Variation in land use with respect to surface area Noni.

Source: Field survey 2021.

From the land use map above, cultivable land represent a small portion of the land ,that is 89659337 meters square , partly influenced by the rugged topography of Noni. This explains why the people interested and depended on agriculture their major source of income are forced to move out for other adventures in towns. Moreso the only agricultural modernisation scheme MEDINO that was located in Ngeptang one of the villages of Noni Sub Division which could have been a booster to agricultural development was closed down. This project had as one of its objective, to train farmers on modern agricultural techniques, provide them with high yielding seed and even assist in the marketing of their farm products.

2.2.1.1. Limited fertile Soils

The main soil types found in this municipality are: modified orthic soil types found in Lassin, Mbinon, Din and part of Djottin, specifically in Gaggi and Bongi; Penevoluted ferrallitic soils, regosolic and lithosolic soils characteristic of the steep slopes found in Nkor, Bvugoi (Dom) and in part of Djottin- i.e. in Buh and Chamkfung- and in part of Mbinon- i.e. in Nchine. These soil types could further be classified as:

White clayey soil, that is very conspicuous in Djottin along the Djottin-Tadu road, on the Bvugoi-Banten road, along the Mbinon-Kuvlu road, and stretching into Donga-Mantung Division. Sandy soils, which are located along the lower reaches of streams and rivers, especially around sand deposits. Humus or top soil, which occurs mostly in the valleys and on flat hilltops

Hydromorphic soils, located in the lower reaches of flood plains, that are characterised by:

Their soft, wet and spongy nature . An excess of soil moisture, leading to waterlogging that makes them feel soft, wet and spongy to walk on .A deep top layer of decomposed organic matter due to the fact that the excess water in the soil inhibits soil aeration, thereby creating a deficiency in soil oxygen, which in turn diminishes bacteriological activity and retards the decay of organic matter

Alluvial soils that are found along the banks of rivers and streams, and in most areas of flood plains that are not occupied by hydromorphic soils

Degraded humus soils that are found on most of the lower slopes of highland ranges and knolls that are subjected to overgrazing and compaction

Brownish loamy soils that are found between the flood plains and the contour limiting the croplands

Lateritic soils that are found everywhere beneath the top soil, and also on highlands depleted of vegetal cover, which have been subjected to high levels of erosion by runoff

Most of these soils are not fertile and does not support agriculture. They suffer from over cultivation. Given the fact that most of the population rely more on agriculture ,it has caused many young people to leave for other opportunity in urban areas with the hope of getting better jobs. This greatly increase the rate of rural exodus from Noni Sub division.

2.2.2. Economic causes.

Economic causes include amongst others, High level of unemployment, little market environment leading to poverty and a low standard of living.

2.2.2.0. High level of Unemployment.

There is a high level of unemployment in the Noni Sub Division. This can partly be explain by the absence of professional training Centre. It is estimated that about 95% of the population is engaged in agriculture, which accounts for the main source of family income. Employment is concentrated in the informal sector. Women's employment rate is higher than the men's because they provide the bulk of the labour force for subsistence farming. Very small livestock rearing takes place and constitutes an important source of supplementary income to most households. There are also a significant number of cattle rearers (308 as at 2004) and 293 petty businesses in the area that provide mostly part-time employment. Most men are victims of disguised under - employment that is common for those who do not engage in fulltime agriculture and rearing of animals. The multiple number of country-Sundays during which the people do not engage in productive farm work also increases the incidence of disguised unemployment. Loitering is common amongst the youths who resent farming, in spite of the fact that the community as a whole has condemned this attitude. Employment in craft production is limited and production output has not yet been quantified. Regarding to the above situation, most of the youth prefer to leave the village for better opportunities in urban areas. Information gotten from 50 respondent show that high level of unemployment is the main economic cause of rural exodus from the Noni Sub-Division.
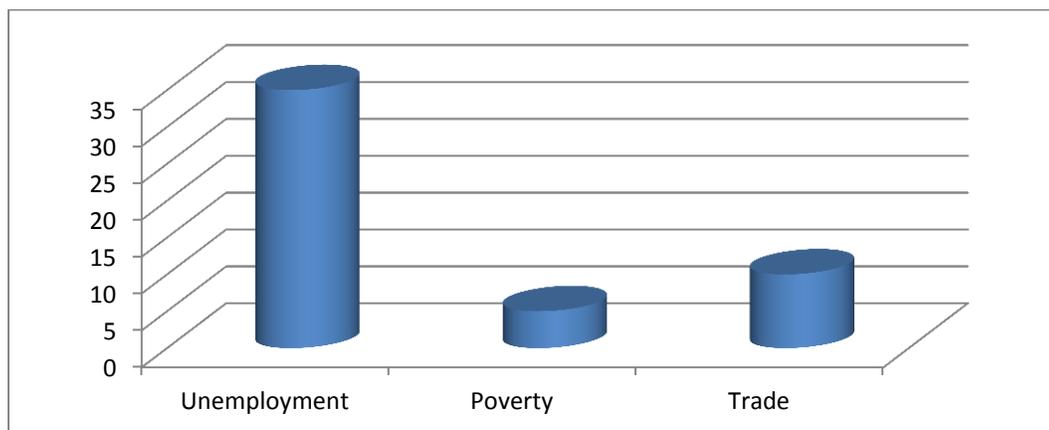
Figure 23: Variation in economic causes of rural exodus in Noni.

Source : Field survey 2021.

From figure 23, it can be clearly seen that unemployment is one of the factors that has contributed to the rapid rate of rural exodus in the Noni Sub Division. Out of 50 respondent 35 happened to moved due to unemployment, while the other factors like poverty are indirectly linked to unemployment. This can be justify by the fact that the rate of rural poverty is very high. More so the rural masses solely depends on agriculture as their main source of employment. The agricultural sector is not well developed and plagued by a number of problems ranging from poor farming methods, land tenure system which deprived many people from gaining access to farm land. Figure 25, clearly present the variations in economic factors influencing rural exodus in Noni Sub Division.

2.2.3. Social Causes.

The main social causes responsible for the massive movement of youth out of the Noni Sub-Division include amongst others , absence of electricity ,poor health facilities, insufficient educational facilities such as high schools and higher institutions of learning and the absence of modern sport infrastructures, land tenure system and the influence of Urban Elites.

2.2.3.0. Limited Educational facilities.

There are more primary schools in the Noni sub-division than secondary schools as well as high schools and higher institutes of learning. There exist 64 primary and Nursery schools, 17 secondary schools amongst which are only five high schools with one equipped with a science laboratory. This makes it very difficult for the science students who move out of Noni after their Ordinary level. More so ,the number of primary schools are far more than the secondary.

From the research findings, there are 63 primary schools,14 colleges and only 03 high schools. this can be explained by the fact that it is more easier to open and managed a primary schools because of it low staffing. Secondly there many persons who can be qualify to teach in primary schools than the secondary and high school in Noni Sub Division.
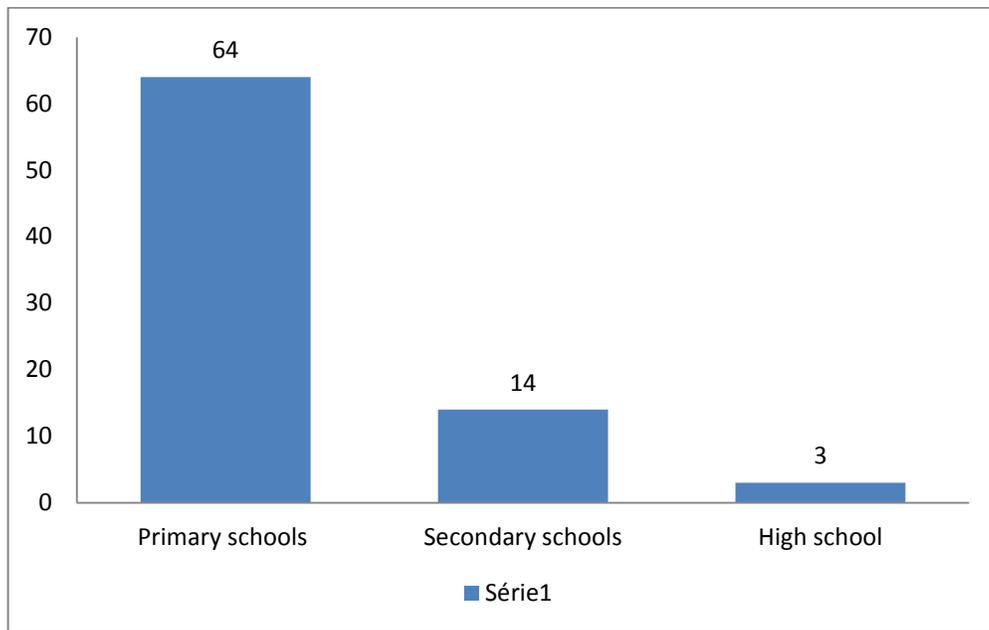
Figure 24: Distributio of learning institutions in Noni Sub Division.

Source: Field survey 2021.

Figure 24 illustrate variation in the number of learning institutions within the Noni Sub Division. The primary schools dominate, followed by secondary and high school. There is the complete absent of higher institution of learning. This has contributed greatly to the out migration of those aspiring to further their education.

2.2.3.1. Limited health facilities.

Limited health facilities has also contributed to rural exodus from Noni. Noni has a total population of 63487 (: Nkor Council Communities Field Surveys 2011).distributed over a surface area of 325.7 Sq.km separated by numerous hills. This makes access to health services very difficult. There exist six (06) health centres and one (01) district hospital. Amongst these health services is one public and six mission health services. There is only one medical doctor in the district hospital. These health services include,

Ngeptang Baptist Health centre, Bamti Catholic Health centrem Nkor District hospital, Baptist health centre Kiftumen(Nkor), Mbinon Catholic health centre, Djottin catholic health centre,Lassin Baptist health centre.

The above limited health facilities in Noni has equally led to some people leaving Noni for better health services.The distances separating each health service and the next is very far.

Figure 25. represent three Baptist health centres, three Catholic health centres and one district hospital.
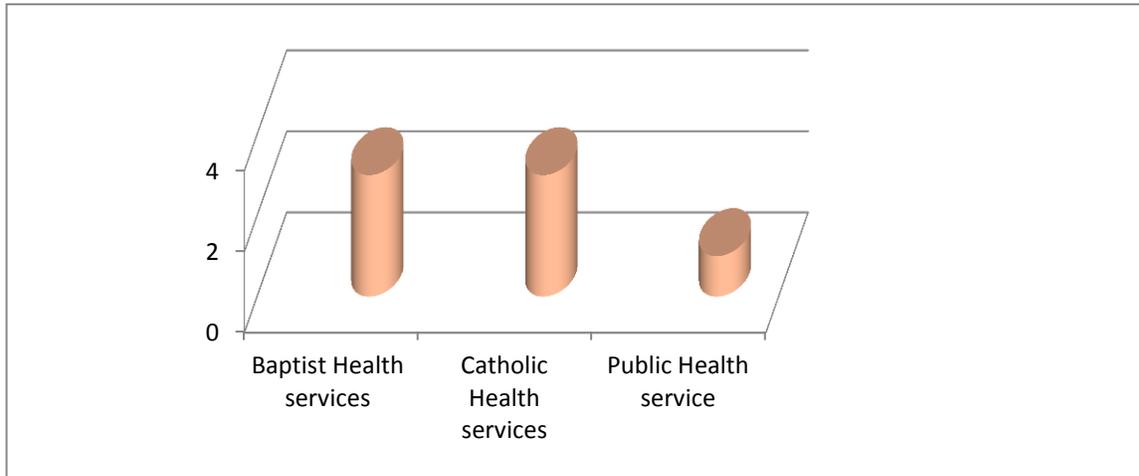
Figure 25: Health services in Noni

Source: Nkor Council Development Plan.2011.

Figure 25 illustrate the spatial distribution of health services in Noni Sub Division with respect to different stakeholders. The stakeholders include the Baptist mission, Catholic mission, and the state. The missions (Baptist and Catholics) have more health services within the Noni Sub Division with only one District hospital located in Nkor the Sub Divisional Headquarters.
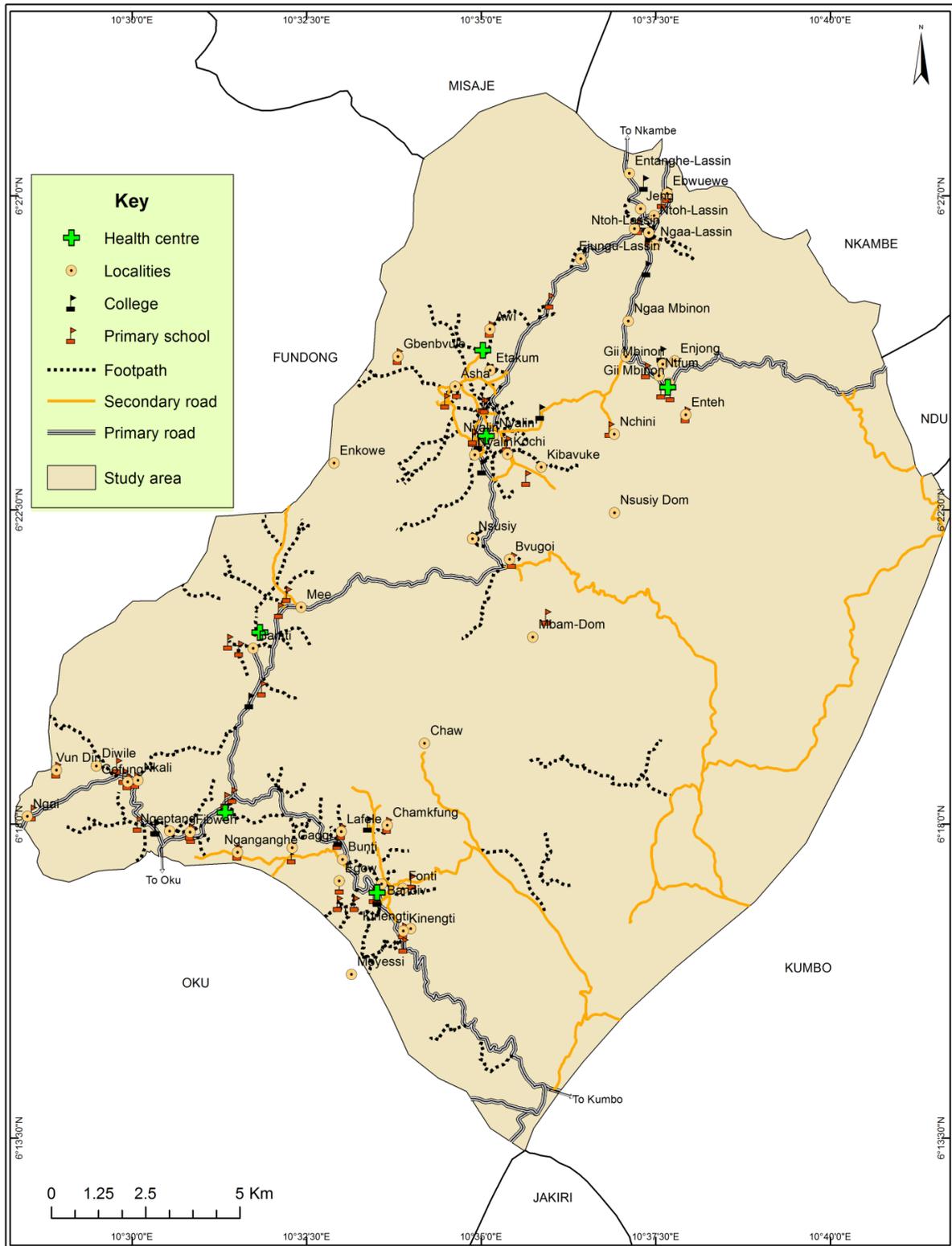
Figure 26: Spatial distribution of Primary schools ,colleges and health services in Noni Sub Division.

Source: N.I.C Database, fieldwork and Nkor council development plan 2011

Figure 26, shows the spatial distribution of social amenities within the Noni Sub-Division.These facilities include schools and health services as well as economic aspect of road infrastructure.The concentration of these facilities are found in the major villages like Nkor(sub divisional headquater),Djottin, a border village to Oku,Lassin , Mbinon Din and Dom.Their distribution is directly related to the number of persons in such areas

2.2.3.2. Absence of Electricity and modern sport infrastructures

The absence of electricity in the Noni Sub-Division as a social facility. has influence many persons to leave for urban areas where they can enjoy such facilities. Electricity play a vital role in the smooth running of any society as it promote tertiary activities like barbing and hair dressing salon which most people need on daily basis. It also encourage manufacturing activities such as bakeries, modern furniture, fashion designing workshops. To this effect, those who have acquired training in these domains can not stay back, but move out to where they will find such facilities.

Statistics gotten from over 73 respondent to the research questionnaires revealed that the major social cause of rural exodus is the need to attend higher education.40 persons are said to have left due to education,20 due absence of electricity,10 for health facilities and 07 for inadequate sport infrastructures, and 06 for land tenure

2.2.3.3 Land Tenure system.

Land tenure system is a situation where one individual own a land piece of land alone. This could be for the purpose of sharing to his grandchildren or for selfish reasons. In the Noni Sub Division this aspect is common. Most of the youth are barely depend on farming for their living or cattle rearing find it so difficult to stay back home with no land to either cultivate farms or construct houses. This forces them to move to urban area with the hope of acquiring wealth before returning home to purchase land. The land tenure mostly affect women who do not have access to land according to gender bias as to Land accessibility by women. Another similar factor which equally render the rural youth landless in Noni Sub Division is the influence of urban elites. These Elites who are from both the Noni tribe and the neighboring villages, buy large land surfaces hence rendering most youth landless. This is usually made easy by poverty of the rural masses which leave them with no choice than the sell the lands.

Amongst the social factors, Education is the most influential social factor influencing rural exodus in Noni Sub Division, This is closely followed by the absence of electricity, health, limited sport infrastructure and lastly land tenure system. This can be explained by the fact that those who are more migratory are the youths. These youths mostly migrate for studies. Secondly electricity is a major social amenity needed for several purposes especially by the youth and the most energetic. It absence therefore present a handicap to these youth who migrate out of Noni Sub Division.This can be presented on figure 27.
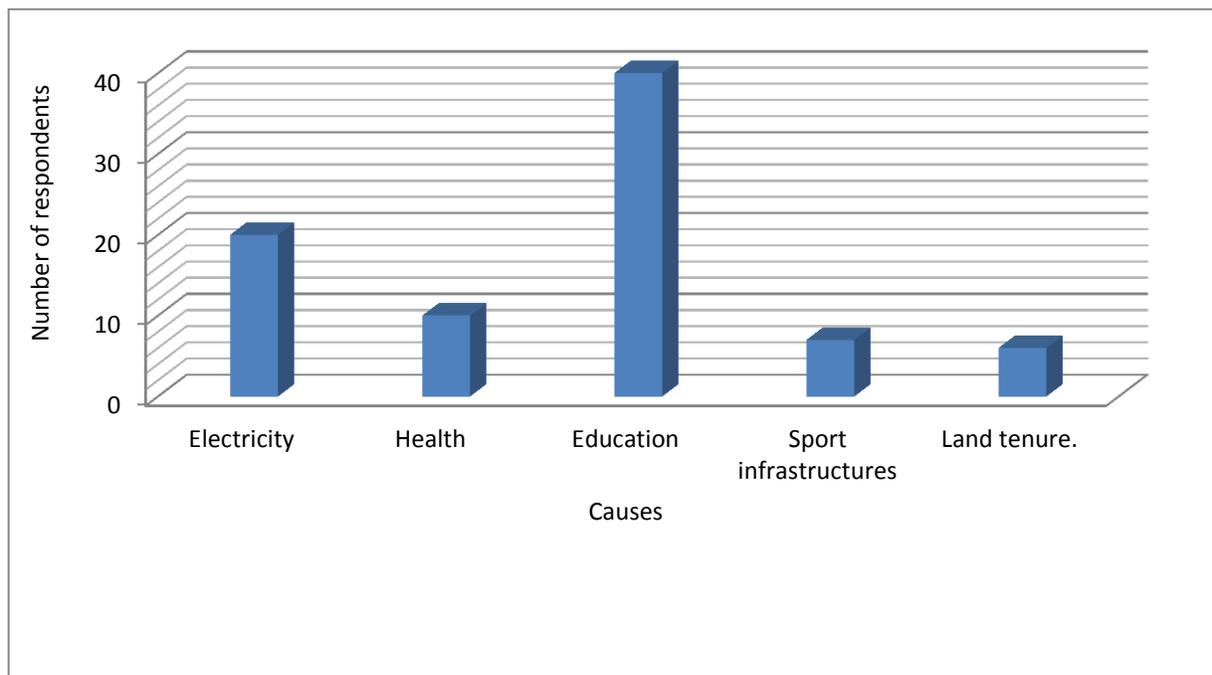
Figure 27: Social causes of rural exodus in Noni Sub Division.
Source: Field work 2021.

Figure 27 is an illustration of the social causes of rural exodus in the Noni Sub Division. The figure shows that most of the people migrate for educational purposes, followed by the absence of electricity, health services sport infrastructure and lastly the land tenure system.

2.2.4. Political causes.

The political causes for rural exodus out of the Noni Sub-Division include mainly Civil war and crimes.

2.2.4.0. Socio – Political crisis .

The socio-political crisis in the two English speaking regions of Cameroon which started in 2016 in Bamenda and Buea with the teachers and lawyers, has greatly contributed to the rapid involuntary movement of people out of the Noni sub-Division. Within the past four years, many people have abandoned their homes and fled due to insecurity caused by this crisis. This movement has been toward the major towns of Bamenda, Bafoussam, Douala, Yaoundé ,Buea, Limbe. Amongst the 60 respondent contacted 50 happened to have been pushed by Civil war or socio-political crisis, 10 due to crimes of different kinds.

2.2.5. Conclusion

From the general analysis and from information gathered from respondent in the field, the human factors are more responsible for the massive movement of people out from the Noni sub-division, The factors were grouped under Economic, social, political and natural factors From the observation it is clear that the human factors are more responsible for rural exodus than the physical or natural factors.From the above analysis, it can be concluded that rural exodus in the Noni sub-division is caused more by human factors rather than physical or natural factors as stated in hypothesis one above.

The social aspect dominate followed by the politically motivated factors ,then the economic and lastly the natural or physical factors. The political influence here only comes in from 2016 due to the socio-political crisis which has in turn affected other sectors of the economy forcing people of all age groups to flee from the Noni Sub Division.

CHAPTER THREE.

THE IMPACT OF RURAL EXODUS ON RURAL DEVELOPMENT.

3.0 Introduction

Rural exodus in Noni Sub-Division has led to both positive and negative impacts. In the context of this work, both will be examined but more emphasis will be laid on the negative impact of rural exodus in the development of the Noni Sub-Division. The impact of rural exodus in Noni are examined from two perspectives, ie negative and positive.

3.1 Positive Impacts.

The positive impacts of rural exodus are remittances, decrease in land dispute between villages and neighboring tribes, Reduction in farmer-grazier conflicts, and low population pressure. Each of these impacts will be presented in the section that follows.

a)) Remittances.

Remettance is a situation where people who move out of the rural area reinvest back in their home villages after acquiring wealth in urban areas. This is done through the construction of modern houses, opening up of business enterprises especially wholesales to assist small scale businessmen, workshops such as fashion designing and furniture. Secondly some of these migrants lobby for developmental projects from the government and NGOs. Some of these infrastructures that have transformed rural life in Noni are showed on plate 1.

Plate 1: Modern houses in Nkor Noni.

Photo 1: A Modern house constructed in Nkor . Photo 2: A complex built at Nkor.
Note on photo 1.main entrance into the house(A), Palms for decoration(B),Front passage(C).

Note on photo 2. : Front view of the house.(A)m Modern gate (B).

Apart from construction of modern houses, which beautifies the village, some elites are involve in other activities like the creation of modern grazing systems such as **The Folk Ranch-Nkor .**This ranch is a private estate that was created in 1997. The Folk Ranch has a surface area of about 3500km^2 and contains 140 cattle. The main breed of cattle grazed in the ranch is the red Mbororo and some Godali species that were gotten from Ndop. The cattle were introduced in this area because Noni and Ndop have similar climatic characteristics. The main objective of the creation of the ranch was profit oriented.The Folk Ranch is well organized and managed. This management is geared towards attaining the set objectives for the creation of the ranch. Artificial pasture has been planted with species like *Desmodium, Leucaena and Calliandra* for the cattle. The area is further divided into paddocks,water drinking points and salting lickss, the care taker's residential area, an area where the mature cattle live and another section for calves (plate 2). The cattle are vaccinated periodically. When mature, most of the cattle are mainly sold in the Nkor Council cattle market.

Plate 2. The Folk Ranch in Nkor

Photo 3:Leucaena grass inside folk ranch in Nkor.   Photo 4:Modern troughs in a cattle farm in nkor.
Note on photo 3: *Leucaena grass affected by dryness(A),Fence separating pasture from where cattle live. (B,),Resident of ranch controller(C),Water tanks to supply water in the dry season.*
Note on photo 4:*Trough where cattle drink water(A), Trough where cattle leak salt(B),*
Degraded pasture (C),Raffia palm in valley (D).

Photo 5: Portion where calves are kept in a ranch in Nkor.
Note on photo 5: *Calves; looking malnourished due to low pasture quality in the dry season(A), Degraded pasture(B).*
Source: Shey D.21/11/15

The Folk Ranch is owned by one of the elites of Noni who is not based in the area.The importance of this activity is enormous. It employs many youths who find themselves in the informal sector. The revenue generated from the activity enables the youths to construct houses and run their households with ease. This activity has significantly reduced delinquency amongst the youths in Noni. Cattle grazing also serve as a post retirement occupation to most retired civil servants. The taxes paid by these graziers serve as a significant source of revenue to the Nkor Council. However, they face similar problems like the Fulani cattle graziers. The appraisal on the effect of remittances by inhabitants of Noni Sub-Division is showed on table 6.

Table 6 :The appraisal on the effect of remittances by inhabitants of Noni Sub-Division.

Village	Sample household	0.04% sample Scale	Effective respondents	Yes responds	No responds	Percentage of effective respondent
Nkor	1315	52	45	25	20	86.5%
Din	4823	192	125	75	50	65.1%
Djottin	1468	58	51	25	26	87.9%
Dom	119	5	4	1	3	80%
Lassin	657	26	19	9	10	73.07%
Mbinon	728	29	26	16	10	89.6%
Totals	9110	362	270	151	119	74.58%

Source: Questionnaire administered.

Table 6 makes an appraisal of remittances in Noni Sub-Division by the inhabitants. Out of the 270 respondents sampled,151(55.9%) were of the opinion that the impact of remittances has been positive, while 119 (44.10%) were of the opinion that the impact of remittances has been negative. Even though with the 55.9% in favour of positive impacts of remittances in Noni is still low. This can only be made possible if these migrants frequently visit the village to supervise some of these projects, order wise mismanagement is bound to exist. From the analysis of 270 questionnaires to find out the frequency with which some migrant from Noni return home,55% of respondent return home after a period of four years and above, 20% annually and 25% two years and above. Data for the illustration of the effects of remittances in the area was collected through direct field observations and interviews.(table 7)

Table 7: Effects of remittances in Noni Sub Division.

Village	Business Enterprises (No)	Modern buildings. (No)	Pipe borne water projects. (No)	Hotels. (No)	Modern Barbing Saloon. (No)
Nkor	35	15	07	03	03
Din	20	19	10	02	04
Djottin	25	35	09	05	06
Dom	02	5	02	00	00
Lassin	34	19	11	02	05
Mbinon	19	17	06	01	02
Total	135	110	45	13	20

Source: Observation and Interviews 2021.

Table 7 shows the effects of remittances in Noni Sub Division. From this data, Nkor has the highest number of business, followed by modern buildings and lastly hotels and barbing saloons. Another village with highest number of business is Lassin. It has with 34 business enterprises followed by modern houses, with the least being modern barbing saloon. Djottin has the highest number of modern buildings(25), than business enterprises (25).The situation of remittances in Noni is showed on the pie chart (figure 28).
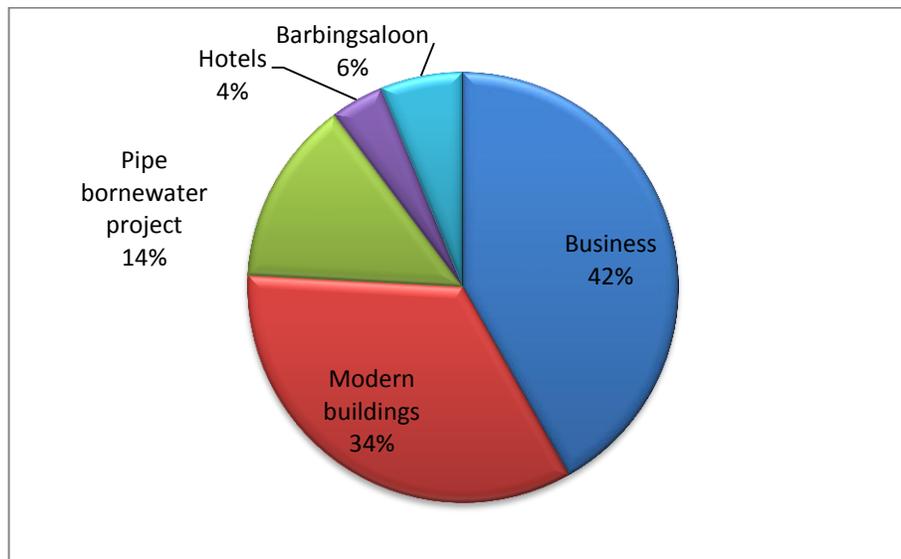
Figure 28: Situation of Remittances in Noni.

Figure 28 shows the total number of activities from remittances in Noni Sub Division. Business enterprises recorded the highest number with 135,followed by modern houses 110, pipe borne water projects 45,barbing saloon 20 and hotels 13. The high number of business enterprises is due to the fact that it is an activity which supply the need of many people in the community, therefore making the demand high. The reason for the small number of hotels and modern barbing saloons is due to the absence of electricity in most parts of Noni Sub Division , the inaccessibility to most areas due to the accidented relief which hinders road construction.

b) Reduction of in land Disputes.

i) Inter-tribal conflicts.

Noni –Sub Division has experienced a number of land disputes in the past between 1988 and 2006.These land disputes were between the neighbouring tribes and villages within Noni Sub Division. Some of these conflicts include ; Oku-Din from 1988 to 1994, and between 1995 to 2006 over Bahluh, the Djottin –Buh conflict of 1993 over Mbim and Chaw, and the Djottin- Din conflicts in 2014 over Mii .These conflicts had far reaching effects on the inhabitants of both tribes and equally on the agricultural produced as many farms were destroyed with fewer lives lost. During the Oku-Din conflicts, the following damages were registered: More than 40 houses were destroyed, over 20 hectares of farmland abandoned which led to a reduction in agricultural

production and productivity. 08 lives were lost in this conflicts. The Djottin –Buh Conflict lead mostly to the destruction of 25 houses with about 30 hectares of farmlands destroyed.

From the evolution of migration trends in Noni (table 5),these conflicts has reduced drastically.From information on conflicts evolution, the last inter-tribal conflicts was witnessed in 2006.This correspond to the period of increase out migration from Noni Sub- Division. This is justified by the fact that, as people move out of Noni, their mentality change and fighting for land no longer becomes their priority.

ii). **Farmer-Grazier Conflicts**

Clashes between crop farmers and cattle graziers are one of the major challenges plaguing the Agricultural activities in Noni Sub Division.Farmer-grazier conflicts in the area have a long history with their roots traceable from the land tenure system practiced in the area. The impact of the conflicts is negative on grazing with a general tendency of reducing cattle productivity. The hot-spots of farmer-grazier conflicts in the area are: Chaw, Enkowe, Karatu, Mii, Mukeiye, Chinin, Mbinon, kilumen, Taashem/Wvem, Banten, Rohvitangtah, Kingomen, Mbawnso, Ibal and Ber-Wassi. A close examination of data on the evolution of farmer grazier conflicts (Shey 2017) shows that the conflicts have been on a steady rise over the years. One common trend about the conflicts is that from the year 2000 to 2015, the number conflicts registered were increasing. Between 2016 and 2017, the number of farmer-grazier conflicts registered in the area reduced tremendously to less than 8 cases.

3.2. The Negative Impact of Rural Exodus on Rural Development of Noni Sub-Division.

These impacts will be examined under three sub headings namely, impact on agriculture, impact on socio-economic development and impact on the cultural aspects.

3.1.1. Impact on agriculture.

Rural exodus has affected the agricultural productivity within the Noni Sub Division negatively. Agriculture demands lot man power which is provided by the youthful population. Most of those moving out are the adult who are more energetic, consequently leading to a reduction in the work force. Those left behind are more of the aged and young who can not do effective work, thus giving rise to low productivity. This movement has resulted to the abandonment of farmlands and

a drastic drop in food supply both in the rural area and in nearby urban areas like Kumbo and Bamenda. Rural exodus has equally affected the livestock sector. The rearing of some animals like goats and sheep has equally reduced. They the young and adult who are more responsible for the keeping of these animals as it demands lot of attention. With the absent of these youths the sector if bound to fall. The indirect effect of this out migration from the Noni Sub Division has been a drastic fall in incomes giving the fact that agriculture is the major source of income within the Noni area. As a result of this the level of rural poverty is on the rise. Food shortage is another problem leading to famine. Statistics gotten from the analysis of 270 questionnaires reviews that rural exodus has a high negative impact of on agricultural productivity in the Noni Sub Division. The response for this questionnaire was structured under the headings, Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree.(D).

The majority of respondent were for the fact that massive movement out of the Noni Sub Division has affected agricultural productivity greatly by scoring 200 out of 270.Only 70 out of 270 disagreed and strongly disagreed this fact.
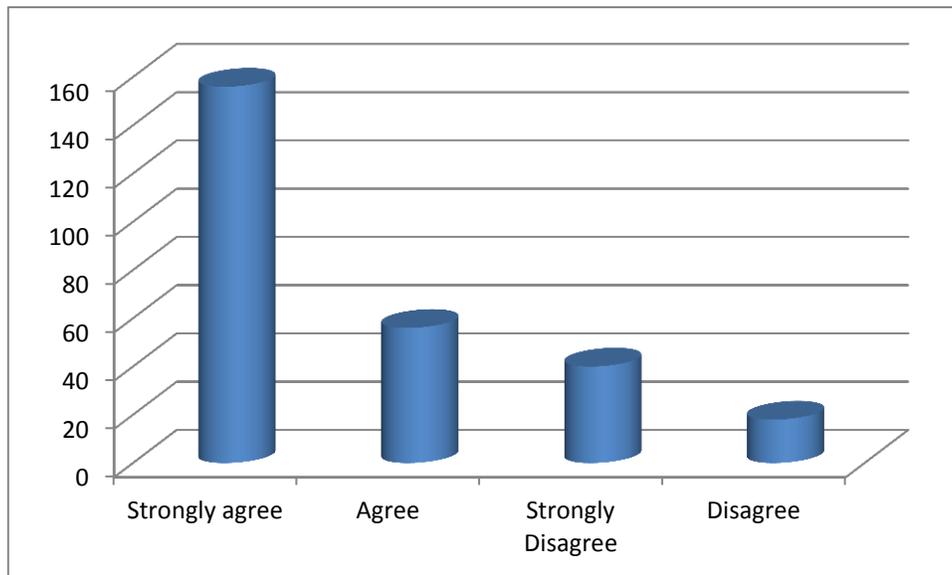
Figure 29: **Impact of rural exodus on the agricultural productivity in Noni Sub Division.**

Source: Field work 2021..

Rural exodus has a great impact on the agricultural production and productivity in the Noni Sub-Division. This is evident from the above chart. The majority of respondents were positive

with the fact that the agricultural sector has been negatively affected by the massive movement of people out of the Noni Sub-Division. Just a few of the respondent were against. From the above variation, it can be concluded that agriculture is greatly affected

Plate 3: Impact of rural exodus on agricultural land in Noni.
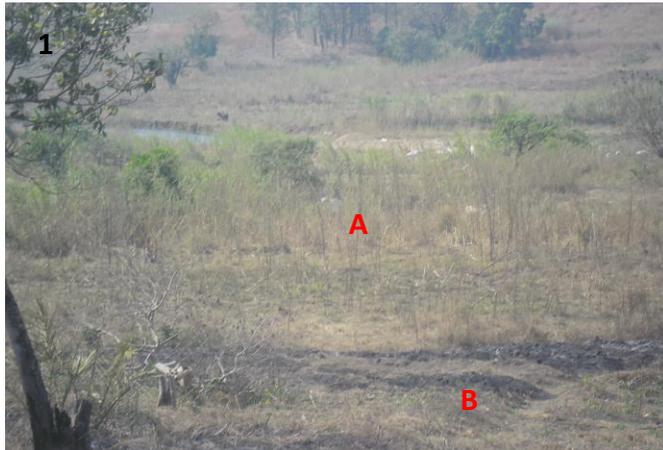
Photo 1. Abandoned farmland.

Note on this photo,

A= elephant grass B= flattened ridges

Photo 2: Partial view of abandoned farmland
With cattles grazing on it.
Note on this photo.
A=cattle B=researcher C=degraded surface

Plate 1, is an illustration of some negative evidence of rural exodus on the agricultural landscape which is the abandonments of farmlands. Photo 1 shows an abandoned farmland where the ridges have been flattened by trampling by both animals and humans. In photo 2,is the researcher and some cattles on transhumance.

3.1.2. Impact on Socio – Economic Development.

Rural exodus has affected the socio – economic development of the Noni Sub Division negatively in the following aspects. Firstly there has been a drop in government funded projects and social amenities. These are projects such as the development of roads infrastructures, improvement in human empowerment programs, provision of electricity, improvement in the provision of pipe borne water, provision of more health services ,creation of secondary and high schools and equipping them with libraries and laboratories, the construction of village vocational

training centers and also the organization of agricultural empowerment programs such as mini agro –pastoral shows. Most of these projects are usually granted based on the number of persons present within a particular area. The Noni Sub Division is lacking behind in the above domains. This has to a greater extend been cause by rapid out migration of people from the Noni sub-division thereby   reducing the population density of the area

Secondly, Noni sub-division possesses some natural potentials which if exploited, will greatly improve on the socio-economic development of the Noni. Some of these potentials include,

Highlands, lowland and caves good for the eco-tourism sector, if developed.

The plains and valleys are suitable for crop cultivation , natural caves in Dom and Djottin, numerous sand pit in Mee –Nkor and lassin, Vegetation like   Montane Sub- montane and domesticated Sub-montane forests Forests of eucalyptus trees which is a home to important medicinal plants like: Prunus Africana (pygeum) Nuxia congesta, Schefflera sp, Maesa Lanceolota and Gnidia glauca. Beautiful green touristic scenario during the rainy seasons.

Eucalyptus trees used for Construction and for fuel. Found mostly at Dom, fertile soils at some strategic areas, fishing and a good number of stone quarries. Hydrography like the wetlands (examples include Mee, Ebanya and Egew) which are of great agricultural potential.   These resources are poorly exploited as the young and energetic age group migrate to the urban areas for greener pastures. As a result there has been a rise in the rate of rural poverty in Noni sub-division. Low rate of exploitation of these resources, has greatly affected socio economic development of Noni. Rural exodus has also lead to the abandonment of social infrastructures like houses, schools and the deterioration of existing roads since there are not being used frequently. This equally destroys the physical beauty of the area. From the analysis of 270 questionnaires it reviews that rural exodus has a negative impact of on socio-economic development of Noni sub-division.

This can   clearly be seen from the table of respondent above .Out of 270 respondent, 165 strongly agreed, 25agreed and 45 strongly disagreed and 25 disagreed. This has rendered socio economic development of Noni Sub Division slow and ineffective. From the analysis of questionnaires 190 respondent supported the fact that rural exodus has slowed down socio-economic growth in Noni Sub-Division while 70 were against. It can therefore be concluded

based on the result from the field that rural exodus affect social and economic development of the Noni Sub Division.
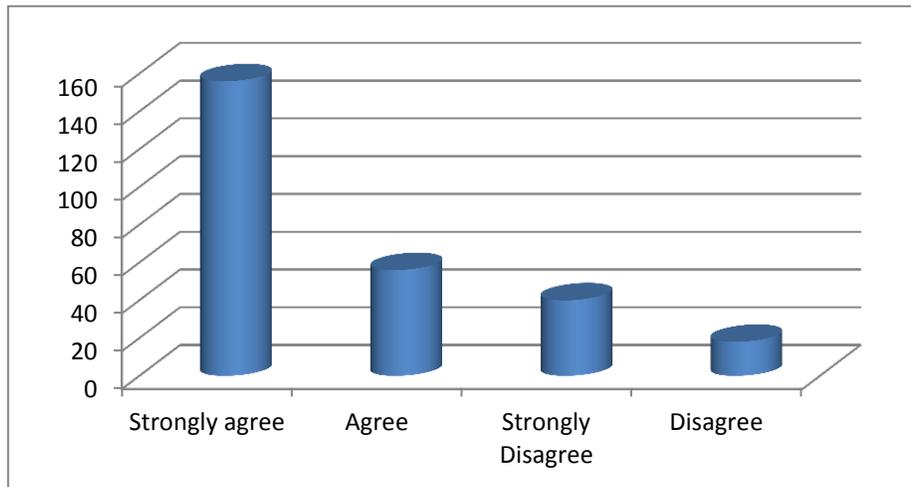
Figure 30: **Impacts of rural exodus in socio –economic development of Noni .**

Source: Field work 2021.

Photo 1: An indicator of the social effect of rural exodus.

1= abandoned building

 2=cypress tree

 3= overgrown surrounding of building.

3.1.3. Impact on Culture.

Rural exodus has seriously affected the culture of Noni people. There has been a fall in the holding of annual cultural festivals within the Noni communities and village developmental programs. This is partly because as many people do not return home often making these cultural events to lose its importance. There has equally been the non respect of some traditional norms such as greetings, respect of elder. Most of the youth or people who have stayed long out of Noni

do not know how to greet their traditional authorities like the Fons. Some transitions with respect to tradition is missing since those in possession are left alone in the village and those to receive or be mentored are in urban areas and they may die without handing over such gift to any one and it dies off, all as a result of rural exodus.

Another negative impact on the culture of the Noni people is the fact that the Noni language is loosing it value as a result of rural exodus. The dialet is mostly understood while living in the village or frequently visiting the village. With the rapid out migration of people from the Noni sub-division, most children are born in urban areas where there is the absent of Noni language Centres making it too difficult for them to understand the Noni dialet. This affect the cultural value and identity of the Noni person. The dressing style of people is equally modified. People now desire other dressing styles against the culture in the name of modernity. The importance affixed or given to traditional dances is equally reducing. Most of the traditional dances are hardly practice in urban areas and secondly acquiring the traditional instruments is difficult. Some of these traditional dances are ancestral and so can not be very effective out of the villages. All this cause the identity of the Noni man to disappear. From the analysis of 114 questionnaires it reviews that rural exodus has a negative impact of on socio-economic development of the Noni Sub Division.

According to the statistics from respondents ,156 respondent strongly agreed to the fact that rural exodus greatly influences agriculture ,56 agreed and 40 strongly disagree with 18 disagreeing. When we add those who agreed and strongly agreed it gives a total of 212 out of the 270 respondents, showing a negative effect of rural exodus on culture in Noni Sub Division.
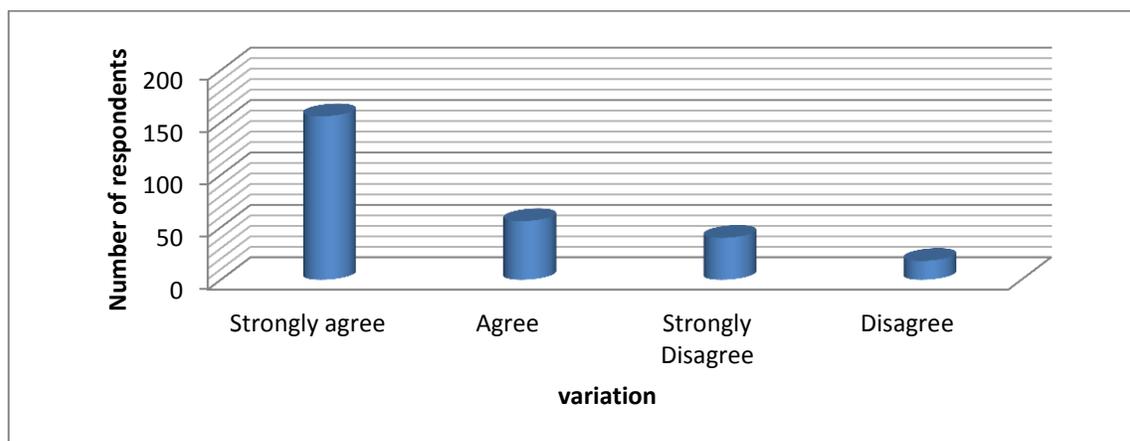
Figure 31: Impact of rural exodus on the culture of Noni .
Source: Field work 2021.

The impact of rural exodus in Noni Sub Division affect the agricultural sector the most. This can be justified based on statistics gathered from questionnaire respondents. Out of 270 respondent 200 agreed to the fact that rural exodus has greatly affected the agricultural sector. 212 respondents agreed to the fact that rural exodus has affected culture and 190 respondent agreed in favor of Socio-economic development. Both the socio-economic, agriculture and the culture contribute greatly to the economic development of Noni Sub Division. The negative impact of rural exodus has therefore slowed down economic development of Noni Sub Division.

3.2 Conclusion

In this chapter, we observe that rural exodus has lots of consequences on the development of Noni Sub Division both positively and negatively, though the negative impacts outweigh the positive. Positively, rural exodus has brought in remittances in the form of infrastructural improvement notably in the housing sector and other areas such as the opening of business and creation of folk ranch. These outcomes of remittance provide employments opportunities to some youth in Noni.

Despite these positive aspects of rural exodus, it has led to some negative impacts on the development of Noni Sub-Division. These negative impacts are mostly felt in the agricultural sector. This can be justified based on statistics gathered from questionnaire respondents. Out of 270 respondent 200 agreed to the fact that rural exodus has greatly affected the agricultural sector. 212 respondents agreed to the fact that rural exodus has affected culture and 190 respondent agreed in favor of Socio-economic development. The negative impact of rural exodus has therefore slowed down economic development of the Noni Sub Division.This work has therefore come to resolve the situation.

CHAPTER FOUR
STRATEGIES IN HANDLING RURAL EXODUS IN NONI SUB DIVISION.

4.0 Introduction

The impact of rural exodus in Noni Sub Division are many and varied especially the negative impact on rural development. Given this situation, some strategies have been put in place by different stakeholders in order to redress the situation. Some of the stakeholders include, the Elites, the Missions, Village Development Authorities (VDA), Common Initiative Groups(CIG), Non-Govermental Organisations (NGOs), the Local Council and traditional authorities.

Apart from the stakeholders, there is also the application of Geographic Information System(GIS) and Cartography as a potential decision making tool to help manage rural exodus in Noni Sub Division.

4.1. Strategies in Handling Rural Exodus
4.1.1The Role of Stakeholders

Stakeholders can simply be defined as partners in development. The various stakeholders involve in the development of the Noni Sub-Division include, the Elites , Missions, Traditional authorities, and project managers.

4.1.2. Role of the Elites.

Elites are a group of educated and influential men and women from a particular area who can intercede on behalf of their areas of origin in terms of development. Noni elites are found every where in Cameroon and some have been making lots of effort with regard to the development of Noni Sub Division.In an interview with some of these elites, they revealed a number of projects being carried out and some still in the making. which are aimed at keeping the youth back home in Noni Sub Division.One of them is Mr. Shey Maison Joseph NYONUCHI, a banker by profession. He began by saying 'We are involve through participation in village development authorities, building of schools, water and also helping to lobby for education closer to home".

He runs a foundation called the FISIY Foundation and Leadership centre. Which was created on February 2015 and was signed on the 24th October 2017 by the ministry of territorial administration. With headquarters at Ngaah in lassin. With branches in the USA ,Bambili,and limbe under construction. This foundation has as objectives the following,

- To promote good governance ,that is getting the community work with the local authorities as partners.
- Give back home what the village gave them
- Creating a produced management and commercialization center to encourage high production in both quality and quantity.
- Working with the councils and helping them to look for workforce.
- Organizes holiday camps to equip the youth with I C T technology;

This foundation recorded some successes amongst others which were,

They organize holiday camps which ran for 3 years with the youth being thought ICT technology and the building of their main hall and center at the foundation's headquarters in Ngaah Lassin with the use of local materials.

The foundation could not achieve much of it objectives with the major reason being the socio political crisis plaguing the two English speaking regions of the country.

Some prospects
- They have as prospects to build libraries in all colleges equipped with at least 50 computers for each college
- To encourage mechanized agriculture and aquaculture in the rural area, with the financing and equipment provided by another NGO (FNDCA)based in Mimboman Yaoundé Cameroon .
- Also engage in social housing at affordable prizes , creat football clubs ,handicappe centres all to make the rural area comfortable for many people who will see no reason to move out of the village for what is already found at home.

Another elite we spoke to was **Mr.Shey Kofon Killian Bonteh** ,an educationist based in yaounde.His contribution in the development of Noni Sub Division is through the sensitization of youth especially students to engage in studying fields that can be applicable in their context. He

runs a Noni language and cultural Centre which is aimed at reducing the language and cultural gap between the village and Yaoundé. This Centre has been helping children born out of Noni Sub Division to learn the Noni dialet and culture.

The limitation of this project is the fact that it is only found in Yaounde which is just one of the towns hosting migrants from Noni Sub Division.

4.1.2. Role the Missions

The missions here involve the Catholics, Baptist, Presbyterians, and the Muslims. These different mission bodies have been involve in the educational and health sectors within Noni Sub Division. The Baptist has a total number of 16 primary schools ,the Catholics has 10 primary schools while the Muslims has 02 and 05 community Primary schools or Private schools. The greatest number is opened by the state. These schools dose not only get the children involve or stay back home but equally employed teachers who can be able to meet their basic need right in the village without going to urban areas. Generally the primary schools has an estimated populated of 8328 pupils (Nkor Council development plan 2011) and a total estimated staff strength of about 193. (Nkor Council development plan 2011).Table 8

Table 8: Nursery and Primary Schools statistics in Noni Sub Division.

Ownership	N° Schools	N° of Pupils			N° of Teachers		
		Girls	Boys	Total	Male	Female	Total
Government Schools	31	2,849	3,055	5,904	65	42	107
CBC Schools	16	652	591	1,243	26	17	43
Catholic Schools	10	520	471	991	8	23	31
Islamic Schools	1	17	13	30	1	0	1
Private	5	71	89	160	5	6	11
TOTAL	**63**	**4,109**	**4,219**	**8,328**	**114**	**87**	**193**

From the table 8 , the Baptist missions dominate in terms of primary and Nursery schools with 16 institutions 23% ,followed by the catholic with 10, 19%. then the Muslims with 01.1.58%The government owned 50% of these institutions with a total of 31 out of the 63, and the private has 05. This can be explain by the fact that the Baptist mission were the first to established within

Noni Sub Division and equally had the vision of bringing education closer to the population as one of it tools for evangelism. This was followed by the Catholics. The small number of the Muslim and the Adventist can be explain by their late establishment within Noni Sub Division.
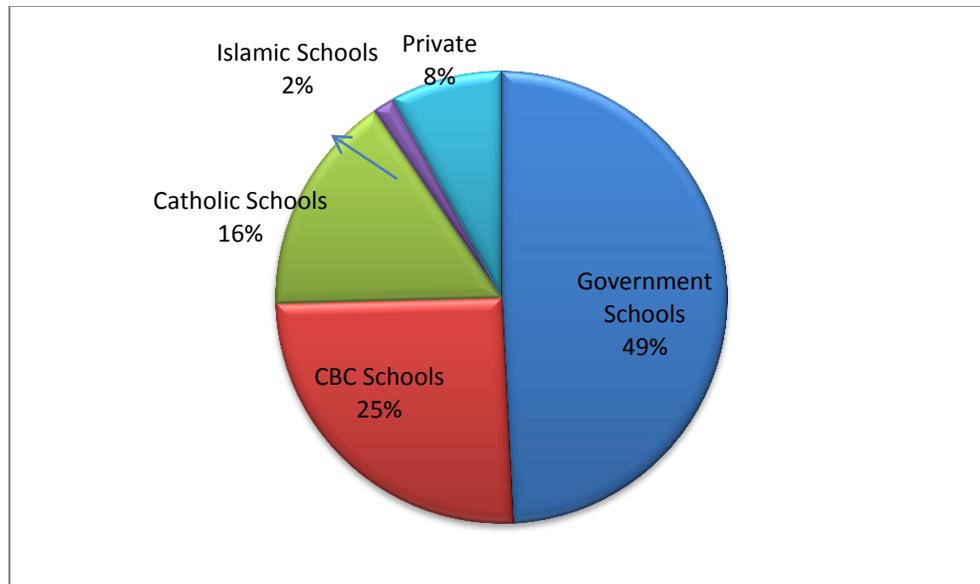
Figure 32: **Nursery and Primary schools in Noni Sub Division.**

In terms of secondary education the missions have just 03 college which include owned by the 03 Catholics. The rest of the schools are owned by the state and private individuals. The state has 08 colleges and 01 community college. These colleges has an estimated student population of about 1641 and an estimated staff strength of 30.This is represented on figure 33.
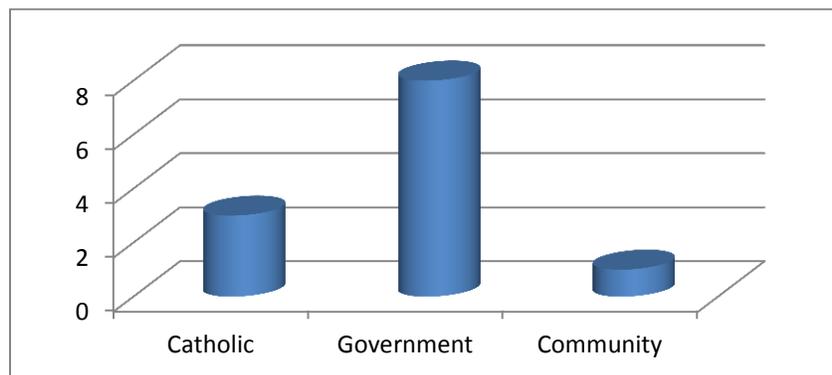
Figure 33: **Secondary schools in Noni Sub Division.**

The missions are also involve in the health sector within Noni Sub Division. These are the Baptist with 03 health centres and the Catholics with 03 health centres. These centres have not only been Centres for meeting up with the people   health challenges but also a source of employment to the local population who earn their living from there, helping them to stay back home and thus reducing the rate of rural exodus in Noni Sub Division.
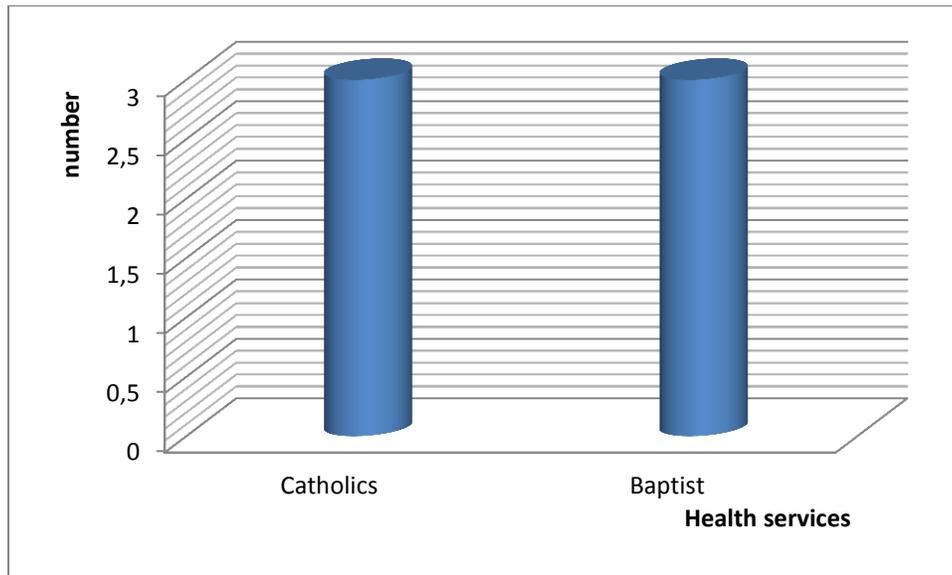
Figure 34: Mission health Centres in Noni Sub Division.

Source: Nkor council development plan 2011.

The missions particularly the Catholics are also involve in agriculture. The Catholic mission of Djottin Noni has embarked on a palm

The various projects carried out by the missions in Noni Sub Division are good and has been playing a great role in reducing the number of people living for urban adventures through employment opportunities and serving the community health and educational wise. But these projects are so limited as far as effectively reducing rural exodus is concern. This is because there are long distances between health institutions, which makes the health coverage very low. Secondly, Inadequate personnel in both quantity and quality, Inadequate equipment and infrastructure even in the existing institutions ,Inadequate budgetary allocations for healthcare by the various families. The number of health centres are limited , only 06.ie Baptist health centres of Lassin, Nkor, and Ngeptang with Catholic health Centre at Mbinon ,Bamti and the Djottin

health Centre. Amongst the 6 health services provided by the missions , only one of them is well equipped with medical personnel. The catholic hospital in Djottin constructed in 1965 by Rev Sister Elisabeth M located on the outskirt of Noni. This also makes the number of patients attended to small living the others with no option than moving to other areas for their treatment. Their personnel are equally not well paid considering the fact that there are in the village setting. This makes those aspiring for more income to migrant to urban areas with the hope of acquiring something better. their staff strength can not equally contain the unemployed population within Noni Sub Division.

Table 9: Health Care Facilities

Health Institutions	Hospital	Health Centre	Health Unit	Health Post	Pharmacy	Laboratory
Nkor	1	1	0	0	1	1
Lassin	0	1	0	0	0	0
Ngeptang	0	1	0	0	0	0
Bamti	0	1	0	0	0	0
Djottin	1	1	0	0	0	1
TOTAL	**2**	**5**	**0**	**0**	**1**	**2**

From the table 9, it is seen that in Noni Sub Division the health sector is poorly developed. There are no Pharmacies, no health laboratories. This makes it very difficult to conduct test within the entire Noni territory with an approximate population of about 64000 inhabitants.

In the educational sector, most of the mission schools are primary schools with a negligible number of secondary schools. (Just 03 colleges) amongst them with only one high school located far off in Lassin. This situation leave most students who complete the first cycle with no choice than to study out of Noni Sub Division, thereby promoting rural exodus.

The limited number of mission schools cannot as well absorb those who earn their living on teaching as they provide only a limited number of space for employment and the payment package is not encouraging per say. For example some one is recruited to teach in college for a monthly salary of 10000FCFA and 5000 FCFA in the primary. This amount can not sustained some one with a family, thus they are force to migrant to urban areas with hope of getting better opportunities. For the missions to effectively contribute to the development of Noni Sub Division which will eventually reduce the rate of rural exodus, they need to improve at the level of

creating secondary schools or colleges, and high schools. In addition to school structures that need to be constructed in most of the schools, other structures like halls and toilets are equally needed. Also classroom needs like benches, tables, chairs, blackboards, bookshelves and teaching aids and sports complexes are needed.This will go a long way to keep many youth who desire to continue secondary education as well as help to offer employment opportunities to many who may be going to urban areas seeking for teaching jobs. They equally need to improve on their institutions by increasing the number of services offered to the public as well as increase number of Doctors and not visiting doctors as it the case with many of these health centers found in Noni Sub Division.

4.1.3   Role of Local Development Actors
4.1.3.1 Village Development Associations (VDA)

Noni Sub Division is made up of six villages which are Din, Mbinon, Lassin ,Nkor, Dom , Djottin. All these villages have their developmental Associations. Village Development and Cultural Associations undertake development activities in the Council area. The following are the few officially registered Associations. NDA: Nkor Development Authority,MBIDA: Mbinon Development Association, DADA: Djottin Area Development Association, LADA: Laan Development Association, DIDA: Din Development Association, BVUDA: Bvugoi Development Association, NVPA: Ngeptang Development Association, BDU: Bamti Development Union, FADA: Febweh Area Development Association, SADU: Shiew Area Development Union, MBIDA: Mbinon Development Association, LADA: Lassin Development Association. These Village development associations and their year of creation is represented on table10.

Table 10: VDA, their year of formation and year of legalization.

Village	Association	Year of formation	Year legalised
Bvugoi	BVUDA	1992	1997
Din	DDA	1981	1991
Djottin	DADA	1981/1994	2002
Lassin	LADA	1981	1993
Nkor	NDA	1979	1988
Mbinon	MBIDA	1985	1992

Source: fieldwork.2021.

The village development associations are working in collaboration with regional, national and international organizations and also with other stakeholders to realize their projects that are earmark every year depending on the needs of the community.

The village development associations have external branches found throughout the national territory and even in the Diaspora. There is a close relationship between the home and external branches. For example DADA, NDA and MBIDA have branches in the United States of America. The branches are in the urban centres of Kumbo, Bamenda, Douala, Yaoundé, Maroua, and Buea. In Douala there are also branches in Bonaberi, Airport, Souza, Kompinya, Kilometre 33, Massoumbou, Bali and Edea. There are also Joint Regional branches in the South West Region and the Littoral Region of Cameroon.

4.1.3.2. Activities of Village Development Associations

These villages development associations carry out a number of activities which can be categorized in to socio-cultural, economic and political activities. The activities are pipe borne water, classrooms, community hall, health care, road rehabilitation and construction. The activities are shown in table 11.

Table 11: Category of activities of Village Development Associations in Noni.

CATEGORY	ACTIVITY	ACTORS
SOCIO-CULTURAL	-Road rehabilitation and construction	-VDA, CIG, Local council, NGO s
	-Bridges and culverts	- VDA, CIG, Local council, NGOs
	-Pipe borne water	- VDA
	-Classrooms	- VDA, Local council, NGOs
	-Community hall	- VDA, Local council, NGO
	-Electricity	-VDA, Local council, NGO s
	-public toilet and urinary	- Local council, NGO s
	-Health	-VDA, Local council, Religious bodies
ECONOMIC	-Markets	- CIG, Local council, NGO s
	-Agriculture	- CIG, NGO s
	-Thrift and loan	- CIG
	-Marketing	- CIG, NGO s
POLITICAL	-women empowerment	-CIG, Local council, NGO s
	- Regulatory	-indigenous institutions
	-Cultural	-VDA, CIG

Source: Field work 2021.

a. Pipe Borne Water.

Water was and is the first priority of the village development associations in Noni. All villages in Noni are having pipe borne water and it is still in extension to all quarters. Recent water extraction in Noni is at the village of Din and Djottin. In Djottin there are knew catchments at Kilumen and Bawe and in Din there two catchments at Ngeptang and Qwan. This is to help add the available water and extend it to all the village quarters. The rest of the villages have old water networks and catchments. This is a precious commodity that the village development associations of Noni were and are very much interested in developing.

In the pipe borne water sector, the village development associations worked with international institutions like HELVETAS, benefactors through the Catholic Church and today they are working with OK WATER which is another non-government organisation based in Kumbo, the divisional headquarter of Bui division. OK WATER is an NGO promoted by the Canadian government which is out to provide clean water, protect catchment areas and to ensure the sustainability of the available water networks. Table 4.4 shows the total population, number of stand pipes per village and the private pipes connections

Table 12: Number of stand pipes and private pipes per village.

Village	Population in thousands (2005)	Number of stand pipes	Privates pipes	Total per village
Din	7803	36	42	78
Djottin	13029	103	125	217
Bvugoi	812	9	19	28
Lassin	3689	26	46	62
Nkor	9131	50	89	130
Mbinon	4159	12	34	46
Total	**38623**	**236**	**355**	**591**

Source: Field work 2021 and from council development plan of 2012

From table 12, there are two hundred and thirty-six (236) stand pipes in all the six villages of Noni sub division. Taking the total population from the 2005 census, there are 171 people for one pipe assuming that there are no private connections. Djottin have 103 stand pipes which is the highest number of stand pipes; follow by Nkor with 50 stand pipes. If the population of Djottin is

taken in to consideration with the stand pipes, it will mean that there are 126 people for a stand pipe which is still not sufficient. Taking the total number of pipe borne water connections in Noni. This means that the level of water connection is the ratio 1:63 that is, one pipe is for sixty-three persons. This indicates that all the Noni people are not yet having pipe borne water to drink despite the fact that there many water catchment sources.

Photo 2: Water reserved Tank in Djottin Noni.

b**. Road Rehabilitation and Construction.**

In the domain of road rehabilitation, Village development associations in Noni have done much. This is because all the roads in Noni and those linking Noni are seasonal roads; that is better during the dry season and very mouldy during the rainy season. Inter-village road rehabilitation is also undergoing serious attention because of the undulating topography, jungle environments and whitish clay soils that are waterlogged lacking silt to make it cohesive and bind together soil particles to form good a solid road. And secondly they use gravel and laterite and due to the hilly nature of the environment, they are easily carried away by overland flow and wind.

The constructions of roads in Noni were solely through community work. Traditional authorities and institutions like the fon, kwifon and the nwerong supervise the constructions of roads in Noni Sub division. From the 1980s until present, it is the work of Village development associations in close collaboration with the traditional authorities. Table 13 shows the activities of village development associations in road construction and rehabilitation. The Village development associations has open up new roads and maintained the old roads that they constructed without the intervention of the state. Farm-to-market roads and inter-village roads are constructed by the

Village development associations. The Village development associations have been working with the Nkor council in the rehabilitation and construction of roads. Village development associations spend a lot of money during the rainy season to make the roads passable. This is done through organisation of frequent community works and hiring of caterpillars (front loaders) and trucks. Nkor council, Gp-DERUDEP and the state have also been of great help in the road sector in Noni.

Table 13: Road rehabilitation and construction in Noni sub division by Village development associations.

Village	Culverts	Bridges	Roads	Project area
Bvugoi	2	none	1	Digging of the Bvugoi-Nkor road.
Din	4	2	3	Ngeptang-Kali din road, Baweh-Bamti road, Nkali din-fibueh road.
Djottin	7	4	6	Djottin-Tadu road, Fonti-Chifua-Lafele road, Chieti-Meyessi road, Jow-Bandiv road, Lafele-Gaggi road, Jeyibai-megaiy-mee road.
Lassin	3	1	2	Jeng-calaba, Ngaah-Bvudungti.
Nkor	6	3	4	Kibavki-Chiney, Nyale-Esha, Nyale-Kochi-road, Kochi-Banten road.
Mbinon	1	1	2	Mbinon-Banten road, Mbinon-Lassin road.
TOTAL	23	11	18	

Source: Field work 2021.

From table 13, a total of 23 culverts, 11 bridges and 18 roads have been constructed in the whole of Noni Sub division by the Village development associations. These figures give an impression that the network of roads is the best but that is not the case. Much still needs to done as far as road construction is concerned. There are quarters in Noni that are unreachable because of no good bridges and roads such as Gofung, Evun, Fibweh and Enkowe all in Din and Chaw in Djottin. There are bridges constructed with sticks and bamboos which are not long lasting and during the rainy seasons the rains carry the sticks and bamboos away cutting the quarter away from the rest of the village. Plate 4 shows four bridges constructed by the Village development associations in Din, Lassin, Nkor and Djottin. The bridges were solely through community work and finances contributed by the community. The bridge indicated in plate 4 is in Din constructed by Din Development Association (DDA) and that of Lassin is a temporal bridge constructed by

the quarter branch of Laan Development Association (LADA). Nkor Development Association benefited from the works of a missionary priest who help them in constructing six bridges today called spirit bridges, but all the labour was provided by the community. It is almost the same with that of Djottin constructed over river Ntan by Rev Sister Christa; the community also provided the labour work.

Plate 4: Bridge constructed by Village development associations in Noni.

Photo1: Bridge on river Montfui in Din. Photo 2: Quarter Bridge in Lassin.

Photo 3: Spirit Bridge in Nkor.   Photo 4: Bridge on river Ntan in Djottin

4.1.3.2. NGO(s) and Common initiative groups.

There are a few organized cooperative associations and common initiative groups in the Council. Equally few NGOs based outside the municipality operate in this area. The following are the few common initiative groups.

Nkor Jolly Mixed Farming Group,Nkor Farm Men Union,Nkor Progress Mixed Farmers Group, Nkor-Djottin Mixed Farmers C.I.G, Nyalim-Enkowe Maize Farmers C.I.G Nkor, Kichia Mixed Farmers C.I.G, Nkor CPMS, Entoumbou Mixed Farmers C.I.G Nkor, Kikoghen Mixed Farmers C.I.G Nkor, Bomonti Farmers Group, Enter Small Livestock C.I.G Nkor, Bantoh Foodstuff And Livestock Group, Mejeiwu Social Womens Group, Bvugoi CPMS Limited, Din Cooperative Produce Marketing Board, Cooperative Produce Society, Lassin, Bongabi Group,Lassin, Nkwaki Group, Lassin, Bonchite, Lassin, Kikonen, Lassin, ANCO- Agriculture and Nature conservation Organization, PNDP National Community Driven Development Program, HEIFER Project International, CREAM- Children's' Reassurance Ministry, GP- DERUDEP, CAMGIS Cameroon Geographic Information System.

Most of these associations and CIGs have been involve in the development of Noni Sub Division in many ways. Some of the areas include the construction of village community halls, provision of pipe borne water, support farmers unions in acquiring farm tools and loans at low interest rates, help in the local farmers in marketing their products. All have helped to a lesser extend in reducing the rate at which people still leave the area. Some of their short comings can be explained by the lack of adequate agricultural tools and other facilities, poor state of the main road talk less of the farm to markets roads, lack of adequate education to can keep many in the business without withdrawing to other activities. One other major reason of recent is the absent of peace within Noni Sub Division caused by the prevailing socio-political crisis plaguing the two English speaking regions of Cameroon. Some of the common initiative groups in Noni Sub Division is shown on table 14.

Table 14: Common initiative groups and activities in Noni

Village	Names Of Common Initiative Groups	Number	Activities
Bvugoi	Bolumteh Dom, Bvugoi CPMS, Dom social women, Enter Small Livestoc.k	4	-farming -social -economic -community work
Din	Din Cooperative Produce Marketing Board, Abakwa, Unity Sisters all in Din and Cooperative Produce Society,	5	-farming -social

			-economic -community work
Djottin	Bonkola, Nyohf Bunti, Ndong Jow, Strong Pillars, Wefiewe, Benfissen, Lahrry, Kitong(Horns), Nyofi Meyese, Kibonen, Bomemte Women, Great Development, Bogineh, Jow Unity Women, Kintashe Women, Kifong	16	-farming -social -economic -community work
Lassin	Bocheiti, Agro-live mixed farming, Sugar women, Balanjo, drivers union, Taifew of ngaah, Hadakai, Social women, Bongabi, Nkwaki Group	10	-farming -social -economic -community work
Nkor	COSSA International, Parka, Momeyen, Anco, Green leaf, Social Women, Jolly Mixed Farming Group, Farm Men Union, Nkor Progress Mixed Farmers Group, Nkor-Djottin Mixed Farmers, Nyalim-Enkowe Maize Farmers, Kichia Mixed Farmer, Entoumbou Mixed Farmers, Bomonti Farmers Group, Bantoh Foodstuff And Livestock Group, Bomonti Farmers Group	17	-farming -social -economic -community work
Mbinon	Kikoghen Mixed Farmers, Mejeiwu Social Womens Group	3	-farming -social -economic -community work
Total		**55**	

Source: Nkor CDP 2012 and from Chief of Agricultural post.

The common imitative groups are mostly farmers groups with the main activity being farming; besides farming they do carry out social, community work and thrift and loan. Farmers are able to buy their farm tools and equipment. There are 55 common initiative groups, 48 legalized and 7 operating on illegal basis. Socio-economic infrastructures in Noni Sub Division realised by Village development associations, CIG, NGOs are presented in figure 35.
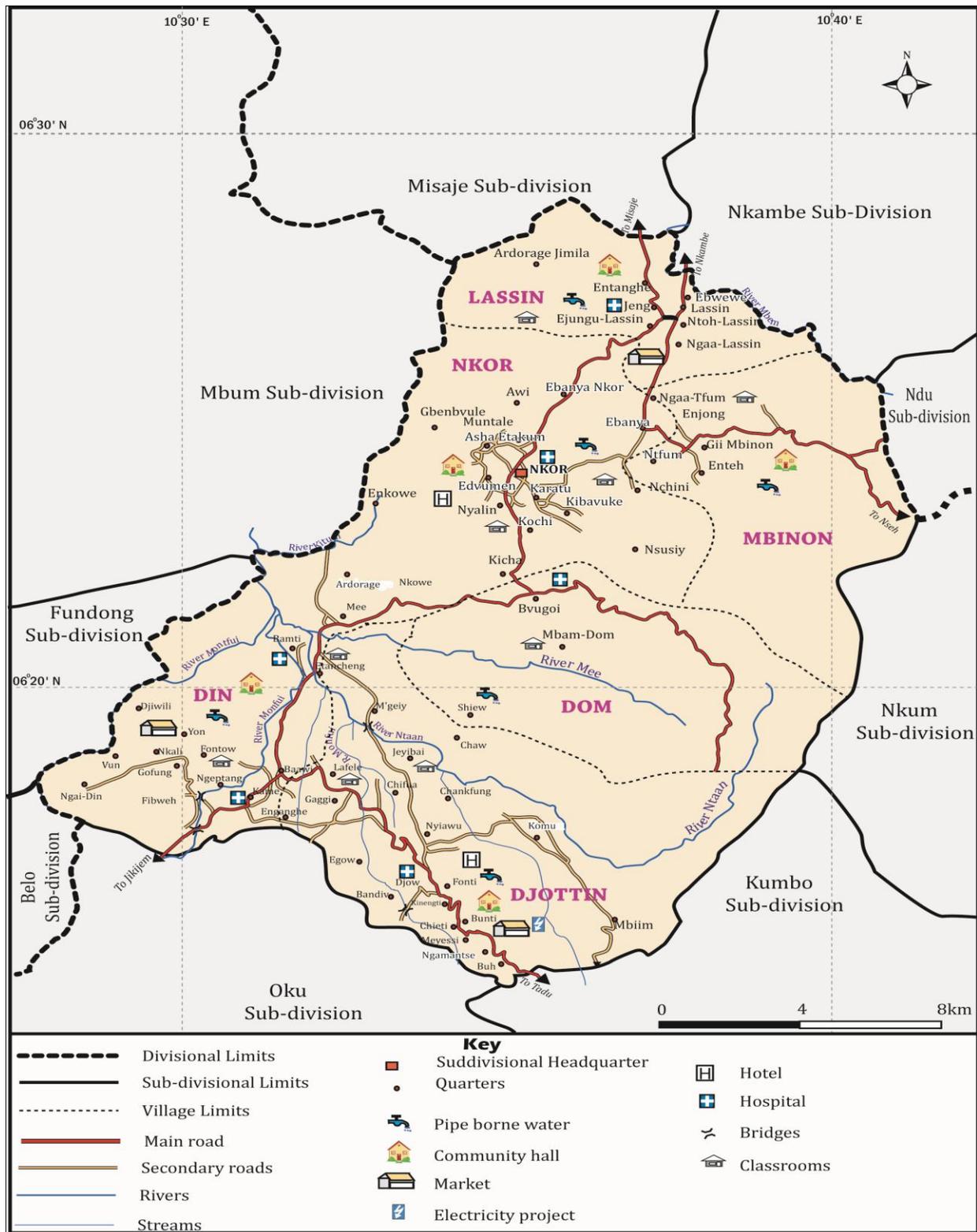
Figure 35: Socio-Economic infrastructure realized by VDA,CIG,and NGOs.
Source : Adapted from CAMGIS and modified by Dimla Ernest.

Figure 35 illustrates some of the socio-economic infrastructure realized by village development associations ,Non-governmental organizations and common initiative groups in the six major villages of Noni. Some of these infrastructure include, pipe borne water, community hall, markets ,hospital, bridges and classrooms. These social facilities has foster rural development of the Noni Sub-division.

Strategic Humanitarian Services (SHUMAS) is a Non-Governmental Organization with head office in Ntafiak, quarter Nkwen Bamenda III council in the North West Region of Cameroon created in 1993 and is concern with rural development. SHUMAS uses an integrated approach to rural development. From field investigation, SHUMAS has only intervened in Ngeptang-Din in the construction of the new catchment, two (2) public taps, one (1) collection chamber and one (1km) water pipe line. The Ngeptang Development Association (NPDA) contributes and provided the labour through community work before the project was realised. The Din community in Bawe-Ngeptang is now enjoying pipe borne water thanks to SHUMAS. This project was done in collaboration with the ROTARY FOUNDATION in Kumbo and the ROTARY INTERNATIONAL.

Plate 5: Pipe borne water constructed in Bawe-Ngeptang by SHUMAS

Photo X. Activities of SHUMAS in Bawe. Photo Y. Water pipe in Bawe-Ngeptang
 A. Enlisted on their sign post.
 B. Water tape.
 C. Containers to carry water .
Source: Fieldwork 2021.

- **Activities of PNDP and GP-DERUDEP.**

GP-DERUDEP is the Grassfield Participatory and Decentralized Rural Development Project created in 2005 and PNPD is the National Community Driven Program created in 2012 to facilitate the council empowerment process towards vision 2035. The institutions started working with the village development associations but now due to the effective decentralisation of Cameroon, they are now working in partnership with local councils.

During the first phase of GP-DERUDEP, Noni community benefited from a good number of projects like community hall in Mbinon, construction of the Mii-Nkor road through Bvugoi, bridge on river tfvuyam in Djottin, 20 culverts all over Noni sub division and public toilets (Nkor council 2012). The village development associations and the entire community contributed ten percent (10%) of all the projects with GP-DERUDEP projects and with PNDP, the council is in charge. These institutions are working with finances borrowed by the Cameroon government from the World Bank and African Development Bank for rural development. In 2015, PNDP through Nkor council constructed modern market sheds in Djottin, Din and Lassin. GP-DERUDEP in its second phase had no project for Noni Sub Division.

4.1.4. Role of Traditional Authorities.

The traditional authorities of Noni Sub Division have been playing their own role are stakeholders in development. Some of these authorities include His Royal Highness Fon Dominic, the fon of Mbin Nkor Noni. He has been participating in the development through the allocation of cultivable lands to the youths and encouraging them to engage in agriculture and animal production. Secondly through persistent education on making good use of the basic amenities we have such as schools and hospitals. They also seek for government grant to help farmers improve on their farming methods.(though government still slow to react).carrying out a lot of counseling with the youths on the disadvantages of leaving village without specific things to do in towns. The youth are also being encouraged to learn trade like Carpentry, bricklayers, tailoring etc. These strategies according to his Royal Highness has been successful given that fact that 75% of those spoken to yielded positive fruits.

This has not been without some challenges which include the lack of finances to empower the youths instantly, the slow rate of government response from appeals, absence of some basic amenities like electricity, good hospitals, and poor road network. With the absence of these facilities, many youths still find it difficult to stay back home.

As to what need to be done in order to reduce movement of youth out of the village, Noni Sub Division should be provided with basic amenities like electricity portable water, good hospitals. Continuous training workshops on processing of local products to semi-finish products. Regular organization of traditional festivals which will bring youths together for better mentorship and counseling, and improving on the working conditions and living standard of the farmers.

4.1.3   Role of the Nkor Council.

Nkor Council was created by Presidential Decree No.93/322 of 25th November 1993. This decree also stated that Nkor Council shall have the same administrative boundaries as Noni Sub-division. This was to separate it from the former Oku-Noni Rural council. Since 1993, the council has recorded many successes in the domain of socio-economic development and infrastructural development. All development in the various villages of Noni is taking place under the Noni municipal council hence village development associations are working hand in glove with the Nkor council because all the infrastructural activities taking place within the municipality are recorded by the council development officer. The activities of the council are very visible . The Nkor rural council in Noni Sub Division has been one of the major stakeholders in the development of the sub division. This is through the provision of basic social amenities like water, village hall and the construction of schools and bridges. The council equally promote education through the provision of scholarships to most of the best students in schools within the municipality and also the provision of holiday jobs the schools children which assist them acquire their school need. The council equally help in the construction and maintenance of rural road network. All of this project help in keeping most of those concern at home.

The Nkor council realised the above projects in Noni since 1993 with the assistance of the government through public investment projects, FELCOM, World Bank through GP-DERUDEP and PNDP. The projects were carried out taking in to consideration the council development plan of March 2012.

The first deputy mayor for the Nkor council "Mr.Forgwei Festus Nyowike".said the council depend mostly on government investment budget and from market tolls which are very minimal. He added that these projects helps to employed the youth of the municipality helping them to gain some income that helps them to stay back home. The mayor added that if the council were to be autonomous it will not exist because the council depend 99% on government funded projects. To remedy the situation the Mayor said the Nkor council can get into council twining with other councils abroad to benefit from equipment like tractors and even seek for financial aid.

Plate 6: Construction of bridge

Photo A: A completed bridge   Photo B: An uncompleted bridge.

Sign post bearing name of river.(1) village elder with his subjects on an inspection tour.(2)

Plate 7: Classrooms under construction and council Hall in Noni.

Photo A. Front view of Classroom building   Photo B: Nkor Council hall

The functioning of the council equally provide employment opportunities to many people who see no need of leaving the village for urban areas. With these projects people are being employed and their standard of living improved upon. But the impact is not very efficient as far as promoting rural development is concern. Some of the reasons ranges from the limited number of projects carried out by the council, difficulty in the acquisition of funds to sponsor various projects ,unstable environment within the municipality.

4.2 Conclusion

A close analysis of the different strategies and projects implemented within Noni Sub Division to contain the ever increasing population of Noni Sub Division are not effective. This can be justified by the continuous movement of people out of Sub-division for various reasons. Amongst the different strategies the role of the missions is greatly felt as far as reducing rural exodus is concern. This is through their educational and the health sectors. A comparative analysis of the various stake holders shows that the council plays the least role in reducing rural exodus .In quantitative terms from questionnaires, interviews and focus group discussion, it was revealed that 45 out of 95 responded in favour of the missions (47.36%), 15 out of 95 responded in favour of the council (15.78%), 25 for the elites (26.31%),and 10 for traditional authorities making up (10.52%)..This analysis give the Missions an upper hand as far as reducing rural urban movement in Noni is concern. This is done through the provision of education and health services. They are seconded by the elites through their various projects carried out in the village.

CHAPTER FIVE

ROLE OF G I S AS POTENTIAL DECISION MAKIG TOOL IN CURBING RURAL EXODUS IN NONI SUB DIVISION.

5.0 Introduction.

Geographic Information Systems (GIS) and Cartography is a very important decision making tool in the management of taxes which will go a long way in enhancing taxes. This will increase council revenue and hence more projects. Efforts made by the management to locate their tax payers and carryout effective follow up is still limited to the use of hand registers which at times are not very leasable.   .

Considering that this council area occupies a geographic space, tax collection cannot be effectively managed without having an idea of the spatial location of tax payers and how accessible they are. This tool can equally be use to locate some of the natural resources within the council area which can be exploited to raise revenue such as caves, sandpits ,quarries etc

5.1 Application of GIS in revenue enhancement in Nkor council of Noni.

The GIS and cartography tool can be use to enhance council revenue which will improve the development of the sub division through the provision of more jobs and the increasing the standard of living of the population. This will go along way to hold back most people in the village thereby reducing rural exodus within Noni Sub Division. This can be achieve through the location of tax payers ,different tax facilities like markets ,cattle markets and other natural potentials which can be exploited.

For example, the GIS and Cartography tool can be use to estimate the number of tax payers, map out their locations to facilitate decision making. From such analysis predictions can easily be made to ease collection and control.

The taxes collected here include ;

The Global Tax (GT) or Discharge Tax, Local Development Tax (LDT) paid annually. Liquor License (LL) for drinks/alcohol. Building permits and Building registration,Cattle Tax (Jangali) and Transhumance, Market Tolls (Paid only on market days),Itinerants Tax paid by people who

hawks within the council area from out side of the council area,Parking Tax paid by clandestine cars drivers,Hygiene and Sanitation Tax,Stamp Duties,Ground tax.

The above taxes can be classified into two groups, that is from taxation (this include rents from council structures like market shade and market tolls) and Direct revenue collected from those doing business.

Most of these taxes are paid per trimester except for the Local Development tax which is paid annually. Most of the taxes in the Nkor Council fall under category A and B.This. can be explain by the subsistence nature of economic activities in this area.

The hygiene and Sanitation tax is not well implemented in the Nkor council. Only fines are levied on those who do not posses a medical certificate. (fine of 2500).These fines are paid directly to the council. The payment of the Global Tax is depended on how much some one pays the Local Development Tax. That is, the higher the Local Development Tax ,the higher the Global Tax and the smaller the Local Development Tax, the smaller the Global Tax.

Another tax which is one the most predominant is the Cattle Tax commonly called the Jangali Tax. This tax is paid by those who own cattles. Jangali tax is paid annually and per cattle. Each cattle pays 300 FCFA per year and for the Transhumance ,it vary from 200frs to 500frs.Below is a presentation of some Ardorates and the number of cattles found in each. A comparative study over three years,(2013,2014, and 2015).

According to field statistics, over 70% of the total cattle reared in Noni Sub Division are owned by the Fulani. Based on council survey from 2013 to 2015 the distribution of cattle across the six Adorates is shown on table 15.

Table 15: Evolution of cattle by Adorate in Nkor Council Area.(2013/2015)

Serial number/Adorate		Year/number of cattle		
S/N	Adorate	2013	2014	2015
1	Din	1711	1259	1366
2	Karatu	1740	1652	1578
3	Enkowe	1694	1569	1452
4	Mbinon	1181	1734	1273
5	Lassin	1288	1337	1218
6	Dom/Djottin	2157	1787	1834
7	*Total :*	*9,771*	*9,338*	*8,721*

Source: Field Data (Nkor Council)

From table 15, we observe a decline in the number of cattle's from 9771 in 2013, 9338 in 2014 and 8,721 in 2015. The reasons gotten for the decline is linked to the high number of farmer-grazer conflicts. It is in these areas that some of the key arable farms are located due to their fertile nature. Such conflicts with the ever immeasurable consequences have thus been pushing out Fulani out of these zones thereby leading to the downward trend in the growth of cattle. Other reasons is that of cow theft, migration, increase in the population leading to high demand which is not proportional to birth. Table 15, when plotted, gives the following bar graph that presents the trend more vividly.
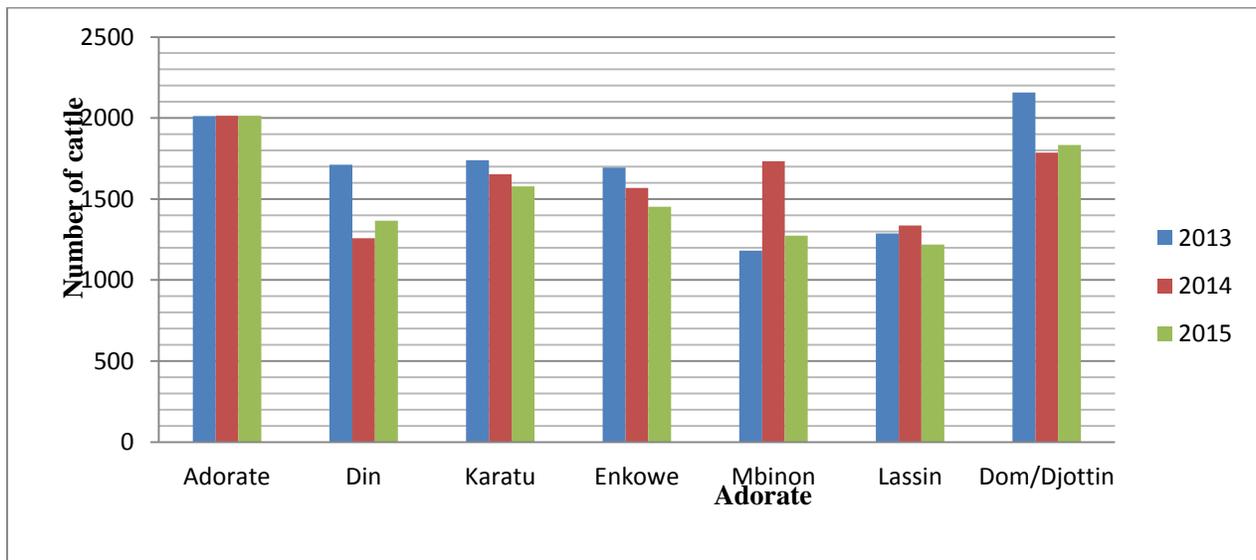
Figure 36: **Evolution of cattle by Adorates in Nkor Council.**

Source. Derived from table 12

According to a compilation from the njangali tax collector in the Nkor Council during the research, the following figures were gotten as trend of growth of the cattle production in Noni.

Table 16: Trend of growth of the cattle production in Noni.

Year	Number of grazers	Number of cattle	Revenue (FCFA)
2010	313	9458	2837400
2011	301	9282	2784600
2012	287	8997	2466900
2013	328	10574	3172200
2014	318	9926	2977800
2015	312	9477	2843100

Source: Nkor council /MINEPIA

Looking at table 16 we observe a great fluctuation in the number of cattles as well as the revenue collected. The reason gathered in the field was that, many cattle grazers during Jangali tax collection fail to declare all their cattle to the tax collectors. It should be noted that for each cow declared, the tax on it per year is 300 FCFA by the council. This trend of fluctuation can be illustrated on the figure 37.

	1	2	3	4	5	6
year	2010	2011	2012	2013	2014	2015
Revenue	2837400	2784600	2466900	3172200	2977800	2843100
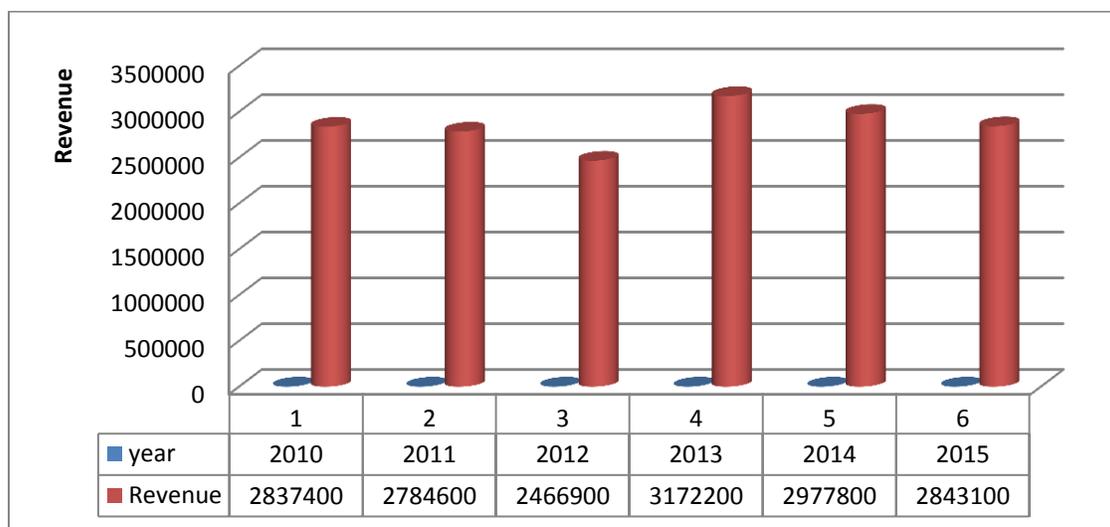
Figure 37: Variation in revenue collection from cattle (2010 to 2015).

Source. Derived from table 16.

Figure 40 shows the trend of fluctuation in the number of cattles and the revenue collected by the council between 2010 to 2015.From this figure,2013 recorded the highest number of cattles

registered (10574) and highest income collected from cattle owners (3172200 FCFA).The least amount collected was in 2012 (2466900) with the smallest number of cattles (8997)

5.2. Samples of Some Projected Revenue From Taxes for a Three Years Period.

Statistics gotten from the council on the evolution of revenue from taxes for a three year period that is, 2013, 2014 and 2015,shows a fluctuation the revenue collected as showed on table 17.

Table 17:   Projected Revenue From Taxes For A Three Years Period in Noni.

Year	Projected Budget(FCFA)	Amount collected(F CFA)	Difference(FCFA)
2013	202,845,701	123,773,374	29,072,327
2014	337,419,171	252,555,874	84,863,297
2015	285,565,000	161,621,175	12,394,825

Source: Nkor Council Archives.

From the above statistics, there is no steady evolution in the revenue collected from taxes. The amount collected start increasing from 2013 to 2014 and then falls drastically in 2015.This irregular pattern in the collection of revenue from taxes in the Nkor Council area can be attributed to several factors ,amongst which include; difficulty of locating the tax payers, unstable nature of the council staff, insufficient revenue collectors, the vast and accidented nature of the terrain, inadequate means of transportation and the absence of a spatial database. The projected revenue from taxes can be presented in figure 38.
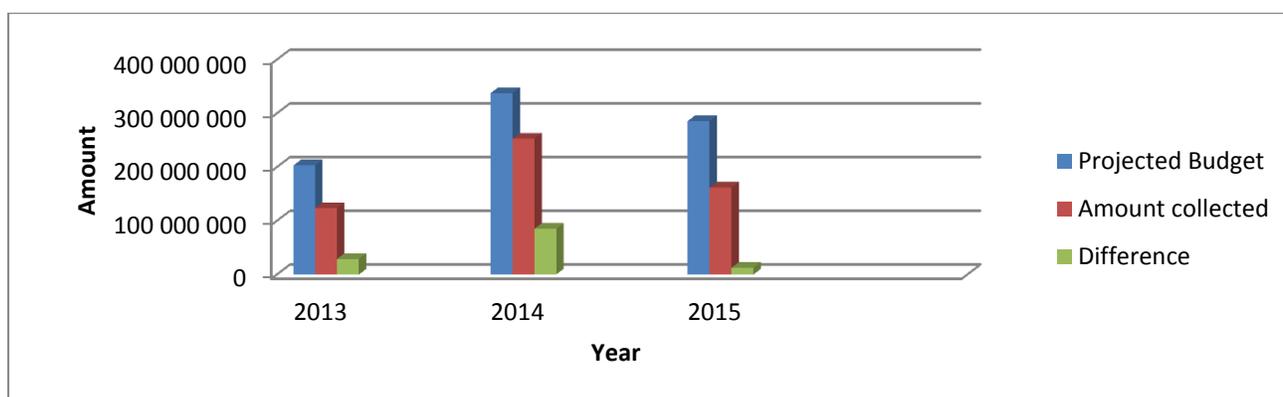
Figure 38: projected Revenue From Taxes For The Period 2013 to 2015.

Source. Derived from table 17

Figure 38 shows projected revenue from taxes for the period 2013 to 2015. For each year there are three variables, that is amount budgeted, amount realised and the balance. We observe from figure 40 that in 2014, the highest amount was budgeted and the highest amount was collected. Generally there is a fluctuation in the council budget realised between 2013 to 2015.

5.3. Methods of Tax Collection

In the Nkor Council, tax payers are identified by going out for assessment trips. This is done on a monthly bases. These council officials go out with the use of motor bikes and especially over long distances and then by trekking within the core areas. The council officials involve in the revenue collection that is, tax clerk and his team, issued a receipt upon payment and the amount paid registered inside the register seen below. This methods of using hand registers in keeping taxes records is disadvantageous in that in case of any fire incident or fire break out the book will be destroyed and tax records are going to be missing .This can promote corruption and embezzlement as no authentic records will exist. Below is a sample of potential tax payers recording sheet in the Nkor Council.

Figure 39: Sample of tax payers recording register in Nkor Council.
Source: Nkor Council Archives.

From the figure above ,there can be a lot of mismanagement as far as tax collection is concern. It can equally promote fraud which will eventually reduce the amount of revenue in the Noni council which affect development negatively.

5.4.   Type of markets in the Nkor Council Area

Markets are important areas for the generation of revenue for councils. One cannot therefore talk about revenue enhancement through tax collection without linking it to market points. These markets can be classified into two, namely Official Market which are constructed by the council and Spontaneous Markets which develop along major roads and quarter Junctions. They have a direct correlation with roads distribution. There are three main weekly markets that operate at full potential in the following order, Lassin market, Djottin and Bamti. Nkor, the seat of administration, has no functional weekly market because the day for the market is the same as that of Oku and Nkambe markets and most traders prefer these markets to that in Nkor. It will be of benefit to the council if another day is allocated to this market. Foodstuffs, meat, pigs, goats and chicken, palm wine are supplied while second- hand dresses, shoes, various articles, beer, fish and petrol sold come from Kumbo. Eight spontaneous markets were located within the council area.

These markets especially the official markets have specific days when the hold and it is usually once a week and four times a month. Business people come in from the various villages within the council area and from neighboring villages to sell their articles in these markets. Each of this markets has a capacity of hosting at least 200 traders daily. They sale their articles inside shades constructed by the council. They pay a types of tax called Market Tolls which usually vary from 150 FCFA to 500 FCFA. Examoles of traditional and modern market is shown on plate.

Plate 8: Partial View of Traditional and Modern market shade in Nkor Council area.

Photo A: Local market in Lassin.   . Photo B: Modern Market in Lassin.

Source : Dimla 2021. **1** Local market shade . **2** = local market bench. **3**=Modern market shade.

In the Nkor Council area namely; Lassin and Mee-Dom cattle markets where only Cattles are usually brought in from within the council area as well as outside of the council area from neighboring villages. These markets unlike those for the sales of goods holds once a week. These cattles markets has a capacity of of about 300 cattles each.plate 9 shows the lassin cattle market

Plate 9: Cattle Markets in NC**.**

Photo **A**. Sign board showing market days. Photo B = Lassin Cattle market
C =wooden fence surrounding the market. D= Market shade.
Source: Dimla 2021.

main cattle market in the Noni Sub-Division and it generate lots of income to the Nkor council of the Noni Sub-Division. If more modern shades are constructed the amount of revenue generated

will increase and in turn increase the council budget which increase the number of council projects.

5.5.1. Estimates on the number of market shades and ground tax collected

Table 18: Estimates on the number of market shades and ground tax collected Noni.

Markets	Lassin	Nkor	Bamti	Djottin
Number of shades	50	15	40	35
Amount per trimester (FCFA)	50 x 1000frs = 50000frs	15 x 1000 =15,000frs	40 x 1000 =40,000frs	35 x 1000 =35,000frs
Amount per year.(FCFA)	50,000 x 4 = 200,000frs	15,000 x 4 60,000	40,000 x 4 160,000frs	35,000 x 4 140,000frs

Grand total : 560,00FCFA .

Source: Field study 2016.

From the above statistics we noticed that from the four official market the council can raise an estimate of about 560,000frs CFA just from ground tax only annually. if the other temporal markets could be developed into official markets and the number of shade increased, this amount can be trebled given the fact that eight spontaneous markets were located. see figure 40
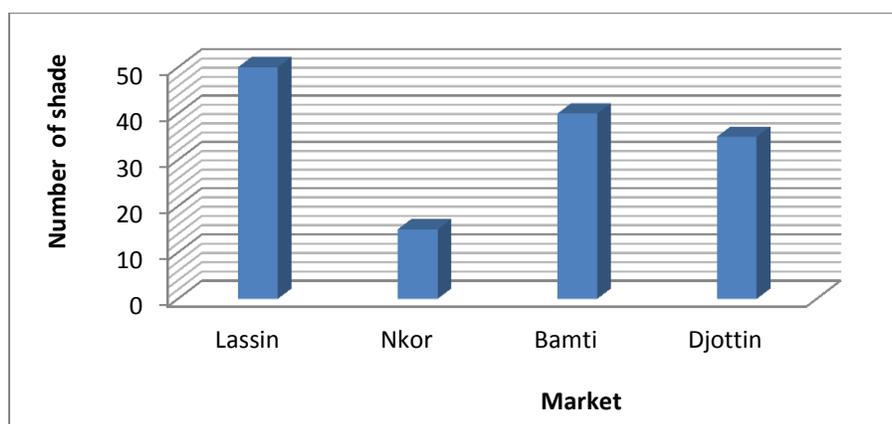
Figure 40: Number of shades/ amount collected in Noni.
Source: Derived from Table 18.

The Lassin market has the highest number of shades(50) followed by Bamti market with 40 shades, Djottin (35 shades and Nkor with 15 shades.This variation is in relation with the carrying capacity of each market.

5.5.2. Estimates of Market Capacity and Market Toll Collected for Official Markets

Table 19: Market Capacity And Market Toll Collected for Official Markets

Markets	Lassin	Nkor	Bamti	Djottin
Capacity	**500**	**100**	**450**	**300**
Market Tolls per week	500 x 200 =100,000frs	100 x 200 = 20000frs	450 x 200 = 90,000frs	300 x 200 = 60,000frs
Market Tolls per month	100,000 x 4 = 400,000frs	20000 x 4 = 80,000frs	90,000 x 4 =360,000frs	60,000 x 4 =240,000frs
Market Tolls per year.	4,800,000frs	960,000frs	4,320,000frs	2,880,000frs.

The above estimates gives a grand total of about **12,960,000FCFA**

Source: Nkor Council Archives and field survey 2020.

The market toll used in the above estimate is an average.an average of 200FCFA per trader. From the four official markets 12,960,000FCFA can be raised annually. This amount is very small as compared to the council projects. There is therefore need for the council to see into transforming the numerous spontaneous markets in official markets. With the eight located spontaneous market, basing on the above statistics the council can make an annual revenue only from market tolls of about 38,880,000FCA .This can be presented on figure 41.
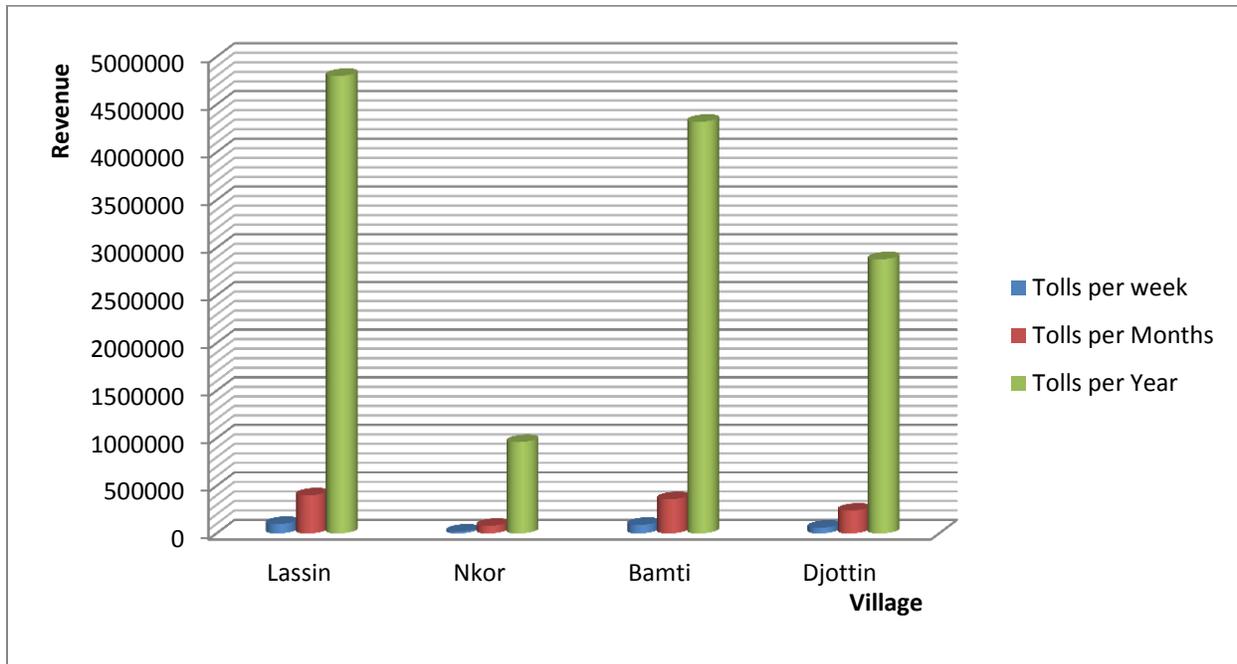
Figure 41: Market capacity / Market Tolls

Source: Derived from table 27.

Figure 41, illustrate the amount of market tolls collected per week, month and year respectively from the different organized markets of Lassin, Nkor Bamti, and Djottin of the Noni Sub-Division. From figure 41, Lassin market and Bamti market are highly attended with the highest annual income followed by Djottin and then Nkor market. These projections shows that if the eight spontaneous market located can be transformed to official markets ,more revenue will be generated which could improved on the level of economic development of the Noni Sub-Division through increase in the number of employments offered by the council to a majority of the population. This will drastically drop the number of people leaving the Noni Sub-Division due to lack of employment.

5.5.3. Estimates of market tolls From Cattle Markets

Table 20: Estimates From Cattle Markets

Markets	Lassin(FCFA)	Mee-Dom(FCFA)
Capacity	300	100
Market Tolls per week(FCFA)	300 x 250=75,000	100 x 250=25,000
Market Tolls per month(FCFA)	75,000 x 4= 300,000	25,000 x 4 = 100,000
Market Tolls per year. (FCFA)	3,600,000	1,200,000

Source: Nkor .Council archives.

The grand total is about **4,800,000FCFA** coming only from cattle markets for one year as market tolls. Figure 42 is a representation of the above statistics of table 28.

	Tolls per week	Tolls per Month	Tolls per Year
Lassin	75000	300000	3600000
Mee-Dom	25000	100000	1200000
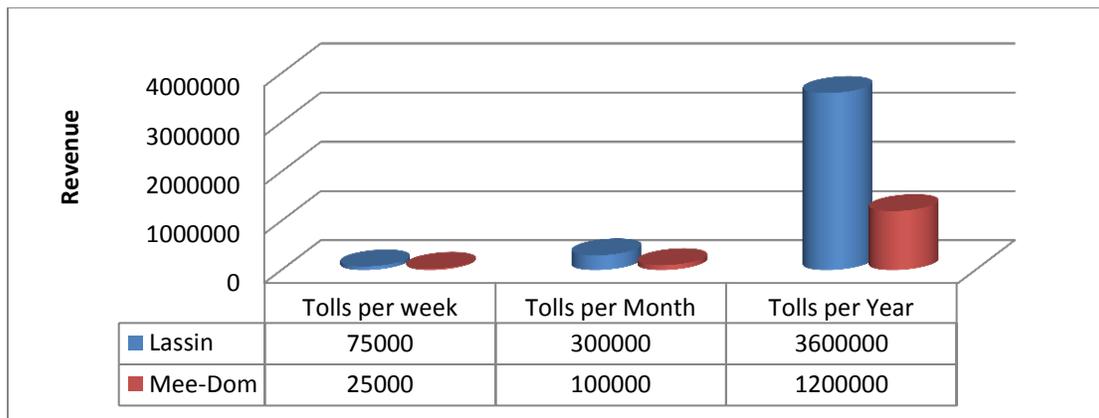
Figure 42:   Extimates of market tolls from cattle market

Source: Derived from Table 20.

The different natural potentials found within Noni Sub Division can also be easily identified and mapped with the application of the GIS and Cartography tool. Such potentials in Noni Sub Division include Caves, Sand pits, Stone quarries natural forest as seen below. These potentials are shown on plate 10 and 11.

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Plate 10: Touristic potentials in Nkor Council area**.**

PhotoA:Kijonjang   mountain

Photo B: Dom community forest in Noni

Photo C : A cave at Dom in Noni Sub Division.

Photo A, shows the Kijonjang mountain as a touristic site which contain other features like caves, Sporting activities are equally organized on this mountain which helps to boost socio-cultural activities in the community.

Photo B, shows the community forest. The preservation of the community forest will help regulate the climate of the area. Secondly it act as habitat to many organisms. Hunting can also be carried in these forest which is of great economic importance

Plate 11: Stone Quarries in Nkor Council area.

A = Stones inside the quarry. **B** = Stone heap

Source. Author ,Dimla 2016.

The potentials above can be located on a map to ease exploitation. See figure 43.
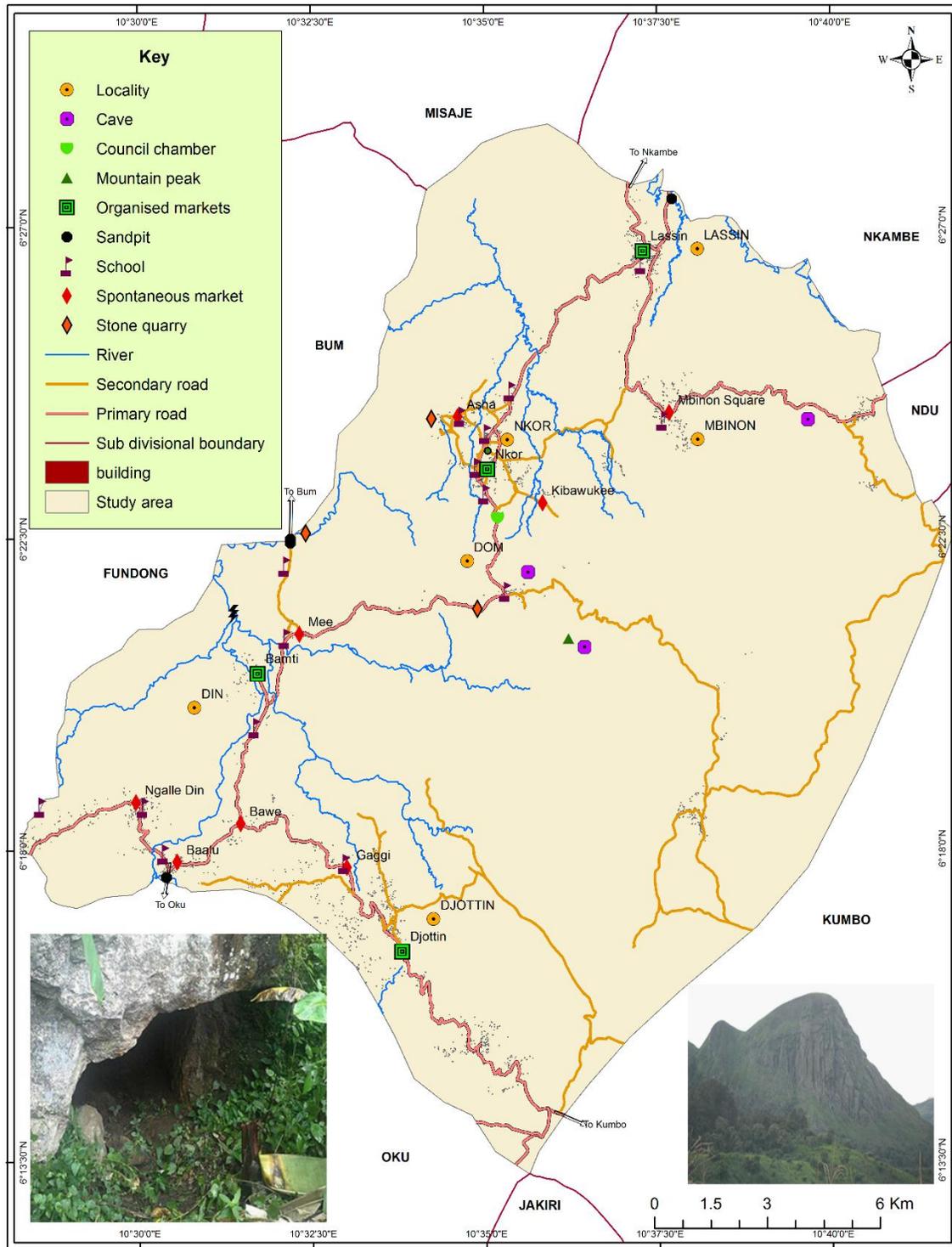
Figure 43:   Spatial distribution of various potentials in Noni Sub Division.

Source: NIC and field survey.

Figure 43 shows the spatial distribution of tourist potentials in Noni Sub Division. Most of theses potentials are evenly distributed in Nkor ,Dom, Djottin and a few in Lassin.

5.6 Conclusion

From the above analysis and presentation of the current revenue situation in the Nkor Council of Noni Sub Division shows that the direct revenue collected from taxes is too small and cannot meet up with the numerous council projects. This therefore calls for the application of GIS and Cartography as a potential decision making tool be applied in order to assist decision makers to improve on the revenue collection and management and equally to locate the existing natural potentials which can be valorized to improve on the council revenue. When this is properly done, it will not only increase revenue in the council but equally improve on the socio economic life in the municipality. This will have a direct effect on the phenomenon of rural exodus as most of the amenities like electricity will be develop, road construction improved upon, scholarship granted ,construction of school and increase in the number of people employed by the council.

With the application of GIS and based on the results analyzed above, the council can benefit in a number of ways which include,

It will facilitate the identification and the location of tax payers. This can achieved through the use of a GPS receiver to locate where each potential tax payer is found and equally identified the type of tax paid by the said tax payer. This will enable ease collection of revenue through taxes.

It will ease follow up of the identified tax payers, through the creation of a data base. With the database ,the tax argent can easily get statistics on the number of tax payers in each quarter and village. He can equally determine those who pay different types of taxes identified in the field and their payment status per say. The database will equally help updates those who are still in activity.

Figure 44: Data base containing tax payers information
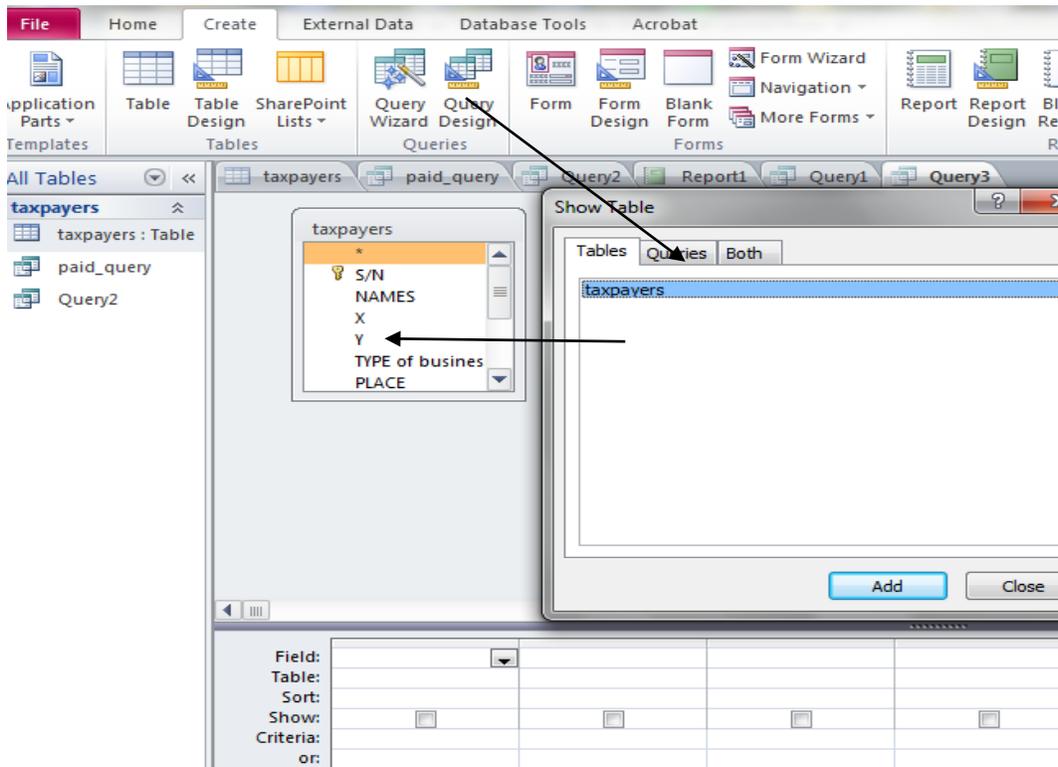
Figure 45: Creation of query design

NAMES	TYPE of business	PLACE	Payment Status
Adamu Lucie	off licence	Nkor	P
Amadu	Spare parts	Lassin	P
Anna Ndongeh	provision store	Djottin	P
Aoudou Amidou	Restaurant	Lassin	P
Asha	provision store	Nkor	P
Asha market	market	Nkor	P
Baba Paul	provision store	Djottin	P
Bah Gideon	Wine shop	Nkor	P
Botus	provision store	Mee	P
Bridge	mee Bridge	Mee	P
Bridge	provision store	Djottin	P
Buba Ngala	provision store	Din	P
C.B. C Church lassin	church	Lassin	P
C.B.C Mbinon	Church	Mbinon	P
catholic primary schoc	provision store	Djottin	P
Catholic School	School	Mbinon	P
Charles	Video club	Mee	P
Che Polycarp	off licence	Nkor	P
Chrisantus	Bar	Djottin	P
Council chamber	council chamber	Nkor	P
Dom Ernest	provision store	Nkor	P
Dom lilian	Wine shop	Djottin	P
Dorothy Mbah	provision store	Din	P
Elvis	Bar	Nkor	P
Esther Mbun	wine shop	Nkor	P

Record: 1 of 109   No Filter   Search

Figure 46: Interphase of database showing tax payers in the various villages.

Source: Field Survey 2021.

The application of G.I.S will equally exposed some of the hidden natural potentials through it identification with the use of a GPS receiver. Essay decision making will be facilitated as the council can now apply for funding for the development of these resources which will eventually improve on the revenue collected.

All of the above will go a long way to improve on the revenue of the council which will in turn foster development thereby reducing rural exodus in Noni Sub Division.

GENERAL CONCLUSION,TESTING OF HYPOTHESIS AND RECOMMENDATIONS.

Rural urban migration has a distinct character. The major towns and cities of Cameroon like Douala , Yaounde, Bafoussam ,Bamenda ,Limbe and Buea   attracts many migrants yearly from the rural areas especially from the Noni Sub-Division in the North West region of Cameroon. It can be inferred from the findings of the study that the majority of these migrants migrated in search of employment while others migrated to continue their education while others migrated in search for basic amenities, to join relatives and get married. This means, until the imbalance or disparity in socio-economic development between the rural and urban areas are removed, no amount of persuasion or force can put a stop to rural exodus and its' multiplying effects on both the urban areas and the Noni sub-division. As long as there are gaps in rural-urban employment opportunities as well as shortages in education caused by urban bias, there will be migration, and it is the responsibility of governments to reduce this disequilibrium. Policy makers must take into consideration that programs initiated in urban areas will also affect rural residents.

SUMMARY OF FINDINGS

Testing of hypotheses, analysis and discussions of the results.

While analysis data and information gotten from the field, it was observed that the independent **t** test was the appropriate test statistics to be used in testing the three stated hypotheses. A **t**-test is a type of inferential statistic used to determine if there is a significant difference between the means of two groups, which may be related in certain features. A t-test looks at the t-statistic, the t-distribution values, and the degrees of freedom to determine the statistical significance. Essentially, a t-test allows us to compare the average values of the two data sets and determine if they came from the same population. To conduct a test with three or more means, one must use an analysis of variance.

The hypothesis has been tested with the aid of the **t** distribution table. The test of the hypotheses dependents on the null and the alternative hypotheses for each hypothesis.

Testing Research hypothesis 1.

Testing our first hypothesis consisted of tallying our "yes"and "no" responses gotten from our respondents on the field. We have proceeded with a statistical method of testing responses in

order to draw a conclusion. Table 21 is a contingency table showing all the variables used in the statistical method.

Table 21: Contingency table for hypothesis One (the males are the most migratory age group in Noni Sub Division)

N°	Surveyed Villages	Contingency table for hypothesis One (the males are the most migratory age group in Noni Sub Division)										
		yes	No	Indifferent	X	Y	S^2_x	S^2_y	N1	N2	Df	t
1	Nkor	34	11									
2	Din	85	40									
3	Djottin	33	18									
4	Dom	4	0	0	31.5	13.5	63.94	32.02	6	6	10	1.812
5	Lassin	14	5	0								
6	Mbinon	19	7	0								
	TOTAL	189	81	0								

Source: Field work (2021)

$\infty = 0.05$

Critical t = 1.812

df = degree of freedom = n1 + n2 − 2 =10

$\overline{X}$ = mean of "YES" responses

$\overline{Y}$ = mean of "NO" responses

S^2_x = standard deviation of X_2

S^2_y = Standard deviation of Y_2

N refers to the number of sampled villages

Calculated $\mathbf{t} = \text{X-Y} \sqrt{S^2\frac{x}{n_1-1} + \frac{S^2_y}{n_1-1}}$

according to table 16

121

$\bar{x}$=31.5

$\bar{y}$= 13.5

S_X^2= 63.94

S_y^2=32.02

$n_1 = 6, n_2 = 6$

Calculated t= $\bar{x}-\bar{y}$

$$\sqrt{\dfrac{S^2{}_x}{n_1-1} + \dfrac{S_y^2}{n_1-1}}$$

Therefore, t = 31.5-13.5

$$\sqrt{\dfrac{63.94}{6-1} + \dfrac{32.02}{6-1}}$$

t= 18/

$$\sqrt{\dfrac{63.94}{5} + \dfrac{32.02}{5}}$$

18/

$\sqrt{12.788} + 6.404$

18/4.38= 4.1

Therefore, calculated t = 4.

The hypothesis was equally tested based on the "yes" and "no" responses which were gathered from the field and tested in null and alternative form.

Null hypothesis (Ho): The Males are not the most migratory age group in Noni Sub-division.

Alternative (Ha): The Males are the most migratory age group in Noni Sub-division.

According to research analysis supported by facts gotten from field work, the null hypothesis was rejected meanwhile the alternative was retained. The conclusion about the null and alternative hypothesis was made through the comparism between calculated **t** and critical **t**. From

table (21), the critical **t** stood at 1.812. At this point, the calculated **t** is far greater than the critical **t** at the df (10) and at a significance level 0.05 on the t distribution table.

It has been noticed that more men migrate out of the Noni sub-division than those the women. This finding validated that the males are the most migratory age group in Noni sub division.

Research hypothesis 2. The human factors are responsible for rural exodus in Noni Sub-division.

Table 22: Contingency table for hypothesis two (The human factors are responsible for rural exodus in Noni Sub-division.)

N°	Surveyed Villages	Contingency table for hypothesis One (The human factors are responsible for rural exodus in Noni Sub-division.)										
		yes	No	Indifferent	X	Y	S^2_x	S^2_y	N1	N2	Df	t
1	Nkor	34	11									
2	Din	85	40									
3	Djottin	33	18									
4	Dom	4	0	0	31.5	13.5	63.94		6	6	10	1.812
5	Lassin	14	5	0								
6	Mbinon	19	7	0								
	TOTAL	189	81	0								

Source: Field work (2021)

∞ = 0.05

Critical t = 1.812

df = degree of freedom = n1 + n2 − 2 =10

$\overline{X}$ = mean of "YES" responses

$\overline{Y}$ = mean of "NO" responses

S^2_x = standard deviation of X_2

S^2_y = Standard deviation of Y_2

N refers to the number of sampled villages

Calculated $\mathbf{t} = \text{X-Y} \sqrt{S^2_x \frac{}{n_1-1} + \frac{S^2_y}{n_1-1}}$

according to table 16

$\bar{x} = 33$

$\bar{y} = 12$

$S^2_X = 73.4$

$S^2_y = 25.9$

$n_1 = 6, n_2 = 6$

Calculated t= $\bar{x}$-$\bar{y}$

$$\sqrt{S^2_x \frac{}{n_1-1} + \frac{S^2_y}{n_1 - 1}}$$

Therefore, t = 33-12

$$\sqrt{\frac{73.4}{6-1} + \frac{25.9}{6-1}}$$

t= 21/

$$\sqrt{\frac{73.4}{5} + \frac{25.9}{5}}$$

21/

$\sqrt{14.68 + 5.18}$

21/4.45= 4.7.

Therefore, calculated t = 4.7.

The hypothesis was equally tested based on the "yes" and "no" responses which were gathered from the field and tested in null and alternative form.

Null hypothesis (Ho): The human factors are not responsible for rural exodus in Noni Sub-division.

Alternative (Ha): The human factors are responsible for rural exodus in Noni Sub-division..

According to research analysis supported by facts gotten from field work, the null hypothesis was rejected meanwhile the alternative was retained. The conclusion about the null and alternative hypothesis was made through the comparism between calculated **t** and critical **t**. From table (22), the critical **t** stood at 1.812. At this point, the calculated **t** is far greater than the critical **t** (ie 4.7)at the df (10) and at a significance level 0.05 on the t distribution table.

It has been noticed that the human factors are more responsible for the movement of people out of the Noni sub-division than the other factors like physical factors. This finding validated that the human factors are responsible for the massive out migration from the Noni sub division.

Research hypothesis 3. Rural exodus has slowed down development of the Noni sub-division.

Table 23: Contingency table for hypothesis Three (Rural exodus has slowed down development of the Noni Sub Division)

N°	Surveyed Villages	Contingency table for hypothesis Three (Rural exodus has slowed down development of the Noni sub-division)										
		Agree	Disagree	Indifferent	X	Y	S^2_x	S^2_y	N1	N2	Df	t
1	Nkor	32	11									
2	Din	96	40									
3	Djottin	33	18									
4	Dom	4	0	0	32.3	12.6	63.94		6	6	10	1.812
5	Lassin	12	5	0								
6	Mbinon	17	7	0								
	TOTAL	194	76	0								

Source: Field work (2021)

$\infty = 0.05$

Critical t = 1.812

df = degree of freedom = n1 + n2 − 2 =10

$\overline{X}$ = mean of "Agreed" responses

$\overline{Y}$ = mean of "Disagreed" responses

S^2_x = standard deviation of X_2

S^2_y = Standard deviation of Y_2

N refers to the number of sampled villages

Calculated $\mathbf{t}$ = X-Y $\sqrt{S^2{}_x \dfrac{}{n_1-1} + \dfrac{S_y^2}{n_1-1}}$

according to table

$\bar{x}$=32.3

$\bar{y}$= 12.6

S_X^2= 74.1

S_y^2=18.50

$n_1 = 6, n_2 = 6$

Calculated t= $\bar{x}$-$\bar{y}$

$$\sqrt{S^2{}_x \dfrac{}{n_1-1} + \dfrac{S_y^2}{n_1 - 1}}$$

Therefore, t = 32.3-12.6

$$\sqrt{\dfrac{74.1}{6-1} + \dfrac{18.50}{6 - 1}}$$

t= 19.7/

$$\sqrt{\dfrac{74.1}{5} + \dfrac{18.50}{5}}$$

19.7/

$\sqrt{14.82 + 3.7}$

19.7/4.30=

Therefore, calculated t = 4.5

The hypothesis was equally tested based on the "agree" and "disagree" responses which were gathered from the field and tested in null and alternative form.

Null hypothesis (Ho): Rural exodus has not slowed down development of the Noni Sub-division.

Alternative (Ha): Rural exodus has slowed down development of the Noni Sub-division.

According to research analysis supported by facts gotten from field work, the null hypothesis was rejected meanwhile the alternative was retained. The conclusion about the null and alternative hypothesis was made through the comparism between calculated **t** and critical **t**. From table (23), the critical **t** stood at 1.812. At this point, the calculated **t** is far greater than the critical **t** (ie 4.5)at the df (10) and at a significance level 0.05 on the t distribution table.

It has been noticed that the massive movement of people from Noni Sub Division has slowed down development in the area. This finding validated that rural exodus has slowed down the level of development in Noni Sub division.

Research hypothesis 4.

Table 24: Contingency table for hypothesis Four (The Nkor Council has played a greater role in reducing rural exodus in Noni Sub-division ?)

N°	Surveyed Villages	❖ Contingency table for hypothesis Four (The Nkor Council has played a greater role in reducing rural exodus in Noni Sub-division ?)										
		yes	No	Indifferent	X	Y	S^2_x	S^2_y	N1	N2	Df	t
1	Nkor	11	34	0								
2	Din	31	94	0								
3	Djottin	21	30	0								
4	Dom	2	2	0	13.6	31.3	23.5		6	6	10	1.812
5	Lassin	10	9	0								
6	Mbinon	7	19	0								
	TOTAL	82	188	0								

Source: Field work (2021)

$\infty = 0.05$

Critical t = 1.812

df = degree of freedom = n1 + n2 − 2 =10

$\overline{X}$ = mean of "YES" responses

$\overline{Y}$ = mean of "NO" responses

$S^2{}_{x=}$ standard deviation of X_2

$S^2{}_{y=}$ Standard deviation of Y_2

N refers to the number of sampled villages

Calculated **t** = X-Y $\sqrt{S^2{}_x \dfrac{}{n_1-1} + \dfrac{S_y^2}{n_1-1}}$

according to table

$\bar{x} = 13.6$

$\bar{y} = 31.3$

$S_X^2 = 23.5$

$S_y^2 = 73.8$

$n_1 = 6, n_2 = 6$

Calculated t= $\bar{x}$-$\bar{y}$

$$\sqrt{\dfrac{S^2{}_x}{n_1-1} + \dfrac{S_y^2}{n_1 - 1}}$$

Therefore, t = 13.6-31.3

$$\sqrt{\dfrac{23.5}{6-1} + \dfrac{73.8}{6-1}}$$

t= -17.7/

$$\sqrt{\dfrac{23.5}{5} + \dfrac{73.8}{5}}$$

-17.7/

$$\sqrt{4.7 +}14.76$$

-17.7/4.41= -4

Therefore, calculated t = -4.

The hypothesis was equally tested based on the "yes" and "no" responses which were gathered from the field and tested in null and alternative form.

- ❖ **Null hypothesis (Ho)**: The Nkor Council has not played a greater role in reducing rural exodus in Noni Sub-division ?.
- ❖ **Alternative (Ha)**: The Nkor Council has played a greater role in reducing rural exodus in Noni Sub-division ?

According to research analysis supported by facts gotten from field work, the null hypothesis was retained.Meanwhile the alternative was rejected The conclusion about the null and alternative hypothesis was made through the comparism between calculated **t** and critical **t**. From table (24), the critical **t** stood at 1.812. At this point, the critical **t** is far greater than the calculate **t** (-4) at the df (10) and at a significance level 0.05 on the t distribution table.

It has been noticed that apart from the Nkor council ,there are other stakeholders involve in the development of the Noni Sub-division such as the Elites, missions, Village Development Associations(Village development associations). This finding validated that the Nkor Council does not played the greater rule in the development of the Noni sub-division.

Research Hypothesis Five:

Table 25: Contingency table for hypothesis Five. (The application of G I S and cartography as a decision making tool can help reduce rural exodus in Noni through council revenue enhancement).

N°	Surveyed Villages	Contingency table for hypothesis One (the males are the most migratory age group in Noni Sub Division)										
							S^2_x	S^2_y	N1	N2	Df	t
		yes	No	Indiffe rent	X	Y						
1	Nkor	30	15									
2	Din	90	35									
3	Djottin	35	16		30.5	14.5	70.55		6	6	10	1.812
4	Dom	3	1	0								
5	Lassin	10	9	0								
6	Mbinon	15	11	0								
	TOTAL	183	87	0								

Source: Field work (2021)

$\infty = 0.05$

Critical t = 1.812

df = degree of freedom = n1 + n2 − 2 =10

$\overline{X}$ = mean of ''YES'' responses

$\overline{Y}$ = mean of ''NO'' responses

S^2_x = standard deviation of X_2

S^2_y = Standard deviation of Y_2

N refers to the number of sampled villages

Calculated **t** = X-Y $\sqrt{\dfrac{S^2_x}{n_1-1} + \dfrac{S^2_y}{n_1-1}}$

according to table 24

$\bar{x}$=30.5

$\bar{y}$= 14.5

S^2_X = 70.55

$S_y^2=25.44$

$n_1 = 6, n_2 = 6$

Calculated t= $\bar{x}$-$\bar{y}$

$$\sqrt{\dfrac{S^2_x}{n_1-1} + \dfrac{S_y^2}{n_1 - 1}}$$

Therefore, t = 30.5-14.5

$$\sqrt{\dfrac{70.55}{6-1} + \dfrac{25.44}{6 - 1}}$$

t= 16/

$$\sqrt{\dfrac{70.55}{5} + \dfrac{25.44}{5}}$$

16/

$$\sqrt{14.11 + 5.08}$$

16/4.38= 3.6

Therefore, calculated t = 3.6

The hypothesis was equally tested based on the "yes" and "no" responses which were gathered from the field and tested in null and alternative form.

Null hypothesis (Ho): The application of G I S and cartography as a decision making tool can not help reduce rural exodus in Noni).

Alternative (Ha): The application of G I S and cartography as a decision making tool can help reduce rural exodus in Noni through council revenue enhancement).

According to research analysis supported by facts gotten from field work, the null hypothesis was rejected meanwhile the alternative was retained. The conclusion about the null and alternative hypothesis was made through the comparism between calculated **t** and critical **t**. From table 25, the critical **t** stood at 1.812. At this point, the calculated **t** is far greater(3.6) than the critical **t** at the df (10) and at a significance level 0.05 on the t distribution table. This finding

validated the fact that, the application of G I S and cartography as a decision making tool can help reduce rural exodus in Noni through enhancement of council revenue.

RECOMMENDATIONS.

After analyzing the causes and impact of rural-urban migration to in the Noni Sub-division, the researcher proposes the following suggestions that could be implemented by policy makers and implementers at different level:

Problems with rural unemployment and underemployment greatly impact the rural economy. Because of the above, rural people are compelled to migrate. Therefore, there is the need for integrated rural development strategy to increase agricultural production by increasing rural labour productivity by improving farm technology, increasing farm inputs such as fertilizers, high yielding variety of seeds, insecticides, adequate agricultural extension services, and price incentives and improve access to financial credit and market facilities. More roads should be constructed to facilitate movement of goods and persons.

Resettlement on voluntary basis from highly degraded areas to where there are vacant and potentially productive irrigable lands can reduce the flow of people towards urban areas.

Concentration of various elements of modernization in the urban areas and their conspicuous absence in rural localities pull many rural people to towns. Therefore, provision of different social services such as better medical facilities, education, infrastructure, water and electricity to the rural areas may reduce the amount of flow of population to urban centers.

Taking into account the population growth of the town, constructing additional house and social service centers, such as schools, health institutions, recreational centers and so forth are important in providing needed services and better quality of life.

The vast actual or perceived difference between rural-urban incomes causes population migration. Since poverty is a pronounced rural phenomenon, migration from rural areas is tied to the income gap between rural and urban areas. When growth is balanced between them through viable regional planning strategies for the mutual development of the towns and their hinterlands at different hierarchical scales it is recommended that it will check or slow down the rural outflow.

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APPENDICES

APPENDICE I: ATESTATION OF RESEARCH

UNIVERSITE DE YAOUNDE I
UNIVERSITY OF YAOUNDE I

FACULTE DES ARTS, LETTRES ET SCIENCES HUMAINES	FACULTY OF ARTS, LETTERS AND SOCIAL SCIENCES
DEPARTEMENT DE GEOGRAPHIE	DEPARTMENT OF GEOGRAPHY
B.P 755 Yaoundé	P.O BOX 755 Yaoundé
Tél. 22 22 24 05	Tel. 22 22 24 05

ATTESTATION DE RECHERCHE

Je soussigné, **Pr. PAUL TCHAWA**

Chef du Département de Géographie, atteste que

Monsieur : **DIMLA ERNEST BINTUM**

Matricule : **03F164**

Est inscrit(e) au cycle de : **MASTER**
Spécialité : **Dynamiques Urbaines et Rurales**

Et prépare une thèse sur le sujet : **Rural exodus and impact on rural development in Noni sub - division**
A cet égard, je prie toutes les personnes ressources et tous les organismes sollicités de lui réserver un bon accueil et de lui apporter toute l'aide nécessaire à la réussite de cette recherche dont la contribution à l'appui au développement ne fait pas de doute.

Fait à Yaoundé le...........................

LE CHEF DE DEPARTEMENT

Clement Anguh Nkwemoh
Associate Professor (M.C)
University of Yaounde I

APPENDICE II: QUESTIONNAIRES and INTERVIEW GUIDE

UNIVERSITE DE YAOUNDE I	**UNIVERSITY OF YAOUNDE I**
*************	*************
CENTRE DE RECHERCHE ET DE FORMATION DOCTORALE EN SCIENCES HUMAINES SOCIALES ET EDUCATIVES	**RESEARCH CENTER AND POST DOCTORATE SCHOOL FOR SOCIAL AND EDUCATIONAL SCIENCES**
*************	*************
UNITE DE RECHERCHE ET DE FORMATION EN SCIENCE HUMAINE ET DOCTORALE	**DOCTORAL RESEARCH UNIT FOR SOCIAL SCIENCES**
**********	*************

A SURVEY QUESTIONNAIRE

Dear respondents ,

I am Dimla Ernest Bintum ,a Master's student in the Geography Department of the University of Yaounde 1.

Note to respondent

The objective of these questionnaires is to enable data to be collected in order to assess the impact of rural exodus on the socio-economic development of the Noni-sub-Division. This will help to provide or propose solutions that will help reduced the rate of rural exodus in Noni-sub-Division. This information is needed in order to complete the requirement for the award of a Master Degree in Geography on the topic "Rural exodus and impact on Rural Development" "the case of Noni –sub-Division" in the university of Yaounde 1. The information you will give shall remain very confidential.

Mark X in the space provided for your appropriate answer and fill the blank space where necessary.

A. IDENTIFICATION OF RESPONDENT.

1. 1 Your origin: Djottin [   ], Nkor [   ], Din [   ], Lassin [   ], Mbinon [   ], Dom [   ], others………………………………………………………………………………………………

…………………………………………………………………………………………

2. Sex: male [   ], female [   ]
3. Age range: 15-23 [   ], 24-32 [   ], 33-41 [   ], 42-50 [   ], 51-59 [   ], 60^+ [   ]
4. Highest level of education: primary [   ], secondary [   ], university [   ], uneducated formally [   ]
5. Marital status: single [   ], married [   ], divorced [   ], widow [   ], widower [   ]

6). Marriage Type: Monogamy [   ]   Polygamy. [   ]

7). Number of children? …………………………………………………………..

B. THE NATURE OF RURAL EXODUS IN NONI SUB – DIVISION.

1. The males are the most migratory age group in the Noni sub-division. YES [ ] NO [ ]

C. CAUSES OF RURAL EXODUS IN NONI SUB-DIVISION.

1) Did you leave Noni because of the following reasons ?

a) **Social** : **reasons** Health [   ]   Education [   ]   Electricity [   ]   Sport infrastructure [   ]

Others…………………………………………………...

b) **Political   reasons** [ ] Civil wars   [ ] Crimes

Others…………………………………………..

c)**Economic   reasons:** Unemployment   [   ]   Commerce   [   ]   Poverty   [   ]
others……………………………………………………………………………………………………
……………………………………………………………………………………………

d) **Cultural reasons** :   Witchcraft [   ]   Religious persecution [   ]

Others…………………………………………………………………………………………

e) **Natural reasons:** Insecurity from   landslide [   ]   Infertile soils   [   ]

Others……………………………………………………………………………………….

9) How did the above causes affect you?

……

10). As a result of the movement, what has changed in your life?

……

……

11). Why did you choose this destination and not the other?

……

……………………………………………………………………………………………………

D. QUESTIONNAIRES ON THE IMPACT OF RURAL EXODUS ON RURAL DEVELOPMENT.

SD = Strongly Disagree   **D** = Disagree   **A** = Agree   **SA** = Strongly Agree

SECTION I) ON AGRICULTURE

25	Rural Exodus Has Led to a Fall In Agricultural Productivity	SD	D	A	SA
26	Rural Exodus Has Caused a Drop In Food Supply	SD	D	A	SA
27	Mechanization of Agriculture is one of The Major Causes of Rural Exodus	SD	D	A	SA
28	The Closure of Agricultural Projects Like MEDINO Has Drastically Increase Poverty In Rural Areas	SD	D	A	SA

SECTION II). ON SOCIO-ECONOMIC DEVELOPMENT.

29	Rural Exodus has led to a drop in Government Funded Projects	SD	D	A	SA
30	There has been a drop of Social Amenities as a result of Rural Exodus	SD	D	A	SA
31	There is a drop in the level of Unemployment in Rural Areas	SD	D	A	SA
32	The resources of Noni are poorly exploited as a result of Rural Exodus	SD	D	A	SA
33	The Rate of Poverty in Rural Areas as a result of Rural Exodus	SD	D	A	SA

SECTION III) ON CULTURE.

34	Fall in traditional annual festival in rural area	SD	D	A	SA

35	Non respect of traditional norms is cause partly by Rural Exodus	SD	D	A	SA
36	The Noni Language is losing its value due partly to Rural Exodus	SD	D	A	SA
37	Dressing style of people are modified	SD	D	A	SA
38	Importance Affixed or given to traditional dances are greatly reducing.	SD	D	A	SA

E. EXISTING STRATEGIES TO FIGHT RURAL EXODUS IN NONI SUB-DIVISION.

1. The Nkor council has played a greater role in reducing rural exodus in Noni sub-division.

YES [ ]   NO [ ]

2. The other strategies (role of Elites ,Village development associations, and missions) has played a greater role in reducing rural exodus in Noni sub-division. **YES [ ] NO [ ]**

3. Can the application of G I S and cartography as a decision making tool help in reducing rural exodus in Noni? **YES [ ]   NO   [ ]**

F. INFORMATION ON SPATIAL MOBILITY AND ACTIVITIES.

1). In the past (41) years you may have lived in a number of places before settling here. I wish you to write down these places and for what purpose, starting with the most recent.

Place	Year	Reason for residence change

2). When you lived in the last place stated above, which activities did you carry out for revenue?

a) …………………………….b)…………………………….c)…………………………….

3). State reasons for abandoning the activity.

………………………………………………………………………………………………

4).What do you think could have been done to enable you stay home i.e in Noni?

………………………………………………………………………………………………
………………………………………………………………………………………………

5). Who are those responsible for the solutions you expected?

………………………………………………………………………………………………

6). What activity do you currently undertake to generate revenue?

Main…………………………......Secondary…………………………………………………….

7). Would you say any of the following persons influenced you to move to your current place

 of residence?

 a) Parents   Yes   No   b) Friends   Yes   No   c) Relative   Yes   No

 d) Others………………………………………………………………………………………

8).Stat how influential?...

9) How often do you visit Noni? Monthly [ ]   Annually [ ]   Every two years [   ]

 Others……………..

10.are they positive effects of remittances in Noni? YES [ ]   NO [ ]

G. INFORMATION ON PICTURE AND EVOLUTION OF MIGRANTS.

1). What has been the estimated volumes of migrants out of Noni within the periods of,

 a) 1980 to 1990   ☐   High ☐ Very High ☐ Low

 b) 1990 to 2000   ☐   High ☐ Very High ☐ Low

 c) 2000 to 2010   ☐   High ☐ Very High ☐ Low

 d) 2010 to present   ☐   High ☐ Very High ☐ Low

2). Could you give some estimate in figures based on a) to d) above?

…………………………………………………………………………………………………
…………………………………………………………………………………………………

3). What are some of the specific reasons behind the variations in movements as stated in
(2)above?

…………………………………………………………………………………………………
…………………………………………………………………………………………

4) Have the increase in migration flow led to a reduction in inter-tribal conflicts? YES [ ] NO [ ]

INTERVIEW GUIDE

A) INTERVIEW WITH NKOR COUNCIL.

1) What is the Role of the Council in reducing   Rural Exodus in Noni?

2) What are the Strategies used by Nkor Council to curb Rural Exodus in Noni?

3) How Successful are these Strategies?

4) What are the major problems faced in reaching the Micro Projects in the Council Area?

5) How are these problem solved?

6) With the coming of Decentralization in Cameroon, how could these Problems of Rural Exodus be controlled in Noni?

B) TRADITIONAL RULERS.

1) What are Major Projects put in place by the Traditional Council to Discourage Rural Exodus in Noni?

2) How Successful are the Strategies being implemented?

3) What are the problems Encountered with these Projects?

C) DIRECTORS OF PROJECTS.

1)   What are the Objectives of MEDINO?

2)   What is the Role of Projects in reducing Rural Exodus

3)   What Strategies have been put in place to fight Rural Exodus in Noni?

4)   How Successful is this project in solving Rural Exodus in Noni?

D) ROLE OF ELITES.

1)   As an Elites of Noni , What have you Done to reduce Rural Exodus in Noni?

2)   In your own opinion as an Elites, What are the Measure to solve the frequent out Migration of Noni Youths?

E) MISSIONS (CATHOLICS, BAPTIST , PRESBYTERIANS ETC)

1)   What is the Role of Mission in solving Rural Exodus in Noni?

2)   What Strategies have been put in place to reduce the Rural Exodus in Noni? (especially in the Health and the Education sector.)

3)   How successful is the Health Sector in reducing Rural Exodus in Noni?

4)   Do you think improving the Health Services can actually help in solving Rural Exodus in Noni? and how?..

5)   What therefore is the role of Mission Schools in solving Rural Exodus in Noni?

APPENDICE III: CONTINGENCY TABLE FOR HYPOTHESIS

1. Contingency table for hypothesis One (the males are the most migratory age group in Noni Sub Division)

Village	Sample household	0.04% sample Scale	Yes responds	No responds	Effective respondents	Percentage of effective respondent
Nkor	1315	52	34	11	45	
Din	4823	192	85	40	125	
Djottin	1468	58	33	18	51	
Dom	119	5	4	0	4	
Lassin	657	26	14	5	19	
Mbinon	728	29	19	7	26	
Totals	9110	362	189	81	270	

2. **Contingency table for hypothesis Two (Human factors are responsible for rural exodus in Noni Sub Division).**

Village	Sample household	0.04% sample Scale	Effective respondents	Yes responds	No responds	Percentage of effective respondent
Nkor	1315	52	45	35	10	
Din	4823	192	125	95	30	
Djottin	1468	58	51	35	16	
Dom	119	5	4	4	0	
Lassin	657	26	19	12	7	
Mbinon	728	29	26	17	9	
Totals	9110	362	270	198	72	

3. **Contingency table for hypothesis Three (Rural exodus has slowed down development in Noni Sub Division)**
   a) Impact on agriculture

Village	Sample household	0.04% sample Scale	Effective respondents	Agree	Disagree	Percentage of effective respondent
Nkor	1315	52	45	36	9	
Din	4823	192	125	96	29	
Djottin	1468	58	51	35	16	
Dom	119	5	4	4	0	
Lassin	657	26	19	12	7	
Mbinon	728	29	26	17	9	
Totals	**9110**	**362**	**270**	**200**	**70**	

   b. **Impact on socio-economic development**

Village	Sample household	0.04% sample Scale	Effective respondents	Agree	Disagree	Percentage of effective respondent
Nkor	1315	52	45	34	11	
Din	4823	192	125	90	35	
Djottin	1468	58	51	30	21	
Dom	119	5	4	4	0	
Lassin	657	26	19	11	8	
Mbinon	728	29	26	15	11	
Totals	**9110**	**362**	**270**	**186**	**84**	

c. Impact on culture

Village	Sample household	0.04% sample Scale	Effective respondents	Agree	Disagree	Percentage of effective respondent
Nkor	1315	52	45	26	19	
Din	4823	192	125	101	24	
Djottin	1468	58	51	33	18	
Dom	119	5	4	3	1	
Lassin	657	26	19	14	5	
Mbinon	728	29	26	18	8	
Totals	**9110**	**362**	**270**	**195**	**75**	

4. Contingency table for hypothesis Four.(The Nkor council has played a greater role in reducing rural exodus in Noni Sub Division.

Village	Sample household	0.04% sample Scale	Effective respondents	Yes responds	No responds	Percentage of effective respondent
Nkor	1315	52	45	11	34	
Din	4823	192	125	31	94	
Djottin	1468	58	51	21	30	
Dom	119	5	4	2	2	
Lassin	657	26	19	10	9	
Mbinon	728	29	26	7	19	
Totals	**9110**	**362**	**270**	**82**	**188**	

5. Contingency table for hypothesis Five (The application of G I S and cartography as a decision making tool can help reduce rural exodus in Noni through council revenue enhancement).

Village	Sample household	0.04% sample Scale	Effective respondents	Yes responds	No responds	Percentage of effective respondent
Nkor	1315	52	45	30	15	
Din	4823	192	125	90	35	
Djottin	1468	58	51	35	16	
Dom	119	5	4	3	1	
Lassin	657	26	19	10	9	
Mbinon	728	29	26	15	11	
Totals	**9110**	**362**	**270**	**183**	**8`7**	